



# Capital Regional District

625 Fisgard St.,  
Victoria, BC V8W 1R7

## Notice of Meeting and Meeting Agenda Capital Regional District Board

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Wednesday, November 18, 2020

1:00 PM

6th Floor Boardroom  
625 Fisgard Street  
Victoria, BC

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### SPECIAL INAUGURAL MEETING

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We pledge to make our meetings a place where all feel welcome and respected.

#### 1. CALL TO ORDER

#### 2. TERRITORIAL ACKNOWLEDGEMENT

#### 3. ELECTION OF CHAIR OF THE BOARD

#### 4. ELECTION OF VICE CHAIR OF THE BOARD

#### 5. RECESS FOR MEETING OF THE CAPITAL REGIONAL HOSPITAL DISTRICT BOARD

#### 6. APPROVAL OF THE AGENDA

#### 7. INAUGURAL ADDRESS OF THE CHAIR

#### 8. PRESENTATIONS/DELEGATIONS

##### 8.1 Presentations

##### 8.2 Delegations

- 8.2.1. 20-752** Delegation - Marcie McLean; Member of the Victoria Family Court & Youth Justice Committee: Re: Agenda Item 11.3.: Review of the Victoria Family Court and Youth Justice Committee

Attachments: Delegation - M. McLean

#### 9. CONSENT AGENDA

- 9.1. [20-699](#)** Community Resiliency Investment Program: 2021 FireSmart Community Funding & Supports Program Grant

**Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District (CRD) Board:  
That the Capital Regional District Board support an application to the Union of British Columbia Municipalities Community Resiliency Investment Program for Juan de Fuca, Salt Spring Island, and Southern Gulf Islands to develop Community Wildfire Resiliency Plans and direct staff to provide overall grant management.  
(NWA)

**Attachments:** [Staff Report: Community Resiliency Invest't Prog: 2021 FireSmart Grant](#)  
[Appendix A: Community Resiliency Investment Program Application Form](#)

**9.2.      [20-702](#)      Highland Fernwood Water Conservation Plan**

**Recommendation:** That the Highland Fernwood Water Service Commission recommend to the Electoral Areas Committee recommends to the Capital Regional District Board:  
That the Capital Regional District Board endorse the Water Conservation Plan.  
(NWA)

**Attachments:** [Staff Report: Highland Fernwood Water Conservation Plan](#)  
[Appendix: Highland Fernwood Water Conservation Plan](#)

**9.3.      [20-703](#)      Request to Increase Budget to Develop Detailed Engineering Design and Cost Estimates for the Maliview Wastewater Treatment Plant Upgrading**

**Recommendation:** That the Highland Water and Sewer (Maliview) Service Commission recommends that the Electoral Areas Committee recommends to the Capital Regional District Board:  
That the Capital Regional District Board amend the Highland Water and Sewer (Maliview) service Five Year Financial Plan to include a project for Maliview Wastewater Treatment Plant Upgrade Design in year 2020 with the total budget of \$257,620 funded by the combination of capital reserve fund (\$22,000) and Community Work Fund (\$235,620).  
(WA)

**Attachments:** [Staff Report: Develop Detail Designs Maliview Wastewater Treatment Plant](#)  
[Appendix 1: Design Report Maliview Wastewater Treatment Plant](#)  
[Appendix 2: Northern and Rural Infrastructure Program New Announcement](#)

**9.4.      [20-630](#)      Enerkem Facility Update**

**Recommendation:** The Environmental Services Committee recommends to the Capital Regional District Board:  
1. That this report be received for information.

[At the October 21, 2020, meeting of the Environmental Services Committee, the following motion arising carried:]  
The Environmental Services Committee recommends to the Capital Regional District Board:  
2. That we enter into a non-disclosure agreement with Enerkem to gather information.  
(NWA)

**Attachments:** [Staff Report: Enerkem Facility Update](#)  
[Appendix A: City of Edmonton Factsheet - Waste-to-Biofuels Initiative](#)

**9.5.      [20-608](#)      Provincial Plastics Action Plan Update and Next Steps**



**Recommendation:** The Environmental Services Committee recommends to the Capital Regional District Board:  
That the Plastics Action Plan and Next Steps report be received for information.  
(NWA)

**Attachments:** [Staff Report: Provincial Plastics Action Plan Update and Next Steps](#)  
[Appendix A: Plastics Action Plan Policy Consultation Paper \(July 2019\)](#)  
[Appendix B: Province of BC - Order in Council - June 29, 2020](#)  
[Appendix C: Recycling Regulation - Policy Intentions Paper](#)

**9.6.      [20-676](#)      Capital Regional District External Grants Update**

**Recommendation:** The Governance and Finance Committee recommends to the Capital Regional District Board:  
That the Capital Regional District External Grants Update be received for information.  
(NWA)

**Attachments:** [Staff Report: CRD External Grants Update](#)  
[Appendix A: CRD Grant Dashboards](#)

**9.7.      [20-698](#)      Grant Adjudication Process**

**Recommendation:** The Governance and Finance Committee recommends to the Capital Regional District Board:  
That the Grant Adjudication Process report be received for information.  
(NWA)

**Attachments:** [Staff Report: Grant Adjudication Process](#)  
[Appendix A: Eight-Step Decision-Making Model](#)

**9.8.      [20-697](#)      Youth Engagement in the Capital Regional District**

**Recommendation:** The Governance and Finance Committee recommends to the Capital Regional District Board:  
That staff be directed to expand and enhance the CRD's youth engagement approaches as part of the organizational Diversity & Inclusion strategy, currently under development.  
(NWA)

**Attachments:** [Staff Report: Youth Engagement in the CRD District](#)  
[Appendix A: Youth Engagement within the CRD Summary](#)  
[Appendix B: Youth Engagement outside the CRD Summary](#)

**9.9.      [20-553](#)      Motion with Notice: CRD External Appointments (C. Plant)**

**Recommendation:** The Governance and Finance Committee recommend to the Capital Regional District Board:  
That staff report back on developing and implementing a standardized process for CRD appointments of members of the public to external boards.  
(NWA)

**9.10.     [20-634](#)      Motion with Notice: Board Discussion Policy Addendum to Procedures  
Bylaw (Directors Tait and Windsor)**

**Recommendation:** That the Governance and Finance Committee recommend to the Capital Regional District Board:  
Whereas during board and committee meetings Directors are often moving motions, making amendments, asking questions and offering discussion in a somewhat disorganized fashion.  
Whereas this can create some confusion from Directors as well as members of the public following the meeting virtually or viewing the recorded meeting.  
Therefore be it resolved that staff develop a policy to guide board discussion and that the policy be referred to as an addendum in the Board Procedures Bylaw.  
(NWA)

**9.11.      [20-691](#)      Reaching Home Additional COVID Funding**

**Recommendation:** The Hospitals and Housing Committee recommends to the Capital Regional District Board:  
That the COVID-19 Additional Reaching Home Funding report be received for information.  
(NWA)

**Attachments:**      [Staff Report: Reaching Home Additional COVID Funding](#)  
                             [Appendix A: Reaching Home Program COVID-19 Funding Strategy](#)  
                             [Appendix B: 2020-21 Reaching Home COVID-19 Contracts](#)

**9.12.      [20-690](#)      Regional Housing First Program: Project Update, Third Quarter 2020**

**Recommendation:** The Hospitals and Housing Committee recommends to the Capital Regional District Board:  
That the Regional Housing First Program: Project Update, Third Quarter 2020 report be received for information.  
(NWA)

**Attachments:**      [Staff Report: RHFP - Project Update, Third Quarter 2020](#)  
                             [Appendix A: RHFP - Project Update, Third Quarter 2020](#)

**9.13.      [20-692](#)      Spencer Close Mortgage - Tri-Partite Agreement and Landlord Estoppel Certificate: 2763 Spencer Road**

**Recommendation:** The Hospitals and Housing Committee recommends to the Capital Regional District Board:  
a) That the resolutions required by BC Housing Management Commission to authorize the execution of the Tri-Partite Agreement and Landlord Estoppel Certificate for 2763 Spencer Road be approved; and  
b) That the Staff be authorized to execute any agreements with Capital Region Housing Corporation and BC Housing Management Commission and to take steps necessary to conclude the purchase of 2763 Spencer Road, Langford, BC.  
(WA)

**Attachments:**      [Staff Report: Spencer Close Mtge-Tri-Partite Agrmt & Landlord Estoppel Cert](#)  
                             [Appendix A: Spencer Close Landlord Estoppel Cert & Ack of Notice](#)

**9.14.      [20-701](#)      Government of Canada Rapid Housing Initiative**

**Recommendation:** The Hospitals and Housing Committee recommends to the Capital Regional District (CRD) Board:  
That CRD staff be authorized to negotiate and execute agreements with the Government of Canada for the Rapid Housing Initiative and do all things incidental to finalize such agreements.  
(WA)

**Attachments:** [Staff Report: Government of Canada Rapid Housing Initiative](#)  
[Appendix A: Letter from Canada Mortgage and Housing Corporation](#)  
[Appendix B: Sample Contribution Agreement](#)  
[Appendix C: RHI Q&As for Municipalities Under Major Cities Stream](#)

**9.15.**     [20-604](#)     Juan de Fuca Water Distribution Service - 2021 Operating and Capital Budget

**Recommendation:** That the Juan de Fuca Water Distribution Commission recommends that the Capital Regional District Board:  
1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan;  
2. Approve the 2021 Juan de Fuca Water Distribution Service retail water rate of \$2.3081 per cubic metre, adjusted if necessary by any change in the Regional Water Supply wholesale water rate; and  
3. Amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.  
(WP - Colwood, Highlands, Langford, Metchosin, Sooke, View Royal, JDF EA)

**Attachments:** [Staff Report: JDF Water Service 2021 Operating and Capital Budget](#)  
[Appendix A: JDF Water Distribution Service Budget](#)  
[Appendix B: Long-Term Debt Obligations Summary](#)  
[Appendix C: Retail & Wholesale Water Rate History & Projection](#)

**9.16.**     [20-628](#)     2019-2022 Transportation Service Planning

**Recommendation:** [At the October 21, 2020, meeting of the Planning, Transportation and Protective Services Committee, the following motion arising carried:]  
The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:  
Request a report to the committee of the planned initiatives in the 2021 plan in regards to multi-modal transportation and the E&N Corridor.  
(NWA)

**Attachments:** [Staff Report: 2019-2022 Transportation Service Planning](#)  
[Appendix A: Community Need Summary - Transportation](#)  
[Appendix B: Transportation - Initiatives Progress Report](#)

**9.17.**     [20-629](#)     South Island Transportation Strategy

**Recommendation:** The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

1. That the South Island Transportation Strategy be received for information.

[At the October 21, 2020, Planning, Transportation and Protective Services Committee meeting, the following motions arising carried:]

2. That the South Island Transportation Strategy report be referred to the Regional Parks Committee as the fourth recommendation speaks to inter-regional trails.
3. That the Planning, Transportation and Protective Services Committee recommend to the CRD Board that the Chair schedule a December Committee of the Whole meeting in the time that typically would be the Planning, Transportation and Protective Services Committee meeting.
4. For staff to provide a summary of gaps in regional transportation functions and options to address them using previously conducted work, for consideration by the Committee of the Whole as soon as possible.
5. That the report [planned initiatives in the 2021 plan in regards to multi-modal transportation and the E&N Corridor] that was requested earlier in the meeting be provided at the proposed Committee of the Whole meeting.  
(NWA)

**Attachments:** [Staff Report: South Island Transportation Strategy](#)  
[Appendix A: South Island Transportation Strategy](#)  
[Appendix B: Summary Analysis – SITS and the RTP](#)  
[Appendix C: Recent & Planned Transportation Projects](#)

**9.18.      [20-727](#)      Ready Step Roll - Active School Travel Planning Progress Report**

**Recommendation:** The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:  
That the Ready Step Roll - Active School Travel Planning Progress report be received for information.  
(NWA)

**Attachments:** [Staff Report: Ready Step Roll-Active School Travel Plan'g Progress Rpt](#)  
[Appendix A: CRD's Ready Step Roll Initiative - 2019/2020 Cohort](#)

**9.19.      [20-728](#)      Regional Growth Strategy Indicators Report**

**Recommendation:** The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:  
That the Regional Growth Strategy Indicator Report be received for information.  
(NWA)

**Attachments:** [Staff Report: Regional Growth Strategy Indicators Report](#)  
[Appendix A: Regional Growth Strategy Indicator Report](#)

**9.20.      [20-566](#)      2019-2022 Parks & Natural Resource Management Service Planning**

**Recommendation:** [At the October 28, 2020, meeting of the Regional Parks Committee, the following motion arising carried:]  
The Regional Parks Committee recommends to the Capital Regional District Board:  
That the Board Chair advocate to the provincial and federal governments asking them to participate in further parkland acquisition in the Capital Region.  
(NWA)

**Attachments:**     [Staff Report: 2019-2022 Parks & Natural Resource Mgmt Service Planning](#)  
[Appendix A: Community Needs Summary - Parks & Natural Resource Mgmt](#)  
[Appendix B: Parks & Natural Resource Mgmt - Initiatives Progress Report](#)

**9.21.     [20-673](#)     2020 CRD Regional Parks Compliance & Enforcement Program**

**Recommendation:** The Regional Parks Committee recommends to the Capital Regional District Board:  
That this report be received for information.  
(NWA)

**Attachments:**     [Staff Report: 2020 CRD RP Compliance & Enforcement](#)  
[Appendix A: 2020 RP Compliance & Enforcement Summary](#)

**9.22.     [20-525](#)     Regional Water Supply Strategic Plan - 2020 Progress Report**

**Recommendation:** That the Regional Water Supply Commission recommends to the Capital Regional District Board:  
That the Regional Water Supply Strategic Plan - 2020 Progress Report be received for information and that the strategic priorities and actions planned in 2021-2022 that deliver on the Plan be confirmed.  
(NWA)

**Attachments:**     [Staff Report: Regional Water Supply Strategic Plan - 2020 Progress Report](#)  
[Appendix A: Regional Water Supply Strategic Plan Progress Report Dashboard](#)

**9.23.     [20-651](#)     Regional Water Supply Service - 2021 Operating and Capital Budget**

**Recommendation:** That the Regional Water Supply Commission recommends that the Capital Regional District Board:  
1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan;  
2. Approve the 2021 wholesale water rate of \$0.7148 per cubic metre;  
3. Approve the 2021 agricultural water rate of \$0.2105 per cubic metre;  
4. Direct staff to balance the 2020 actual revenue and expense on the transfer to the water capital fund; and  
5. Direct staff to amend the Water Rates Bylaw accordingly.  
(WP - All except SGI & SSI)

**Attachments:**     [Staff Report: Regional Water Supply Service - 2021 Operating and Capital Budget](#)  
[Appendix A: 2021 Regional Water Supply Service Budget](#)  
[Appendix B: Long Term Debt Obligations Summary](#)  
[Appendix C: Agricultural Water Volumes and Rate Payments for 2011 – 2019](#)  
[Appendix D: Wholesale Water Rate History and Projection](#)

**9.24.     [20-669](#)     Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget**

**Recommendation:** The Saanich Peninsula Wastewater Commission recommends that the CRD Board:  
1. Approve the 2021 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget; and  
2. Balance the 2020 actual revenue and expense on the transfer to capital reserve fund.  
(WP - Central Saanich, North Saanich, Sidney)

**Attachments:**      [Staff Report: Saan Pen Wastewater Serv 2021 Operating and Cptl Budget](#)  
[Appendix A: 2021 Budget Document](#)

**9.25.      [20-668](#)**      Saanich Peninsula Water Service - 2021 Operating and Capital Budget

**Recommendation:**      The Saanich Peninsula Water Commission recommends that the Capital Regional District Board:

1. Approve the 2021 operating and capital budget;
2. Approve the 2021 Saanich Peninsula bulk water rate of \$1.0536 per cubic metre, and the Agricultural Research Station water rate of \$1.0888 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2020 actual revenue and expense on the transfer to capital reserve fund; and
4. Direct staff to amend the Bulk Water Rates Bylaw accordingly.

(WP - Central Saanich, North Saanich, Sidney)

**Attachments:**      [Staff Report: Saanich Peninsula Water 2021 Operating and Capital Budget](#)  
[Appendix A: 2021 Budget Document](#)  
[Appendix B: Saan Pen Water Rate & Rgnl Water Supply Rate Hstry and Prjctn](#)  
[Appendix C: Agricultural Water Volumes and Rate Payments 2011-2019](#)

**9.26.      [20-744](#)**      Appointments - Vancouver Island Regional Library Board

**Recommendation:**      That the following appointments be made:  
Director Mike Hicks as a Trustee on the Vancouver Island Regional Library Board for a term to begin January 1, 2021 and expire December 31, 2021.  
Alternate Director Dan Quigley as an Alternate Trustee on the Vancouver Island Regional Library Board for a term to begin January 1, 2021 and expire December 31, 2021.  
(NWA)

## **10. ADMINISTRATION REPORTS**

**10.1.      [20-719](#)**      Hauling and Processing of Kitchen Scraps - Award of Contract  
30.20-16-01

**Recommendation:**      That Contract 30.20.16-01, Hauling and Processing Kitchen Scraps, be awarded to D.L. Bins Ltd. from March 1, 2021 to February 28, 2025, at the rate of \$138.60 per tonne and an estimated cost of \$1,663,200 per year.  
(WA)

**Attachments:**      [Staff Report: Kitchen Scraps - Award of Contract 20.20-16-01](#)

**10.2.      [20-681](#)**      First Nation Participation in Closed Committee Meetings

**Recommendation:**      [At the October 28, 2020 Committee of the Whole Meeting, the following motion was referred without discussion to the Capital Regional District Board]:  
That all closed matters be directed to Regional Board, where First Nation Member participation can be determined on an item-by-item basis.  
(NWA)

**Attachments:**      [First Nation Participation in Closed Committee Meetings](#)  
[Appendix A: Closed Item Process Diagram](#)

## 11. REPORTS OF COMMITTEES

### Electoral Areas Committee

11.1. [20-502](#) Port Renfrew - Snuggery Cove Water Local Service Committee Membership Amendment

**Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4364, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, Amendment No. 3, 2020 be read a first, second, and third time.
2. That Bylaw No. 4364 be adopted.

(NWA, 2/3rds on adoption)

**Attachments:** [Staff Report: Port Renfrew - Snug Cove Water Local Serv Comm Mem Amend](#)  
[Appendix A: Bylaw No. 4364, Port Renfrew Utility Serv Comm, Amend No. 3](#)  
[Appendix B: Port Renfrew Utility Services Unofficial Consolidation](#)

11.2. [20-704](#) Maliview Wastewater Treatment Plant Upgrade Loan Authorization and Amend Service Establishment-Process and Next Steps

**Recommendation:** The Highland Water and Sewer Local Service Area recommends the Electoral Areas Committee recommends to the Capital Regional District Board:

1. That Bylaw 4370, "Maliview Sewer System Loan Authorization Bylaw No. 1, 2020" be introduced and read a first, second, and third time.

(WA)

2. That Bylaw 4373, "Maliview Estates Sewerage Local Service Establishment Bylaw No. 1, 1991, Amendment Bylaw No. 1, 2020" be introduced and read a first, second, and third time.

(NWA)

3. Present the project and funding option to the ratepayers in the first quarter of 2021; and bring forward a report to the Commission on the results of the public engagement, and ratepayer's preferred electoral assent process.

(NWA)

**Attachments:** [Staff Report: Maliview Loan Authorization Report](#)  
[Appendix A: Referendum Process](#)  
[Appendix B: Alternative Approval Process](#)  
[Appendix C: Bylaw No. 4370](#)  
[Appendix D: Bylaw No. 4373](#)

### Governance and Finance Committee

11.3. [20-599](#) Review of the Victoria Family Court and Youth Justice Committee

**Recommendation:** The Governance and Finance Committee recommends to the Capital Regional District Board:

That staff be directed to report back on the process to restructure the Committee in accordance with the recommendations set out in Appendix H.

[The following motion arising was made at the October 7, 2020 meeting of the Governance and Finance Committee:]

That the report be referred out to all member municipalities.

(NWA)

**Attachments:**     [Staff Report: Review of the Victoria Family Court & Youth Justice Committee](#)  
[Appendix A: Review actions](#)  
[Appendix B: Summary of legislative grant of authority](#)  
[Appendix C: Sections of the Provincial Court Act, Youth Criminal Justice Act](#)  
[Appendix D: Projects 2000 to 2018](#)  
[Appendix E: Projects to 2020](#)  
[Appendix F: Vancouver's Children, Youth & Families Advisory Committee TOR](#)  
[Appendix G: Richmond Family Court Committee Terms of Reference](#)  
[Appendix H: Recommendations for Restructuring Committee](#)

- 11.4.     [20-687](#)     Bylaw No. 4383: 2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020

**Recommendation:** The Governance and Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4383, "2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020" be introduced and read a first, second, and third time; and
2. That Bylaw No. 4383 be adopted.  
(WA, 2/3rds on adoption)

**Attachments:**     [Staff Report: Bylaw 4383 Financial Plan Amendment 4](#)  
[Appendix A: Bylaw No. 4383 Financial Plan Amendment 4, 2020](#)

- 11.5.     [20-686](#)     Bylaw No. 4384: Capital Regional District Electoral Area Services Operating Reserve Fund Bylaw No. 1, 2016, Amendment Bylaw No. 3, 2020

**Recommendation:** The Governance and Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4384 cited as the "Capital Regional District Regional Services Operating Reserve Fund Bylaw No. 1, 2016, Amendment Bylaw No. 3, 2020" be introduced and read a first, second and third time.
2. That Bylaw No. 4384 be adopted.  
(WA, 2/3rds on adoption)

**Attachments:**     [Staff Report: Bylaw 4384 EAS Operating Reserve Fund Amendment 3](#)  
[Appendix A: Bylaw 4384 EAS Op Reserve Amend 3](#)

## Regional Water Supply Commission

- 11.6.     [20-663](#)     Bylaw 4382: Regional Water Supply Water Works Facilities Loan Authorization Bylaw

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

1. That Bylaw No. 4382 cited as "Regional Water Supply Water Works Facilities Loan Authorization Bylaw No. 5, 2020" be introduced and read a first, second and third time.  
(WA)
2. That Bylaw No. 4382 be referred to the Inspector of Municipalities for approval, and if received, to proceed with elector approval by way of regional alternative approval process.  
(NWA)



**Attachments:**      [Staff Report: Bylaw 4382 Regional Water Supply Loan Authorization](#)  
[Appendix A: Bylaw 4382 Regional Water Supply Loan Authorization](#)

## **Saanich Peninsula Wastewater Commission**

**11.7.      [20-741](#)      CRD Bylaw No. 4391 - Establishment of a New Harbours  
Environmental Action Service for Saanich Peninsula**

**Recommendation:** The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

1. That CRD Bylaw No. 4391 "Saanich Peninsula Waterways Environmental Action Service Establishment Bylaw No. 1, 2020" be introduced and read a first, second time and third time.  
(NWA)
2. That Bylaw No. 4391 be referred to the municipal councils of the participants for approval, and if two-thirds of approval is received, to the Inspector of Municipalities.  
(NWA)

[At the November 10, 2020, meeting of the Saanich Peninsula Wastewater Commission, the following motion arising was referred (without a vote) to the Capital Regional District Board for consideration:]

3. That staff prepare a summary of outcomes from similarly established services in the Region, and the cost benefit of it, so that the Commission can evaluate how the Services have resulted in changes.  
(NWA)

**Attachments:**      [Staff Report: Est. of New Harbours Environmental Service - Peninsula](#)  
[Appendix A: Letter from District of Central Saanich \(August 6, 2020\)](#)  
[Appendix B: Letter from District of North Saanich \(September 8, 2020\)](#)  
[Appendix C: Letter from Town of Sidney \(September 15, 2020\)](#)  
[Appendix D: New Bylaw No. 4391](#)  
[Appendix E: Proposed Cost-Share for Participating Municipalities](#)

**11.8.      [20-670](#)      Bylaw No. 4372, Transfer of Funds from Development Cost Charges  
Reserve to Related Capital Reserve**

**Recommendation:** That the Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

1. That Bylaw No. 4372 cited as "Saanich Peninsula Water and Wastewater Development Cost Charges Transfer to Capital Reserve Bylaw No. 1, 2020" be introduced and read a first, second, and a third time.  
(WA)
2. That Bylaw No. 4372 be referred to the Inspector of Municipalities for review as required by the Local Government Act and Community Charter.  
(NWA)

**Attachments:**      [Staff Report: Bylaw 4372 Transfer of Funds from DCC to Capital Reserve](#)  
[Appendix A: Bylaw No. 4372](#)

## **12. MOTION TO CLOSE THE MEETING**

**12.1.      [20-742](#)      Motion to Close the Meeting**

- Recommendation:**
1. That the meeting be closed for Appointments in accordance with Section 90(1)(a) of the Community Charter. [2 items]
  2. That the meeting be closed for Land Acquisition in accordance with Section 90(1)(e) of the Community Charter.
  3. That such disclosures could reasonably be expected to harm the interests of the Regional District. [3 items]

### **13. RISE AND REPORT**

### **14. ADJOURNMENT**

#### **Voting Key:**

**NWA - Non-weighted vote of all Directors**

**NWP - Non-weighted vote of participants (as listed)**

**WA - Weighted vote of all Directors**

**WP - Weighted vote of participants (as listed)**

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**From:** Legserv  
**Subject:** FW: Addressing the Board - Submission

**Your name::**  
Marcie McLean

**I represent::**  
a member of Victoria Family Court & Youth Justice Committee

**Municipality/Electoral Area in which you reside::**  
Highlands

**I wish to address::**  
Capital Regional District Board

**Meeting Date::**  
November 18, 2020

**Agenda Item::**  
11.3 Review of Victoria Family Court & Youth Justice Committee

**My reason(s) for appearing (is/are) and the substance of my presentation is as follows::**  
I wish to speak to the CRD staff report on the agenda and its recommendations. And, Provincial legislation towards a "justice committee" and municipalities.

**I will have a PowerPoint or video presentation and will submit it at least 24 hours in advance of the meeting.:**  
No

**The meeting and my presentation will be webstreamed live via the CRD website and recorded.:**  
I understand



Making a difference...together

**REPORT TO ELECTORAL AREAS COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**      **Community Resiliency Investment Program: 2021 FireSmart Community Funding & Supports Program Grant**

**ISSUE SUMMARY**

The Capital Regional District (CRD) is responsible for providing emergency management support in the Electoral Areas (EAs). This includes mitigation, planning, training and supporting first responders during emergencies. The CRD is applying to the Union of British Columbia Municipalities (UBCM) for funding to create Community Wildfire Resiliency Plans for each of the EAs. UBCM requires that all grant applications be accompanied by a motion of support from the local government.

**BACKGROUND**

UBCM provides funding for many community based projects including emergency programs, particularly projects that support community resiliency and emergency preparedness. A 2020/2021 grant opportunity is available to create Community Wildfire Resiliency Plans, in order to better understand spatial wildfire risk distribution and prioritize wildfire risk mitigation and preparedness projects. The plans will include EA-specific assessment and recommendations for all seven FireSmart disciplines: education, vegetation management, legislation and planning, development considerations, interagency cooperation, cross-training, and emergency planning.

EA fire departments and the BC Wildfire Services have jurisdiction to lead wildfire response operations, while emergency programs assist with mitigation, preparedness, evacuation procedures, and public education. Most EA communities have a Community Wildfire Preparedness Plan, but these were completed between 10 and 16 years ago and do not reflect recent developments or best practices in plan preparation.

The FireSmart grant funds will benefit all three CRD EA Emergency Programs: Juan de Fuca, Salt Spring Island, and Southern Gulf Islands. Grant funds will permit the development of plans, including the costs of consultants and a presentation of results to stakeholders. The total funds requested through the grant application are \$135,039.

As part of the application process, UBCM requires a motion of support from the local government to receive and manage grant funding.

**ALTERNATIVES**

*Alternative 1*

The Electoral Areas Committee recommends to the Capital Regional District (CRD) Board: That the CRD Board support an application to the Union of British Columbia Municipalities Community Resiliency Investment Program for Juan de Fuca, Salt Spring Island, and Southern Gulf Islands for Community Wildfire Resiliency Plan development and direct staff to provide overall grant management.

*Alternative 2*

That staff be directed to not submit the Union of British Columbia Municipalities Grant to the Community Resiliency Investment Program for Juan de Fuca, Salt Spring Island, and Southern Gulf Islands for Community Wildfire Resiliency Plan development.

**IMPLICATIONS**

*Operational Implications*

Under the *Emergency Program Act*, the CRD provides emergency management services to residents of Electoral Areas. Community Wildfire Resiliency Plans help local governments and fire departments prioritize preparedness and mitigation projects, and grants provide opportunity for supplemental funding to increase community resilience and support EAs residents who may be impacted by future disasters.

**CONCLUSION**

The CRD is responsible for supporting emergency management programs in the EAs. The UBCM's FireSmart Community Funding and Supports Program grant is an opportunity to increase public safety in the EAs. Staff recommend funding the Community Wildfire Resiliency Plan updates for all three EA emergency programs through the grant. If supported by the Board, UBCM will consider the CRD's grant application.

**RECOMMENDATION**

The Electoral Areas Committee recommends to the Capital Regional District (CRD) Board: That the CRD Board support an application to the Union of British Columbia Municipalities Community Resiliency Investment Program for Juan de Fuca, Salt Spring Island, and Southern Gulf Islands to develop Community Wildfire Resiliency Plans and direct staff to provide overall grant management.

Submitted by:	Jonathan Reimer, MSc, Manager Electoral Area Fire and Emergency Programs
Concurrence:	Shawn Carby, CD, BHSc, MAL, Senior Manager, Protective Services
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT(S)**

Appendix A – Community Resiliency Investment Program: 2021 FireSmart Community Funding & Supports Application Form

# Community Resiliency Investment Program

## 2021 FireSmart Community Funding & Supports

### Application Form

Please complete and return the application form and all required attachments by October 9, 2020.

All questions are required to be answered by typing directly in this form. If you have any questions, contact [cri-swpi@ubcm.ca](mailto:cri-swpi@ubcm.ca) or (250) 356-2947.

<b>SECTION 1: Applicant Information</b>	<b>CRI-</b> <i>(administrative use only)</i>
Name of Local Government or First Nation: Capital Regional District	Complete Mailing Address: 625 Fisgard St, Victoria, BC V8W 1R7
Contact Person*: Jonathan Reimer	Position: Manager, Fire and Emergency Programs
Phone: 2503603137	E-mail: <a href="mailto:jreimer@crd.bc.ca">jreimer@crd.bc.ca</a>

\* Contact person must be an authorized representative of the applicant (i.e. staff member or elected official).

<b>SECTION 2: Type of Application</b> – Please identify the type of application you are submitting and provide the required information. Refer to Section 3 in the Program & Application Guide for eligibility.
<b>1. Type of Application</b> (select one only): <div style="margin-left: 20px;"> <input type="checkbox"/> Single applicant (as identified in Section 1 of the application form)  <input type="checkbox"/> Regional Project for Multiple Eligible Applicants. Please list all of the partnering eligible applicants included in this application:  <input checked="" type="checkbox"/> Regional Projects for Regional District Applications Including Multiple Electoral Areas. Please list all electoral areas included in this application and submit a separate Worksheet 1 for each: 3 Electoral Areas: Salt Spring Island, Southern Gulf Islands, and Juan de Fuca         </div>
<b>2. Rationale for Regional Projects</b> (only). Please provide a rationale for submitting a regional project application and describe how this approach will support cost-efficiencies in the total funding request.

<b>SECTION 3: Project Summary</b>
<b>3. Name of the Project:</b> CRD Community Wildfire Resiliency Plan Update

**4. Project Summary.** Please provide a summary of your project in 150 words or less.

A Community Wildfire Resiliency Plan is proposed to be developed for each of the 3 CRD Electoral Areas. In communities that have a previous CWPP, the plans were produced between 2005 - 2010 and are in need of an update and improved consistency.

**5. Fire Centre (use check boxes).** Indicate which Fire Centre the proposed activities are located in (check all that apply).

☐ Cariboo Fire Centre

☒ Coastal Fire Centre

☐ Kamloops Fire Centre

☐ Northwest Fire Centre

☐ Prince George Fire Centre

☐ Southeast Fire Centre

**6. Project Cost & Funding Request:**

Total project cost: \$135039.00

Total funding request for FireSmart activities (as indicated on Worksheet(s) 1): \$135039.00

Total funding request for fuel management activities (as indicated on Worksheet 2): \$

**Total project funding request:** 135039.00

Have you applied for or received funding for this project from other sources? If yes, please provide details below.

No

**7. Progress to Date.** If you were approved for funding under the 2019 and/or 2020 CRI FireSmart Community Funding & Supports programs, please describe the activities that have been completed to date and/or what activities your community has not yet completed but will be undertaking to increase resiliency.

2019 project: Wildfire cross-training in Salt Spring Island, public education activities in Juan de Fuca, Pender Island, and Saturna Island

2020 project: Exploring the creation of a regional FireSmart committee, Galiano Island public education and capacity building

Further, if any activities that were funded under the 2019 and/or 2020 CRI FireSmart Community Funding & Supports programs were impacted or delayed by COVID-19 or public health requirements, please describe: the 2019 project was amended to provide improved course woody debris disposal options on Pender and Saturna Island, due to COVID-related fire bans.

**SECTION 4: Requirements for Funding** (refer to Section 4 of Program & Application Guide)

**8. Engagement Prior to Submitting an Application.** In order to qualify for funding, applicants must demonstrate their level of engagement with a BCWS Wildfire Prevention Officer, FNESS Fuel Management Liaison/Specialist, and, if applicable, the FLNRORD district, region, or relevant Land Manager to ensure project alignment with Land Manager priorities.

Please indicate the name(s) and title(s) of the person(s) you engaged with and describe the extent of that engagement.

Extensive phone-based consulting with Tony Botica, BCWS Wildfire Prevention Officer with the Coastal Fire Centre. Most recent phone call was October 1<sup>st</sup> 10:00am.

- 9. Acceptable Plan.** In order to qualify for funding, applicants must have a current and acceptable plan that includes assessment and identification of FireSmart and/or fuel management priorities (i.e. Community Wildfire Protection Plan, Community Wildfire Resiliency Plan, or Crown Land WRR Tactical or Fuel Management Plan, etc.).

Please outline how your community meets this requirement. Note: applicants that do not have a current and acceptable plan may apply to develop or update a plan.

The CRD has several CWPPs spanning several communities in the Electoral Areas, however most are 10-16 years or older and require updating. These older plans are not attached to this application, but are available on request.

*Attach completed plans, assessments, and/or excerpts from higher-level plans with the application form.*

## SECTION 5: Wildfire Risk & Rationale

- 10. A. WUI Wildfire Risk Class.** What is the WUI Risk Class (1 – 5) for the general area of interest of your community or proposed activities, including the WUI polygon name, from the risk class map? Refer to Appendix 1 of the Program & Application Guide.

Port Renfrew RC:5

Ganges RC:5

**B.** If local assessments provide additional evidence of higher wildfire risk than the WUI Risk Class, provide specific evidence of wildfire risk (reference to appropriate section of a CWPP/CWRP or other plan, etc.).

N/A

*Additional evidence for higher wildfire risk (e.g. CWPP/CWRP extract, copies of assessments, etc.) is required to be submitted with the application form.*

**C.** For the purpose of FireSmart Community Funding & Supports grants, identify the risk category that you are applying under:

- ☐ Lower risk of wildfire (may apply for a base grant of up to \$50,000)
- ☒ Higher risk of wildfire (may apply for a base grant of up to \$150,000)

- 11. Other Rationale.** What other rationale or evidence is there for undertaking the proposed project? This may include local hazards identified in the Emergency Plan; threat levels identified in Hazard Risk & Vulnerability Analysis and/or other risk assessments; demonstrated history of repeated and/or significant interface wildfires and evacuations; or other rationale.

N/A

*Evidence of other rationale (e.g. Local Authority Emergency Plan extract, copies of assessments, etc.) is required to be submitted with the application form.*

## SECTION 6: Detailed Project Information

- 12. Proposed Activities.** Please refer to Section 6 of the Program & Application Guide for eligibility, and complete Worksheet 1: Proposed Activities & Cost-Estimate. Worksheet 1 is



required to be completed for all applications and all projects must include an Education component.

**13. Increasing Resiliency.** Please indicate how the proposed project will increase community resiliency by undertaking community-based FireSmart planning and activities that reduce the community's risk from wildfire.

Current CWRPs will help coordinate the activities of the diverse stakeholders across our Electoral Areas and prioritize our joint preparedness, mitigation, and response efforts so that we increase the resiliency of our communities

**14. Partnerships & Collaboration.** Please identify any other authorities you will collaborate with on the proposed project (e.g. community or resident organizations, First Nation or Indigenous organizations, or other local governments) and outline how you intend to work together.

The CRD will collaborate with BC Wildfire Service, local of improvement district-based fire departments (including Salt Spring, Mayne, Pier, and Sidney Islands), local land use planning authorities such as the Islands Trust, Local Government Emergency Programs, FireSmartBC, and First Nations partners, including Pacheedaht FN. These partners will be consulted during the CWRP process.

**15. Additional Information.** Please share any other information you think may help support your submission.

## SECTION 7: Application Check List

Required Submissions	Related Attachments
<input checked="" type="checkbox"/> Application Form	<input checked="" type="checkbox"/> Completed plans, and/or assessments, or excerpts from higher-level plans, as required in Q. 9 <input type="checkbox"/> Other rationale, as required in Q. 10 and 11
<input checked="" type="checkbox"/> Completed Worksheet 1: Proposed Activities & Cost Estimate	<input type="checkbox"/> Completed FireSmart Assessments for structures proposed for FireSmart Projects for Critical Infrastructure, as required in Q. 7
<input type="checkbox"/> <u>For fuel management activities only:</u> Completed Worksheet 2: Proposed Fuel Management Activities	<input type="checkbox"/> Overview map of the community, previously completed treatments, proposed treatments for this application, and planned future treatments <input type="checkbox"/> PDF map <u>and</u> Google Earth compatible KML file, at appropriate scale, outlining the area of interest, proposed treatment units, land status and tenure overlaps <input type="checkbox"/> If available, current wildfire threat assessment plots and/or fuel loading data and rationale for the proposed treatment unit(s) <input type="checkbox"/> <u>For fuel management treatment only</u> , a copy of the completed (signed and sealed) prescription and project spatial layer

<input type="checkbox"/> <u>For prescribed fire only</u> , a copy of the completed burn plan (in addition to the prescription) and project spatial layer <input type="checkbox"/> <u>For fuel management treatment on Provincial Crown land only</u> , an email from the Land Manager indicating information sharing with First Nations has been completed
<input type="checkbox"/> Council, Board or Band Council resolution, indicating support for the current proposed activities and willingness to provide overall grant management
<input type="checkbox"/> <u>For regional projects only</u> : Council, Board or Band Council resolution, from each partnering community that clearly states approval for the applicant to apply for, receive and manage the grant funding on their behalf
<p>Submit the completed Application Form and all required related attachments as e-mail attachments to <a href="mailto:cri-swpi@ubcm.ca">cri-swpi@ubcm.ca</a> and note “<b>2021 CRI</b>” in the subject line. Submit your application as either a Word or PDF file(s). If you submit by e-mail, hardcopies and/or additional copies of the application are not required.</p>

<b>SECTION 8: Signature</b> – Applications are required to be signed by an authorized representative of the applicant. Please note all application materials will be shared with the Province of BC and the BC FireSmart Committee.	
I certify that: (1) to the best of my knowledge, all information is accurate and (2) the area covered by the approved project is within the applicant’s jurisdiction (or appropriate approvals are in place).	
Name: Jonathan Reimer	Title: Manager, Fire and Emergency Programs
Signature*:  <i>An electronic or original signature is required.</i>	Date: October 6, 2020

\* Signatory must be an authorized representative of the applicant (i.e. staff member or elected official).



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## **REPORT TO HIGHLAND FERNWOOD WATER SERVICE COMMISSION MEETING OF THURSDAY, OCTOBER 22, 2020**

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**SUBJECT**     Highland Fernwood Water Conservation Plan

### **ISSUE**

To seek the approval of a Water Conservation Plan for the Highland Fernwood Service which is a requirement of the Rural and Northern Communities Infrastructure grant that the Highland Water and Sewer (Maliview) Service is applying for its waste water treatment plant upgrade.

### **BACKGROUND**

The Maliview Waste Water Treatment Plant (WWTP) has been experiencing challenges in consistently meeting regulatory requirements. On September 19, 2019, the CRD received a written warning letter from the Enforcement Branch of EC that the Maliview WWTP contravenes subsection 36(3) of the Fisheries Act. On January 30, 2020, the CRD received a written warning letter from the Ministry of Environment (MOE), Province of British Columbia which determined that the Maliview WWTP is non-compliant with Municipal Wastewater Regulation requirements. The regulators require that the CRD implement necessary changes or modifications to correct the non-compliance. MOE warns that if CRD fails to take necessary actions to restore compliance, they may escalate enforcement actions.

The CRD provided its responses to both regulators on October 22, 2019 and February 25, 2020 respectively and outlined its corrective action plans to enhance the facility and bring the facility back to regulatory compliance. The letter summarized near term actions and provided medium and long term action plans to the MOE. The final phase of the corrective action plan will be to complete the upgrading construction of the Maliview WWTP with a target completion date of the end of year 2022. Currently the near term measures have been implemented and the CRD has retained an engineering consultant and completed an engineering assessment and a comprehensive analysis to investigate current problems with the plant and screen various treatment technologies that could be suitable for the upgrading of the Maliview WWTF. Based on current conceptual design, it is estimated that the total construction costs associated with the upgrade is approximately \$1.65 million (class C cost estimates with up to  $\pm 25\%$ -40%). Total costs including construction, engineering and project management and contingency (40%) is estimated to be approximately \$2.2 million.

Given the limited financial capacity of the service, the CRD has explored alternative funding strategies such as grants from senior levels of government. The CRD has submitted on October 22, 2020 an Investing in Canada Infrastructure Program (ICIP) grant under the Rural and Northern Communities Program Funding stream to the Province of British Columbia and the Government of Canada. The ICIP program targets capital infrastructure projects in communities with a population of 25,000 or less. The Maliview wastewater treatment plan upgrade qualifies under one of the federal outcomes for green infrastructure – environmental quality for increased capacity to treat and or manage wastewater for public use and benefit. The wastewater project must result in wastewater effluent that meets the Wastewater Systems Effluent Regulations, or provincial regulations where there is a federal equivalency agreement in place.

One of the requirements of the ICIP grant program is that a current Board endorsed a Water Conservation plan for any Drinking Water and Wastewater projects. In order to meet the grant application requirements, the Board endorsement for the Water Conservation plan must be submitted no later than a month after the application deadline, on **November 22, 2020**. To meet this requirement, the CRD has developed a draft Water Conservation Plan for the year of 2020-2030 for the Highland Fernwood Water Service (attached in Appendix 1).

The draft Water Conservation plan was prepared in accordance with the Water Conservation Plan Guide for BC (2013) which reviewed the Highland Fernwood water system profile, water production and use data, and forecasted demand for future years. The plan proposed the following conservation targets by 2030.

- Reduce annual average water demand per full time, permanent resident by 10%,
- Reduce annual average water loss in the system by 20%.

A planned adaptive strategy for water conservation is proposed for Highland and Fernwood, enabling conservation measures to be tailored to meet the changing needs of the community over time. The following current and future conservation measures are proposed as elements of a water conservation plan for Highland and Fernwood Water Services:

- Universal metering – this is an ongoing measure and will continue.
- Reporting usage on water bills – this is an ongoing measure and will continue.
- Consumption based water billing – this is an ongoing measure and will continue.
- Community Awareness and Education – this is an ongoing measure and will continue.

The scope of these measures will be reviewed annually and expanded as needed during annual and five year planning and budgeting process.

- Distribution Loss Reduction
  - Implement a Strategic Asset Management Plan to prioritize asset replacement based on water losses and other criteria (current and every five years);
  - Monitor overall non-revenue water at least annually, and compare against published benchmarks;
  - Develop a water main repair/replacement strategy for the Highland Fernwood water services in 2021;
  - Complete a water main repair/replacement detailed design in 2021;
  - Construct the initial phase of water main repair/replacement in 2022-2023 (estimated construction cost of \$1,500,000, subject to Commission approval and borrowing referendum); and
  - Repair/replace the Upper water storage reservoir for the service which is currently experiencing leakage issues by 2023.

The costs of a distribution loss reduction program have been incorporated into 2021-2025 five year capital plans for the Highland Fernwood water service. It is anticipated that losses will be significantly reduced to meet conservation program targets once the reduction measures are implemented.

- Water Conservation Plan Renewal

A review of the Water Conservation Plan will be conducted every five years to update forecasts and targets, consider new information, and adjust program activities as required to meet targets.

## **ALTERNATIVES**

### *Alternative 1*

That the Highland Fernwood Water Service Commission recommend to the Electoral Areas Committee that the Capital Regional District Board endorse the Water Conservation Plan for Highland Fernwood Water Service.

### *Alternative 2*

That the Highland Fernwood Water Service Commission recommend that this report be referred back to staff for additional information.

## **IMPLICATIONS**

### *Environmental & Climate Implications*

Reducing water use per capita will benefit the community and the environment by:

- reducing the costs and carbon emissions of operating the process treatment plant including transporting residuals for disposal;
- reducing the costs and carbon emissions of expanding the infrastructure to accommodate growth (e.g. manufacturing, transporting and installing larger water mains);
- maintaining more water storage in reserve for emergencies such as wildfires or extreme drought, which may increase due to climate change; and
- maintaining higher reservoir levels, thereby improving source water quality in summer and minimizing a possible expansion of storage by other users

### *Financial Implications*

Many of the conservation measures including water meters, usage reporting, and consumption based billing, and Community Awareness and Education are already in place and included in the service's annual operating budgets. No significant financial implications are anticipated at this time due to implementation of these measures. The scope of these water conservation measures will be reviewed annually and expanded as needed during annual and five year planning and budgeting process.

The costs of a distribution loss reduction program have been incorporated into 2021-2025 five year capital plans for the Highland Fernwood water service. It is anticipated that losses will be significantly reduced and result in savings of revenue water once the reduction measures are implemented.

The estimated costs are included in the 2021 to 2025 capital/operating plans, as follows:

- Monitor overall non-revenue water at least annually, and compare against published benchmarks (included in operating plans);
- Develop a water main repair/replacement strategy and a water main repair/replacement detailed design for the Highland Fernwood water services in 2021 (estimated \$15,000 from Capital Reserve Fund and \$85,000 from grant);
- Construct the initial phase of water main repair/replacement in 2022-2023 (estimated construction cost of \$1,500,000, subject to Commission approval and borrowing referendum); and
- Repair/replace the Upper water storage reservoir for the service which is currently experiencing leakage issues by 2023 (estimated total cost of \$390,000, subject to Commission approval and borrowing referendum).

The above major capital projects were identified during the asset management planning process in 2019-2020 and have already been included in the 2021-2025 five year capital programs. The water conservation benefit will be a positive outcome that will come with the completion of these capital projects which are proposed to address issues associated with existing aging/failing infrastructure and poor asset conditions in the Highland Fernwood water service area.

#### *Service Delivery Implications*

No significant impacts to the operations and delivery of drinking water to the service area are expected as a result of the implementation of this water conservation plan.

#### **CONCLUSION**

The Highland Water and Sewer (Maliview) Service is applying to the Rural and Northern Communities Infrastructure funding program to fund its waste water treatment plant upgrade. The program requires applicants to have a Board endorsed Water Conservation Plan submitted no later than a month after the application deadline, on November 22, 2020.

The Water Conservation Plan as proposed aims to achieve 20% water loss reduction and 10% water use reduction in ten year by 2030 by continuing current water metering, usage reporting, consumption based billing, and Community Awareness and Education programs and carrying out a number of capital projects to replace existing aging water distribution and storage infrastructure.

**RECOMMENDATION**

That the Highland Fernwood Water Service Commission recommend to the Electoral Areas Committee that the Capital Regional District Board endorse the Water Conservation Plan.

Submitted by	Allen Xu, MSc., P.Eng, Manager of Engineering, Salt Spring Island Electoral Area
Concurrence by	Karla Campbell, BBA, Senior Manager, Salt Spring Island Electoral Area

AX: ts

Attachments: Appendix 1 Highland Fernwood Water Conservation Plan Draft



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CRD Salt Spring Island Electoral Area

# **Highland and Fernwood Water Service (Maliview Wastewater) Water Conservation Plan DRAFT**

October 14, 2020



## 1. Introduction

The Maliview Sewer Service is in a semi-rural residential community located on Salt Spring Island. It is a sewage conveyance and treatment system that is owned and operated by the Capital Regional District (CRD) and services the Maliview Sewer Service Area, shown Figure 1.



**Figure 1 Maliview Wastewater Service Area Map**

The Maliview Wastewater service is located geographically within the Highland and Fernwood Water Service area (Figure 2). Both the water and wastewater services are administered by the Highland and Fernwood water local Services Commission.

## 2. Water Supply System Profile

The Highland Fernwood water service area is comprised of 333 parcels of land with 320 of those parcels connected to the service.

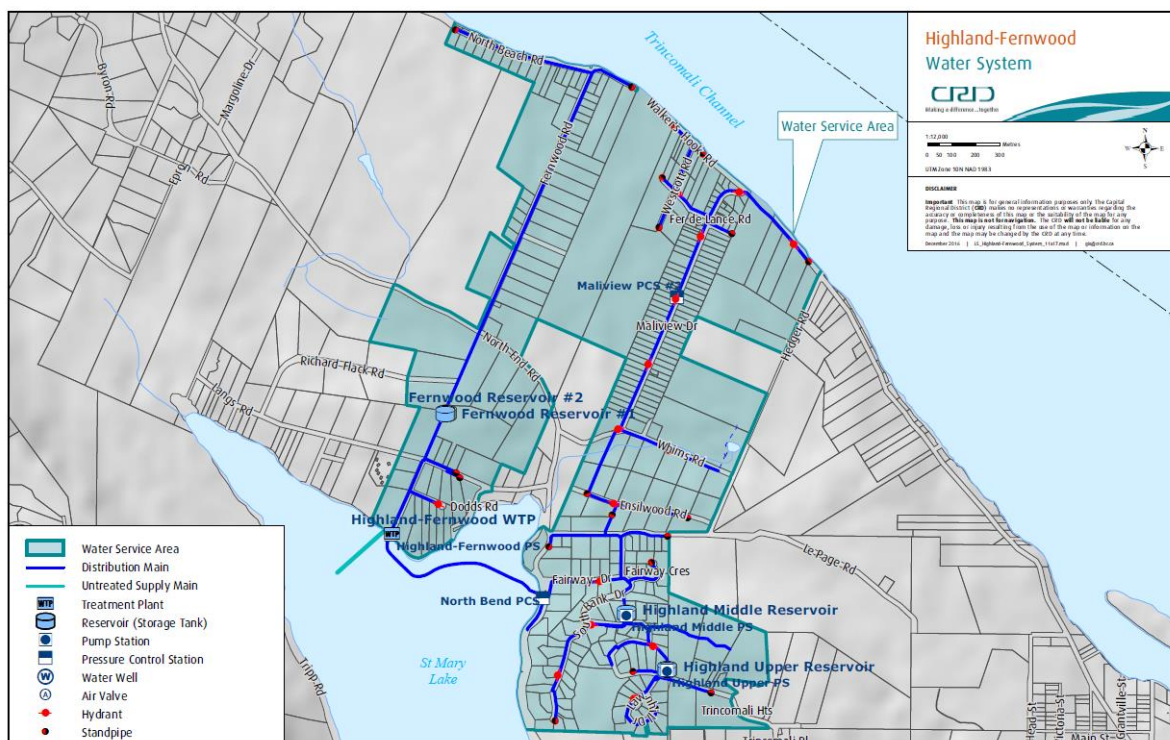
The service obtains its drinking water from St. Mary Lake, which lies within an uncontrolled multi-use watershed. The Capital Regional District (CRD) holds five licenses to divert a total of up to 230,000 m<sup>3</sup> per year and store up to 30,800 m<sup>3</sup>. St. Mary Lake is subject to seasonal water quality changes and is affected by periodic algae blooms.

The Highland/Fernwood water system is primarily comprised of:

- a water treatment plant (WTP) that draws water from St. Mary Lake and treats it at a location on Maycock Road, adjacent to the lake. The water is treated using a rapid mix system, flocculation, dissolved air floatation (DAF) and filters, ultraviolet disinfection, then chlorination

prior to being pumped, via the distribution system to two different reservoirs. The WTP design flow rate is 11.3 l/sec (150 l/gpm);

- one raw water pump station on Maycock Road, adjacent to the lake. (flow rate of two pumps running is 4.6 l/sec (60 l/gpm);
- approximately 12,000 m of water distribution pipe;
- 4 water reservoirs – one 180 m<sup>3</sup> (40,000 lg) on the Highland system, one 91 m<sup>3</sup> (20,000 lg) on the Highland system, one 45 m<sup>3</sup> (10,000 lg) on the Fernwood system and, one 91 m<sup>3</sup> (20,000 lg) on the Fernwood system;
- 2 water system booster pumps – on the Highland system only, 1 at each reservoir;
- fire hydrants, standpipes, and gate valves;
- water service connections complete with water meters;
- 2 pressure reducing valve stations - one on North End Road and one on Maliview Drive.



**Figure 2 Highland Fernwood Water Service Area Map**

Current system supply and use data are shown in Table 1, 2, and 3:

**Table 1 Water Supply Capacity for Highland and Fernwood Service**

Total Population Currently Served	750 Persons
Maximum Future Population	780 Persons
Maximum Annual Water Supply Capacity of System	350,000 Cubic Meters <sup>1</sup>

1. Based on water treatment plant capacity of 11.1 l/l. Licensed volume is 230,000 m<sup>3</sup> per year.

The water source for the Highland Fernwood Water Service is St. Mary Lake with an actual live storage of 16,593,000 cubic meters (Ministry of Environment) and an annual inflow estimated between 3 - 4 million cubic meters. The historical water supply available from St. Mary Lake is

significantly more than the licensed capacity. The volume of treated water available to the Highland Fernwood service is limited to the abstraction amount afforded it through license. The maximum design output of the water treatment plant is 11.1 l/s, or 350,000 cubic meters per year, which exceeds current annual production of water from this plant.

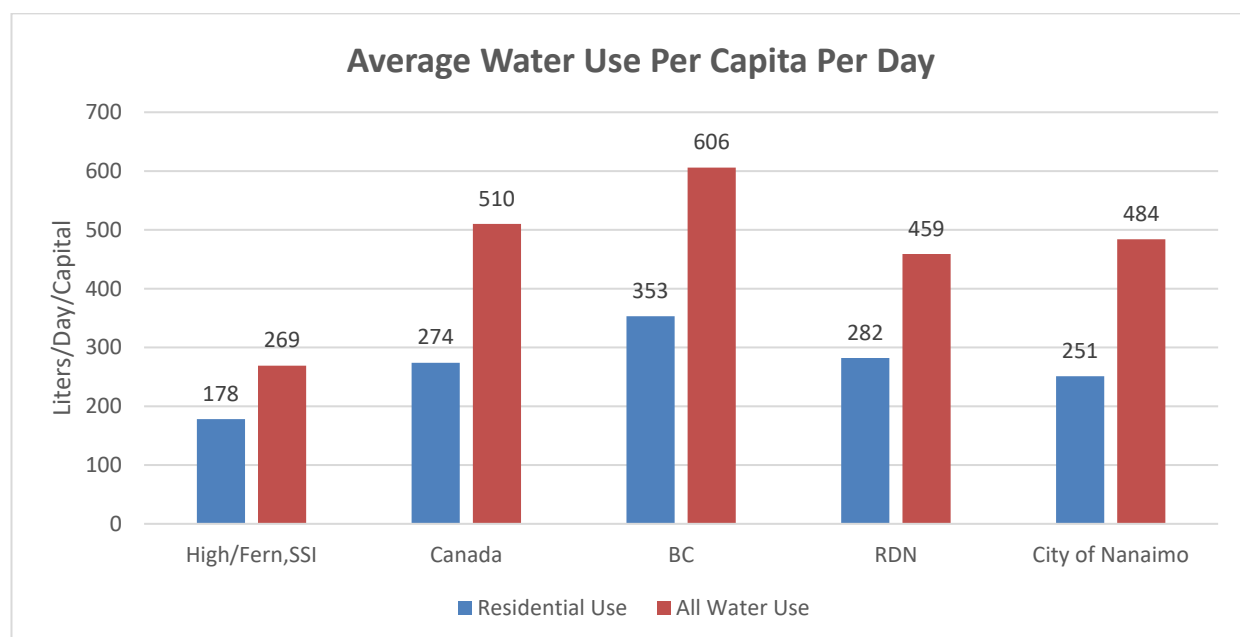
The water production and use data for the Highland Fernwood Service in 2015 to 2019 is provide in Table 2.

**Table 2 Water Production and Use Data for the Highland and Fernwood Water Service**

Year	Annual Production (m <sup>3</sup> )	Annual Residential Water Use (m <sup>3</sup> ) <sup>1</sup>	Annual Water Loss (m <sup>3</sup> ) <sup>2</sup>	Average Residential Use per Day (m <sup>3</sup> )	Average Residential Use per Capita (m <sup>3</sup> ) <sup>3</sup>	Average Residential Use per Capita per Day (liters)
2015	77,621	51,376	26,245	141	69	188
2016	85,727	50,965	34,762	140	68	186
2017	86,026	51,943	34,083	142	69	190
2018	85,659	51,059	34,600	140	68	187
2019	73,670	48,804	24,866	134	65	178

1. Water use data based on billing information. The Highland/Fernwood Water System is fully metered, and water meters are read quarterly.
2. The difference between water produced and water demand (total metered consumption) is called non-revenue water and includes distribution leaks, meter error, and unmetered uses such as fire hydrant usage, distribution system maintenance, and process water for the treatment plant. Water loss is estimated to be approximately over 30% of produced water which is considered high.
3. Calculation is based on 750 residents in the service area.

The following figure compares Highland Fernwood water use to other municipalities in BC, average BC and Canada in general.



### **Figure 3 Average Water Use per Capital per Day**

It is seen that average water use per capital per day for the Highland Fernwood service is significantly lower than BC and Canada average values, by 35% and 50%, respectively.

## **3. Demand Forecasting**

### **Population and Potential Growth**

The Highland - Fernwood Service Area, includes 333 taxable folios, of which 320 are currently connected to the water system. Most connections serve single-family equivalent (SFE) dwellings although 21 connections are reported to serve two dwellings each making 341 dwellings in total. As there is reportedly little seasonal variation in occupancy, for the purpose of this analysis, the population is assumed to average 750 residents (based on an average household size of 2.2 for Salt Spring Island, 2006 census).

There is limited potential for population growth within the Highland-Fernwood area as there are only 13 undeveloped folios remaining, and based on the relatively small lot sizes and lack of available sewer, subdivision is extremely unlikely. Therefore, it is estimated that the area has achieved close to its maximum number of households. If all properties were to be developed, the maximum area built-out population would be approximately 780 persons. Secondary dwellings are allowed on residential parcels on Salt Spring Island; however, the Islands Trust (which has jurisdiction for land use) restricts the approval of secondary dwellings where drinking water supply capacity or wastewater facilities are constrained.

Expansion of the service area is subject to the approval of the Capital Regional District Board (normally following a recommendation by the local service commission). There are several dwellings in the immediate proximity to the existing water area which are currently served by either individual private wells or extract from St. Mary Lake. It is possible that some of those adjacent owners may seek inclusion in the water service area in the future which would be contingent upon available capacity within the system and agreeing to fund the cost to extend the existing distribution piping system and pay all applicable inclusion charges levied against a new property. There has been limited increase (<5) in the number of folios in the combined system for the past eight years.

There is potential for an increase in average household size, although there are no apparent drivers for such an increase in order to predict a significant change. For the purpose of this study, it is assumed that the maximum population of the service area is equal to the build-out population of 780.

### **Climate Change Adaptation and Mitigation**

Precipitation trends are expected to change in coming decades. For the CRO region, by the 2050s, annual precipitation is likely to increase. For the purpose of this analysis, it is assumed that the worst case annual lake recharge would be 3% less than the driest year on historical record.

If water demand per capita, including non-revenue water, remains relatively static, the negligible forecast population growth would maintain the total average annual water demand at about 85,000 cubic metres. The current water source is expected to be capable of meeting this demand in the driest forecast year (accounting for climate change), with a maximum seasonal reservoir over-all drawdown of 10-15% of capacity. On this basis, the current water source is expected to be adequate

to serve the needs of the community for at least the next 50 years without demand reduction measures.

The Highland Fernwood water system has a relatively moderate carbon footprint as treated water must still be pumped to storage reservoirs to serve the community. Although it has been determined that there is sufficient raw water available to provide the community for at least the next 50 years, reducing water use per capita will benefit the community and the environment by:

- reducing the costs and carbon emissions of operating the process treatment plant including transporting residuals for disposal
- reducing the costs and carbon emissions of expanding the infrastructure to accommodate growth (e.g. manufacturing, transporting and installing larger water mains)
- maintaining more water storage in reserve for emergencies such as wildfires or extreme drought, which may increase due to climate change
- maintaining higher reservoir levels, thereby improving source water quality in summer and minimizing a possible expansion of storage by other users

#### **4. Conservation Goals and Targets**

The following water conservation targets are proposed by 2030:

- Reduce annual average water demand per full time, permanent resident by 10%,
- Reduce annual average water loss in the system by 20%.

These targets are achievable by gradual adoption of current, cost-effective technologies including high efficiency toilets and front loading washing machines. Rainwater harvesting for non-potable uses and leak reduction may also be implemented cost-effectively as existing infrastructure is replaced and annual costs of water service increase over the next 10-20 years. In order to achieve the conservation targets, the value of water efficient technologies and practices must be effectively communicated to the community.

There is approximately 12.9 km of water distribution pipe with the Highland Fernwood Water service with the vast majority being asbestos cement pipe installed in 1970s. The distribution also includes fire hydrants, standpipes, gate valves; and water service connections complete with water meters. The current water distribution system is approximately 50 years old and close or passed its service life. The service has experienced increasing number of localized water distribution pipe failures in recent years. Replacing these aged and failing water distribution system in the next five to ten years would effectively reduce water losses in the system.

#### **5. Current and Future Water Conservation Measures**

A planned adaptive strategy for water conservation is proposed for Highland and Fernwood, enabling conservation measures to be tailored to meet the changing needs of the community over time. This approach has proven successful for the CRD Greater Victoria water system. The following conservation measures are proposed as elements of a water conservation plan for Highland and Fernwood Water Services:

- a) **Universal metering (current)** - Each customer connection to the water system is fitted with

a water meter. The meters have been read quarterly. The ongoing annual cost to read and maintain the meters and to replace them is included in the Operational plans.

- b) **Reporting usage on water bills (current)** - Information about water use has been displayed on water bills since January 2011, raising customer awareness about their water use. Further information is presented at annual general meetings and in community newsletters, enabling customers to compare their own usage with the range and average in their community and others. The cost of reporting water usage on the water bills is currently budgeted.
- c) **Consumption based water billing (current)** - Inclining block rate structures are commonly used for CRD water services, typically recovering 10-25% of the total cost of service (the remainder is recovered through fixed user charges and parcel taxes).

Such a structure maintains stable revenue for fixed costs, provides a sufficient quantity of water at an affordable cost for essential customer needs, and provides a strong price signal to reduce excessive usage in any of the four billing cycles. Implementation of this structure in other CRD Salt Spring Island water services has proven to be effective in reducing an overall demand.

- d) **Community Awareness and Education (current and future; expand as needed to meet target)** - Information about water use and conservation is provided in community newsletters and at typically well attended annual general meetings (AGM). A more formal conservation awareness program may be implemented by linking information presented by mail and at the AGM with a community homepage on the CRD website that includes:

- water use statistics, and comparison with other areas and benchmarks/targets
- best practice guides (e.g. fixture and appliance standards, rainwater harvesting, leak prevention)
- links to CRD regional water conservation resources
- links to other organizations that provide water conservation resources tailored to the Gulf Islands (e.g. Mayne Island Integrated Water Systems Society, Salt Spring Island Water Council).

The cost of a modest community awareness program including the AGM, newsletters and website content, is currently budgeted. The scope of this measure will be reviewed annually and expanded as needed during annual and five year planning and budgeting process.

- e) **Distribution Loss Reduction (current and future; expand as needed to meet target)**

The CRD has monitored quarterly production volumes and the corresponding customer water usage as an indicator of leakage losses. CRD operators are able to monitor the difference between the volume of water treated and the volume measured through customer meters (non-revenue water).

The following measures is planned to be implemented over the next ten years to meet demand reduction targets and manage distribution losses in accordance with industry best practices:

- Develop/update a Strategic Asset Management Plan to prioritize asset replacement based on water losses and other criteria (current and every five years)



- Monitor overall non-revenue water at least annually, and compare against published benchmarks
- Add or modify distribution valves to increase zone isolation and measurement to efficiently isolate and repair leaks
- Develop a water main repair/replacement strategy for the Highland Fernwood water services;
- Complete a detailed water main repair/replacement design in 2021;
- Construct the initial phase of water main repair/replacement in 2022-2023 (estimated construction cost of \$1,500,000, subject to Commission approval and borrowing referendum).
- Repair/replace the Upper water storage reservoir for the service which is currently experiencing leakage issues by 2022.

The cost of a distribution loss reduction program have been incorporated into 2021-2025 five year capital plans. It is anticipated that losses will be significantly reduced and maintained to meet conservation program targets once the reduction measures are implemented.

f) **Water Conservation Plan Renewal (future in 2026, and every five years thereafter)**

A review of the Water Conservation Plan will be conducted every five years to update forecasts and targets, consider new information, and adjust program activities as required to meet targets.

The cost to review and update this conservation plan is anticipated to be roughly \$1,000 every five years, which could be accommodated within the current annual budget for the service.

## 6. Implementation Strategy

This Water Conservation Plan will be implemented by CRD staff, under the authority of the Highland Fernwood Water Service Commission and the CRD Board.

The following implementation schedule is proposed:

- a) **Universal metering** – this is an ongoing measure and will continue.
- b) **Reporting usage on water bills**– this is an ongoing measure and will continue.
- c) **Consumption based water billing (current)** – this is an ongoing measure and will continue.
- d) **Community Awareness and Education** – this is an ongoing measure and will continue.

The scope of this measure will be reviewed annually and expanded as needed during annual and five year planning and budgeting process.

e) **Distribution Loss Reduction**

- Develop/update a Strategic Asset Management Plan to prioritize asset replacement based on water losses and other criteria (current and every five years)
- Monitor overall non-revenue water at least annually, and compare against published benchmarks
- Develop a water main repair/replacement strategy for the Highland Fernwood water

## Highland and Fernwood Water Service Water Conservation Plan

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services in 2021;

- Complete a water main repair/replacement detailed design in 2021;
- Construct the initial phase of water main repair/replacement in 2022-2023 (estimated construction cost of \$1,500,000, subject to Commission approval and borrowing referendum).
- Repair/replace the Upper water storage reservoir for the service which is currently experiencing leakage issues by 2023.

The costs of a distribution loss reduction program have been incorporated into 2021-2025 five year capital plans for the Highland Fernwood water service. It is anticipated that losses will be significantly reduced and maintained to meet conservation program targets once the reduction measures are implemented.

### g) **Water Conservation Plan Renewal**

A review of the Water Conservation Plan will be conducted every five years to update forecasts and targets, consider new information, and adjust program activities as required to meet targets.

The cost to review and update this conservation plan is anticipated to be roughly \$1,000 every five years, which could be accommodated within the current annual budget for the service.



## Highland and Fernwood Water Service Water Conservation Plan

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### References:

- Highland Water System Asset Management Plan, McElhanney 2020
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- Highland Fernwood Water Service Water Conservation Plan Draft, Capital Regional District Internal Document 2012
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## **REPORT TO HIGHLAND WATER AND SEWER (MALIVIEW) SERVICES COMMISSION MEETING OF THURSDAY OCTOBER 22, 2020**

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**SUBJECT**     Request to Increase Budget to Develop Detailed Engineering Design and Cost Estimates for the Maliview Wastewater Treatment Plant Upgrading

### **ISSUE**

To seek the Commission's approval to increase the project budget (CE 582.4501) and proceed with detailed design and cost estimation for the upgrading of the Maliview Wastewater Treatment Plant (WWTP).

### **BACKGROUND**

The Maliview Wastewater Treatment Plant (WWTP) is a 60 m<sup>3</sup>/day Rotating Biological Contactor (RBC) secondary treatment plant that discharges treated effluent into the marine receiving environment of Trincomali Channel. Authorization to discharge falls under the provincial British Columbia Municipal Wastewater Regulation. The Maliview WWTP is exempted from the requirements of the federal Wastewater Systems Effluent Regulation due to small plant discharge. However the Federal government has jurisdiction under Section 36(3) of the *Fisheries Act* which prohibits deposition of deleterious substance in water frequented by fish.

The Maliview WWTP has been experiencing challenges in consistently meeting regulatory requirements. Environment Canada (EC) inspected the Maliview WWTP on August 22, 2019 and collected effluent samples for toxicity testing. The samples failed both LT50 and LC50 Rainbow Trout lethality analyses as well as contained approximately 1.5 times greater ammonia concentration than the acutely lethal concentration to rainbow trout.

On September 19, 2019, the CRD received a written warning letter from the Enforcement Branch of EC that the Maliview WWTP contravenes subsection 36(3) of the *Fisheries Act*. EC requires the CRD and its responsible officers to take all necessary corrective actions to ensure compliance and exercise due diligence in the future. EC also warned the CRD that it will consider taking further actions if corrective actions are not taken. In accordance with EC's Compliance and Enforcement Policy for Habitat and Pollution Provisions of Fisheries Act, the range of further actions include financial penalties, orders, injunctions or prosecutions.

On January 30, 2020, the CRD received a written warning letter from the Ministry of Environment (MOE), Province of British Columbia. MOE 2019 inspection determined that Maliview WWTP is non-compliant with Municipal Wastewater Regulation requirements. MOE requests that the CRD implement necessary changes or modifications to correct the non-compliance. MOE warns that if CRD fails to take necessary actions to restore compliance, they may escalate enforcement actions.

As required by the EC Warning, CRD provided a written response on October 22, 2019 and outlined its corrective action plans to enhance the facility and bring the facility back into regulatory compliance:

- Phase 1: Implementing operational improvements, e.g. , increase frequency of hauling of sludge and removal of fats, oils and grease, by December 31, 2019;

- Phase 2: Retaining an engineering consultant to review existing documentation and plant data, conduct engineering analysis and recommend plant upgrading options, as well as perform a preliminary design and cost estimate;

Phase 2 will also include a public outreach campaign to educate the users about negative impacts of disposing of fats, oils and grease into the sewer system and Wastewater treatment process. The final report and design work was to be completed by June 30, 2020; and,

- Phase 3: the final phase of the corrective action plan will be to complete the upgrading construction of the Maliview WWTP. The CRD has noted that due to limited financial capacity of the service, the CRD will need to explore debt borrowing (subject to electoral approval) and alternative funding strategies such as grants from senior levels of government. The target completion date for the upgrading is the end of year 2022.

The CRD provided a letter response back to MOE on February 25, 2020. The letter summarized near term actions and provided medium and long term action plans to the MOE. The actions and timelines are the same as CRD's commitment to the EC.

Currently the phase 1 tasks have been implemented and the CRD has completed a conceptual/preliminary design and cost estimate for upgrading options per the phase 2 commitments. To complete this Design Project, CRD retained an engineering consultant and completed an engineering assessment and a comprehensive analysis to investigate current problems with the plant and screen various treatment technologies that could be suitable for the upgrading of the Maliview WWTP (project CE 582.4501).

Seven potential technologies were evaluated and compared considering technology suitability, physical space constraints, capital and operational and maintenance costs, and regulatory requirements. Two technologies, Moving Bed Biofilm Reactor (MBBR) and Conventional Activated Sludge (CAS) were shortlisted and further evaluated in the conceptual design process. These two technologies were further evaluated and scored on technology, economic and environmental criteria. MBBR was eventually recommended to be the technology to proceed with a conceptual design, primarily due to the fact that the biofilm is more resilient to broad load and temperature ranges which is a typical issue experienced in the Maliview wastewater service. It was concluded in the study that the MBBR process will be better suited for the service to meet effluent requirements during peak flow and loading events.

Based on the conceptual design, it is estimated that the total construction costs associated with the upgrade is approximately \$1.65 million (Class C cost estimate with up to +/- 40% contingency). Design details including general drawings and specifications for civil, structural, process and instrumentation, process and mechanical, electrical drawings were not included in the scope of work for the preliminary design and need to be developed for future construction. Additionally, there have not been site survey or geotechnical investigations completed at this stage, which will be required to inform the design of site grading, foundation and tanks. An estimation of additional costs associated with detailed design as well as costs associated with preparing the grant application are summarized in Table 1.

Table 1 Estimated Costs for Detailed Design, Geotechnical Investigation and Site Survey for Maliview WWTP Upgrade (Alternative 1)

<b>Item</b>	<b>Estimated Fees</b>
Detailed design and cost estimation (Issue for Tender specification and drawings and Class B cost estimation within 25%)	\$143,000
Geotechnical Investigation	\$18,000
Site Survey	\$3,700
Project Management and Quality Assurance	\$16,500
Grant Application	\$3,000
Archeological Impact Study and Monitoring Allowance <sup>1</sup>	\$50,000
Contingency (10%) <sup>2</sup>	\$23,420
Total Estimate Cost <sup>3</sup>	\$257,620

1 A preliminary search indicates the site is in a high archaeological potential area. An archaeologist will need to be engaged to further review the site and obtain regulatory permit (if required).

2. Contingency will be applied if needed, any unused contingency will be returned to the Capital Reserve Fund or Community Works Fund.

3. Approximately 12% based on the assumption that total construction cost is \$2,200,000.

Current construction cost estimation is high level and based on conceptual/preliminary design information and consultant's experience with similar sized Wastewater plant projects elsewhere. If a detailed design is going to be developed, it is recommended that a geotechnical investigation and site survey be carried out to understand the site surface and subsurface conditions to mitigate uncertainties in construction and costs. It is also recommended that the current Class C cost estimated from preliminary design be further broken down, analyzed and updated with current market data and pricing for Salt Spring Island.

Table 2 provides the estimated costs for an alternative where the full Issue-for-Tender detailed design will not be developed at this time, but some additional analysis and updating of cost estimation, as well as geotechnical investigation and site survey will be completed. The primary purpose of the alternative approach is to reduce uncertainties associated with future design and construction and a reasonable accurate cost estimation can be developed for the grant application.

Table 2 Estimated Costs for Detailed Cost Estimation, Geotechnical Investigation and Site Survey for Maliview WWTP Upgrade (Alternative 2)

<b>Item</b>	<b>Estimated Fees</b>
Additional Design & Analysis, Detailed Cost Estimation	\$40,000
Public Engagement/Consultation	
Geotechnical Investigation	\$18,000
Site Survey	\$3,700
Project Management and Quality Assurance	\$6,500
Grant Application	\$3,000
Archeological Impact Study and Monitoring Allowance	\$50,000
Contingency (10%)	\$12,120
Total Estimate Cost	\$133,320

Advantages/disadvantages and financial/regulatory/environmental implications for both alternatives are further analyzed and presented in subsequent sections of this report.

## **ALTERNATIVES**

### **Alternative 1**

That the Highland Water and Sewer (Maliview) Service Commission recommends to the Electoral Areas Committee that the Capital Regional District Board amend the Highland Water and Sewer (Maliview) service Five Year Financial Plan to include a project for Maliview WWTP Upgrade Design in year 2020 with the total budget of \$257,620 funded by the combination of capital reserve fund (\$22,000) and Community Work Fund (\$235,620).

### **Alternative 2**

That the Highland Water and Sewer (Maliview) Service Commission recommends that the Capital Regional District Board amend the Highland Water and Sewer (Maliview) service Five Year Financial Plan to include a project for Maliview WWTP Upgrade Design in year 2020 with the total budget of \$133,320 funded by the combination of capital reserve fund (\$12,000) and Community Work Fund (\$121,320).

### **Alternative 3**

That the Highland Water and Sewer (Maliview) Service Commission recommends the request be referred back to staff.

## **IMPLICATIONS**

### **INTERGOVERNMENTAL/ REGULATORY IMPLICATIONS**

As stated in the federal government's warning letter, EC will take further actions against the CRD and the service if corrective actions are not taken or due diligence is not exercised by the CRD in a timely manner. The range of further actions may include financial penalties, orders, injunctions or prosecution.

As stated in the Warning Letter from the Ministry of Environment (MOE), MOE *requests that the* CRD immediately implement the necessary changes or modifications to correct the noncompliance. MOE states in the warning letter that "Contravention of the requirements set out in the Municipal Wastewater Regulation is an offence under the Environmental Management Act (EMA). Section 120(13) of EMA states as follows:

*120 (13) A person who contravenes a requirement of a regulation that specifies the quantity or characteristics of waste that may be introduced into the environment commits an offence and is liable on conviction to a fine not exceeding \$1,000, 000 or imprisonment for not more than 6 months, or both."*

### **ECONOMIC IMPLICATIONS**

#### **Fines and Penalties**

Under section 40(2) of the *Fisheries Act*, the federal regulator can assess a fine of no less than \$25,000 and not more than \$2,000,000 for a first offence. Or a fine of not less than \$50,000 and not more than \$4,000,000, for a second or subsequent offence.

MOE of BC can impose an Administrative Monetary Penalty of up to \$75,000 or up to \$1,000,000 under formal charges, in accordance with its Compliance and Enforcement Policy and Procedure.

If penalties are assessed against the Maliview WWTP, the cost will be borne by the service users in the community, which can have severe and adverse impacts to the operation and capital improvements of the service for many years in the future.

### **Grant Program**

The CRD has noted in its response to the federal government that due to limited financial capacity of the service, the CRD will need to explore alternative funding strategies such as grants from senior levels of government. It should be noted that, funding criteria of senior levels of government often require the project to be “shovel ready” which means the projects are properly designed, cost estimated and ready to be constructed within a certain timeframe prescribed by the program. It is therefore critical to carry out the engineering investigation and designs as early as possible so that the project meets funding criteria should funding opportunities become available in the future.

CRD staff have been closely monitoring funding program announcements and news - on June 25, 2020, the Canadian and British Columbian governments announced up to \$58.7 million towards the second intake of the Rural and Northern Communities (RNC) Program to support cost-sharing of infrastructure projects in communities across the province. This intake is designed to target projects starting in 2021. For local governments with less than 25,000 population, the program provides up to 90% of required funding towards eligible infrastructure programs.

CRD staff have recommended to submit an application for the Maliview upgrading project prior to the deadline of October 22, 2020. According to the Grant Administrator/Approval Officer, engineering and construction costs are both eligible costs under the program. However it is expected by the Grant Administrator that the design be advanced to a stage where there is a reasonable level of certainty associated with the construction details and associated costs (less than 20%). As well it is important to know that any ineligible costs and cost overruns are the responsibility of the grant recipient, besides the 10% share of the total costs that is the responsibilities of the recipient.

Based on conceptual design and preliminary design analysis without geotechnical investigation and detailed engineering analysis, it is estimated that the entire project will likely cost \$2,000,000 to \$2,200,000 including engineering, project management, construction, and contingency. If CRD can successfully secure a grant under the RNC Program, the costs to the service would be approximately \$200,000 to \$250,000 (10% of total costs plus contingency plus ineligible costs). The financial burden to the service will be greatly reduced if the grant funding application is successful.

### **Project Fund, Capital Reserve Fund and Community Works Fund**

The inflow and infiltration inspection project (CE.451.7501) was completed in 2018. The outfall land portion replacement project (CE.451.7502) was completed in early 2019 and the sewer inflow and infiltration repairs project (CE.451.7503) was completed in early 2019. Based on financial analysis, a total of approximately \$87,713 Community Works Fund (CWF) is left within the three project funds and will be returned.

Table 3: Summary of completed projects and funding sources with CWF remaining.

Project Number/Name	Total Budget	CWF Eligible Costs
CE.451.7501 Maliview Sewer Inflow and Infiltration Inspection	\$15,000	\$13,190
CE.451.7502 Maliview Sewer Replacement	\$135,000	\$45,198
CE.451.7503 Maliview Inflow and Infiltration Repairs	\$80,875	\$63,899
Total Budget	\$230,875	\$122,287
Total CWF Fund Received for All Three Projects		\$210,000
Remaining CWF Fund (to be returned)		\$87,713

In 2020 capital projects plan, there was a project for access improvements (\$15,000) and another project for backup power design (\$10,000). These two projects can likely be more cost-effectively executed in the upcoming major upgrading project and therefore the allocated total fund of \$25,000 from Capital Reserve Fund (CRF) will not be required. The original CRF balance at the end of 2020 is estimated to be \$4,933 and it will be approximately \$29,933 due to the cancellation of the access improvement and backup power design projects.

Existing project CE.582.4501 has an approved budget of \$57,900 (\$9,120 spent on project management and technical review, \$48,294 spent on optional analysis and conceptual design, \$486 remaining) and the related scope has now been completed. It is estimated that in order to continue detailed design and fund Alternative 1, a total of \$22,000 is needed from the CRF and a total of \$182,200 is required from the CWF. There is a net amount of \$94,487 additional CWF to be applied for, considering the return of \$87,713 to CWF from remaining project fund of CE.451.7501, CE.451.7502 and CE.451.7503.

It is estimated that to fund Alternative 2, a total of \$12,000 is needed from the CRF (for CWF ineligible costs) and a total of \$66,320 is required from the CWF (a net amount of \$13,880 will be returned to the CWF). The costs and funding sources are summarized in Table 4.

Table 4: Summary of alternative costs and funding sources.

Alternative	Total Budget Increase Required	Budget to be Funded by CRF	Budget to be Funded by CWF	Remaining Funds in Completed Capital Projects (to be Returned to CWF)	Net Additional CWF to be Applied for
Alternative 1	\$257,620	\$22,000	\$235,620	\$87,713	\$147,907
Alternative 2	\$133,320	\$12,000	\$121,320	\$87,713	\$33,607

## **ENVIRONMENTAL IMPLICATIONS**

Discharging effluent that does not meet treatment requirements into the marine environment is considered, under *Fisheries Act*, as depositing deleterious substances that affects fish in the receiving marine environment. One of the CRD's priorities is protecting health and the environment and therefore taking timely corrective action is required to rectify this environmental risk.

## **CONCLUSION**

The Maliview WWTP has been experiencing challenges in consistently meeting regulatory requirements. The CRD has received warning letters from both the federal and provincial regulators who require the CRD to take all necessary corrective actions to ensure compliance and exercise due diligence. The CRD has developed an action plan in response to the Regulators which committed to complete the upgrading construction of the Maliview WWTP by the end of 2022, subject to funding. To date, phase 2 actions are completed which evaluated multiple upgrading options and recommended upgrading using MBBR technology. The phase 2 study also developed a preliminary design for the MBBR option and a Class C cost estimate.

On June 25, 2020, the Canadian and British Columbian governments announced up to \$58.7 million towards the second intake of the RNC Program to support cost-sharing of infrastructure projects in communities across the province. This intake is designed to target projects starting in 2021.

Proceeding with detailed design and cost estimate will put the service in a ready position to apply for senior level government grants and reduces unknowns and uncertainties in the construction phase and mitigate future cost overruns. Currently the Federal and Provincial governments' RNC Program can provide up to 90% of construction costs which will greatly reduce the service's financial burden and accelerate the construction of treatment plant upgrading and return to compliance.

Approval of the increase in the design project budget will permit the project team to advance the design stage in parallel with the RNC Grant application which may be viewed favorably by the granting agencies.

## **RECOMMENDATION**

That the Highland Water and Sewer (Maliview) Service Commission recommends that the Electoral Areas Committee recommends that the Capital Regional District Board amend the Highland Water and Sewer (Maliview) service Five Year Financial Plan to include a project for Maliview WWTP Upgrade Design in year 2020 with the total budget of \$257,620 funded by the combination of capital reserve fund (\$22,000) and Community Work Fund (\$235,620).

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AX/ts

Attachments:

Appendix 1 Preliminary Design Memo

Appendix 2 [Northern and Rural Infrastructure Program New Announcement](#)



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## PRELIMINARY DESIGN REPORT

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### Capital Regional District Salt Spring Island

### Maliview Wastewater Treatment Plant




OCTOBER 2020

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## EXECUTIVE SUMMARY

The Maliview Wastewater Treatment Facility is a secondary treatment facility providing treatment for approximately 100 residences on Salt Spring Island. In its current configuration, the treatment facility screens incoming wastewater utilizing 2-mm screen. Screened flows up to 60 m<sup>3</sup>/d are treated utilizing a Rotating Biological Contactor (RBC) prior to clarification and discharge to the marine outfall. Screened flows greater than 60 m<sup>3</sup>/d are split from the main treatment process and discharged directly to the outfall and into Trincomali Channel.

Currently, discharges from the Maliview Treatment Facility occasionally exceed permitted BOD<sub>5</sub>, TSS, and toxicity. As such, upgrades to the facility are required to improve effluent quality prior to discharge. The preliminary design of the facility upgrades includes the following:

- Increased secondary treatment capacity to 100 m<sup>3</sup>/d.
- Moving Bed Biofilm Reactor (MBBR) treatment system in a two-stage reactor configuration.
  - First MBBR reactor: BOD<sub>5</sub> oxidation.
  - Second MBBR reactor: Ammonia oxidation.
- Mixing tank for chemical flocculation and biomass settling and pH adjustment.
- Secondary Clarifier (retrofitted RBC) for suspended solids removal and sludge storage

These process improvements will require additional modifications to the treatment facility, including:

- Conversion of the storage room for chemical storage (sodium hydroxide and aluminum sulphate).
- Duty/standby blowers located within the storage building.
- Miscellaneous structural pads.
- Step up transformer for 600 V.
- Electrical, instrumentation, and controls upgrades.
- New conveyance piping.
- Emergency eye wash and shower.
- Tempered water system.
- Building HVAC upgrades.
- Standby generator

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# 1 INTRODUCTION

The Capital Regional District (CRD) retained Associated Engineering (AE) to assist them with the Maliview Wastewater Treatment Plant Upgrade project. The findings of the work to date indicate that additional treatment is required to meet receiving environment quality objectives.

The proposed upgrades include the design of a new MBBR train to be integrated into the existing treatment train on the current Maliview Wastewater Treatment Plant (WWTP) site.

## 1.1 Purpose

The purpose of the Design Basis Memorandum (DBM) is to:

- Summarize the findings and observations of the field work undertaken.
- Document the elements required for the detailed design stage of the project, including extent of existing system being repurposed and upgraded, as well new project elements complete with cost estimates, and a proposed project implementation plan.
- Serve as a technical detailed design guidance document for the next phase of the project.
- Provide an updated cost estimate for CRD's budgeting.

## 1.2 Previous Studies and Documents

The following previous studies, documents and data were provided by the CRD and reviewed by AE:

- Drawings of the Maliview WWTF: One drawing of the RBC unit and two as-built drawings of the WWTF.
- Maliview Environmental Impact Study, 2006.
- Plant Permit (PE 242) and Registration (RE-00242) and associated letters from the CRD and Ministry of the Environment (MOE), August 2006.
- P.J. Hannah Biodisc Operation and Maintenance Manual.
- Facility classification and operator's certification.
- Plant monitoring, daily operation/inspection report forms, sampling schedule and procedure.
- Self-assessment report form.
- Maliview Sewage System - Asset Condition Evaluation and Engineering Study, Final Report by Stantec, November 2011.
- Maliview WWTF Operating Plan by the CRD, November 2013.
- Gulf Islands and Port Renfrew Wastewater and Marine Environment Program - 2016 Annual Report by the CRD, May 2017.
- Maliview – Surface water sampling sites.
- Response to written warning letter (File: 8530-2019-07-23-11959) issued for the Maliview WWTF by the CRD, October 2019.
- 2016 – 2019 Influent and effluent data (flow, biological oxygen demand – BOD5, total suspended solids – TSS, ammonia, fecal coliforms, and pH).
- 2019 Ganges WWTF rain gauge data.
- 2019 water consumption data.

- Additional sampling conducted in February 2020 (Maliview WWTF) and March and April 2020 (outfall – receiving water summary).
- Alkalinity Sampling Data.
- Dimensions of existing storage building onsite.
- Maliview Wastewater Treatment Facility Technology Screening report, May 2020.

### **1.3 Scope of Services**

The scope of the DBM report includes the following:

- Design Criteria Confirmation/Establishment.
- High-level multi-discipline assessment and review of existing systems and upgrade requirements for the purpose of defining detailed design scope, including structural, building mechanical, process mechanical, electrical, and instrumentation and control.
- Utility Requirements.
- Existing System Reuse Items Summary.
- New System Tie-in Requirements.
- New System Operation Philosophy.
- Construction Tie-ins and Sequencing.
- Updated Cost Estimates and Schedule.
- Review Alkalinity Sampling Program Results and Implications to Upgrade.
- Design Drawing Preparation.

## 2 BACKGROUND INFORMATION

### 2.1 Existing Installation

The Maliview WWTF consists of a raw influent receiving box, a wet well, a Rotoscreen with 2-mm openings, a modified settling chamber that serves as an equalization tank, a splitter box, and a rotating biological contactor (RBC) unit comprising of a screened effluent settling chamber, two RBCs and a final clarifier. The RBC unit has capacity to treat 60 m<sup>3</sup>/d. Flows in excess of 60 m<sup>3</sup>/d (and up to 250 m<sup>3</sup>/d) by-pass the biological treatment system and are combined with the RBC unit effluent before discharge to the Trincomali Channel of the Georgia Strait through an outfall pipe. A simplified process flow diagram (PFD) is presented in Figure 2-1.

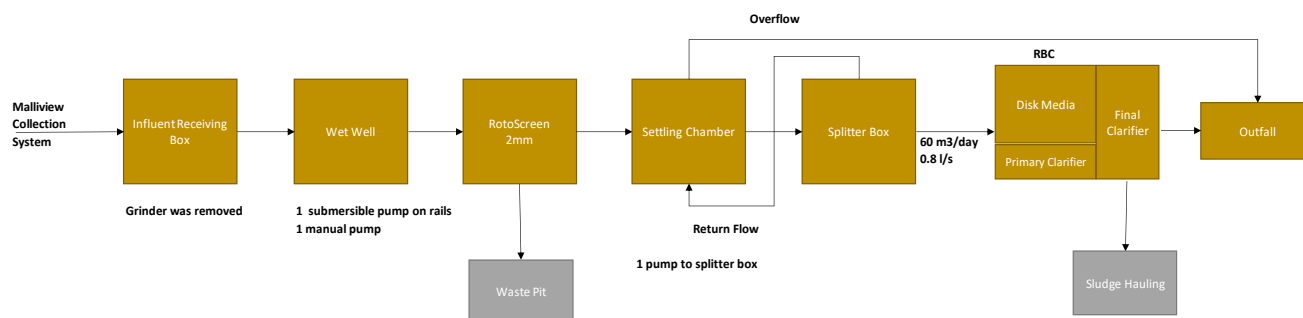


Figure 2-1  
Simplified PFD of Existing Installation

### 2.2 Regulatory Targets

All municipal wastewater discharges to surface water in BC must comply with the provincial Municipal Wastewater Regulation<sup>1</sup> (MWR) (B.C. Reg. 87/2012) under the Environmental Management Act (S.B.C. 2003, c. 53), and those that are designed to collect an average daily influent volume of 100 m<sup>3</sup> or higher must comply with the federal Wastewater Systems Effluent Regulations (WSER) (SOR/2012-139) under the federal Fisheries Act (R.S.C. 1985, c. F-14).

The WWTF permit (Registration RE-00242) was amended in 2007 to allow for flows in excess of 60 m<sup>3</sup>/d, but less than 250 m<sup>3</sup>/d, to be screened only. The effluent limits are as follows:

- RBC unit effluent (treating up to 60 m<sup>3</sup>/d) – 5-day carbonaceous biochemical oxygen demand (cBOD) and total suspended solids (TSS) levels of 45 mg/L.
- Combined effluent (flows over 60 m<sup>3</sup>/d) – cBOD<sub>5</sub> and TSS levels of 130 mg/L.

<sup>1</sup> This applies unless the discharge is authorized under an existing permit, issued by the Ministry of Environment. Historically, municipal wastewater discharges were authorized under site-specific permits. New municipal discharges, or those that are undergoing significant upgrades or changes, are being moved to the Registration process, where they are required to meet all applicable aspects of the regulations.

Effluent Quality Parameter	Fisheries Act	MWR Table 11 Criteria and Section 95	
cBOD <sub>5</sub>	N/A	< 2x ADWF <sup>1</sup>	≤ 45 mg/L
	N/A	≥ 2x ADWF (interim)	≤ 130 mg/L
TSS	N/A	< 2x ADWF	≤ 45 mg/L
	N/A	≥ 2x ADWF (interim)	≤ 130 mg/L
pH	N/A	< 2x ADWF	6 – 9 pH units
Total Phosphorus (total P)	N/A	< 2x ADWF	N/A
Ortho-Phosphate (ortho-P)	N/A	< 2x ADWF	N/A
Ammonia-N	< 33 mg/L <sup>(2)</sup>	Calculated values <sup>3</sup> of 0.69 mg/L in the vicinity of the outfall based on receiving environment characteristics and chronic aquatic life guideline (discussed below)	
Fecal Coliforms	N/A	Back-calculated based on receiving environment characteristics and provincial water quality guidelines (discussed below)	

Notes:

<sup>1</sup> ADWF = Average Dry Weather Flow, as defined by the MWR.

<sup>2</sup> Ammonia-N concentration in the combined effluent (treated + by-passed) that corresponds to the unionized ammonia limit of 1.25 mg/L at pH of 8 and temperature of 20°C.

<sup>3</sup> This corresponds to a pH of 8, temperature of 25°C, and salinity of 10 ppt (g/kg) and represents the chronic (long-term) guideline. The acute (short-term) maximum guideline, under the same factors, is 4.6 mg/L.

N/A = not applicable (no standard exists).

cBOD<sub>5</sub> = 5-day carbonaceous biochemical oxygen demand.

## 2.3 Population

There were 100 single family equivalent (SFE) recorded for the Maliview catchment area in the last quarter of 2019. Assuming an average occupancy of 2.8 persons per unit as per the CRD planning documents, it is estimated the current population served by the Maliview WWTF is approximately 280 persons. The Maliview area has the potential to accommodate 115 SFE or a total population of 322 persons (at 2.8 person per unit) according to the information provided by the CRD.

## 2.4 Wastewater Generation

From analysis of the influent monitoring data, the estimated BOD<sub>5</sub> and TSS generation rate per person were estimated to be 68 and 56 g/person-day, respectively for 2019. The NH<sub>3</sub>-N load per person was estimated to be 6.3 g/person-day for 2019. These numbers are lower than typical, but within the range of published values<sup>2</sup> of 50 – 120, 60 – 150, and 5 – 12 g/person-day for BOD<sub>5</sub>, TSS, and NH<sub>3</sub>-N respectively.

The per capita loadings under dry weather flow conditions (May to September) were calculated based on the average BOD<sub>5</sub>, TSS and NH<sub>3</sub>-N obtained for May to September (2017 to 2019) and average dry weather flows also obtained for May to September (2017 to 2019). The per capita loadings obtained are 55 g BOD<sub>5</sub>/cap/d, 50 g TSS/cap/d.

<sup>2</sup> Metcalf & Eddy (2003). Wastewater Engineering: Treatment and Reuse. McGraw Hill, NY.

However, as these estimated generation rates are on the “low” end of the typical ranges, higher generation rates should be utilized to minimize the risk of inaccurate data skewing the estimation for generation rates. As such typical values of 76g of BOD<sub>5</sub> and TSS/cap/d and 7.6 g NH<sub>3</sub>-N/cap/d are assumed for design.



### 3 DESIGN CRITERIA

#### 3.1 Design Parameters

Table 3-1 summarizes the raw wastewater flows and characteristics utilized for the preliminary design of the secondary treatment system.

**Table 3-1  
Design Summary**

Parameter	Units	Value
Average Annual Flow	m <sup>3</sup> /d	70
Average Dry Weather Flow	m <sup>3</sup> /d	40
Average Wet Weather Flow	m <sup>3</sup> /d	95
Maximum Daily Flow	m <sup>3</sup> /d	100
BOD <sub>5</sub> Loading	kg/d	25
TSS Loading	kg/d	25
NH <sub>3</sub> -N (average)	kg/d	2.4
NH <sub>3</sub> -N (peak)	kg/d	3.6
Alkalinity (average)	kg/d	16.1

The design TSS and BOD<sub>5</sub> loading of 25 kg/d corresponds to a per capita generation rate of 76 g/cap/d, which is within the typical range for North America (50 to 120 g/cap/d). The generation rate also corresponds to a typical municipal collection system with no large industrial contributions and 25% of contributors utilizing garburators (Metcalf & Eddy, 2013). Overall, the generation rates are higher than the measured generation rate of 68 and 56 g/cap/d for BOD<sub>5</sub> and TSS (based on analysis of monitoring data) and represents a conservative estimation for TSS and BOD<sub>5</sub> loading to the facility (Associated Engineering, 2020).

Average ammonia (as NH<sub>3</sub>-N) loading of 2.5 kg/d corresponds to a per capita generation rate of 7.7 g/cap/d, which is within the typical range of North America (5 to 12 g/cap/d). The generation rate also corresponds to a typical municipal collection system with no large industrial contributions and 25% of contributors utilizing garburators (Metcalf & Eddy, 2013). Overall, the design generation rate is higher than the measured generation rate of 6.3 g/cap/d and represents a conservative estimation for ammonia loading to the facility. In addition, the peak ammonia loading of 3.2 kg/d corresponds to a per capita generation rate of 11.2 g/cap/d, which on the high end of the typical range of North America and represents a conservative value.

Recent measurements of influent ammonia during dry weather showed ammonia concentrations at approximately 70 mg/L. This corresponds to an ammonia loading of 2.8 kg/d under average dry weather flow and within the design parameters for the MBBR system.

Source water for Maliview Estates originates from a surface water source (St. Mary Lake) where natural alkalinity is expected to be negligible. As such, all alkalinity in the wastewater is expected to be a result of residential contributions. Assuming a typical per capita generation rate of 50 g/cap/d (as CaCO<sub>3</sub>), the typical alkalinity loading



rate to the treatment facility is 16.1 kg/d. Assuming an average annual flowrate of 70 m<sup>3</sup>/d, the average alkalinity concentration is approximately 230 mg/L. This was confirmed by the grab sample measurements taken during the month of June 2020 by the CRD.

## 4 UPGRADE CONCEPT

### 4.1 Major Wastewater Treatment Components

To achieve the revised treatment objectives, the addition of new secondary treatment train will be required. This will include the following components:

- New lifting pump (wet well to screen).
- New lifting pump (settling and equalization tank to MBBR).
- Moving bed biofilm reactor (MBBR) treatment system for BOD<sub>5</sub> and ammonia removal.
- Coagulation tank.
- Reconfigured Rotating Biological Contactor (RBC) to secondary clarifier.
- Process aeration blowers.
- Chemical dosing equipment (alum and caustic).
- Upgraded electrical, instrumentation, and controls.

#### 4.1.1 Process Flow Diagram

As shown in Figure 4-1, the new process train (red coloured items) will be integrated into the existing treatment system.

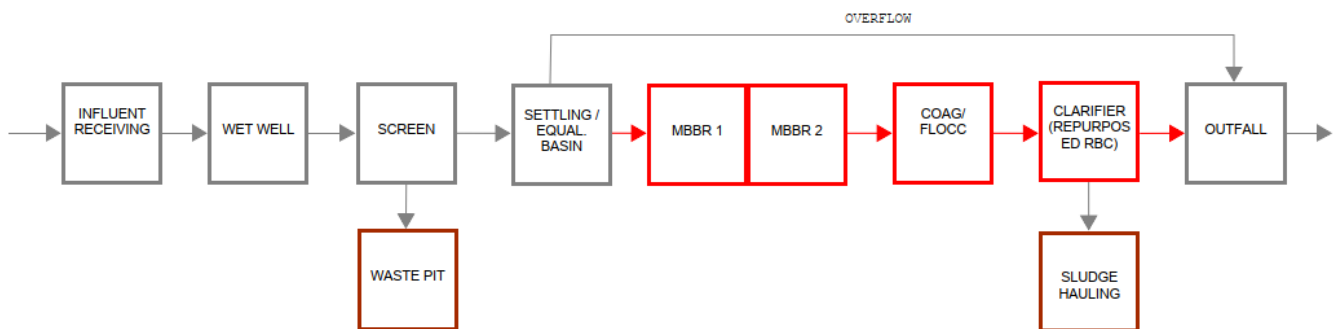


Figure 4-1  
Preliminary Process Flow Diagram

### 4.2 General Arrangements

The Maliview WWTP project site is located on Salt Spring Island on the intersection of Walks Hook Road and Maliview Drive.

Refer to Drawing C-101 for the site plan and general process arrangement.



## 5 WASTEWATER TREATMENT PLANT DESIGN

The detailed design package will need to include the following discipline components:

- General drawings and specifications.
- Civil drawings and specifications.
- Structural drawings and specifications.
- Process and Instrumentation diagrams.
- Process Mechanical drawings and specifications.
- HVAC drawings and specifications.
- Electrical drawings and specifications.
- Instrumentation and Controls drawings and specifications.

### 5.1 Civil

#### 5.1.1 Tie-ins

New conveyance piping will be required to convey untreated and treated wastewater for the new process tankage. The piping will be comprised of a mixture of 100 mm nominal to 150 mm nominal PVC SDR35 piping. Piping is to be joined with as gasketed bell and spigot with thrust blocks for restraint. Above ground piping is to be solvent welded or flanged as necessary.

Refer to Drawing C-101 for overview of proposed tie-in locations for the new conveyance piping to the existing facility.

#### 5.1.2 Site Grading and Preparation

The proposed concept utilizes above grade tankage and piping in a small portion of the treatment plant site footprint. Overall, the general disturbance should be minor and require minimal grading. A topographic survey should be completed prior to the commencement of detailed design to confirm any site grading requirements.

In addition, a subsurface utility survey should be conducted to confirm the location of existing utilities.

### 5.2 Structural

Structural components on site will consist of miscellaneous concrete pads for support of process and other equipment.

The new above grade tankage will be supported utilizing cast-in-place concrete slabs, 2,500 x 2,500 (LxW) in size, to support the above grade treatment tankage. Each slab will vary in height (in increments of 150 mm) to ensure the tankage remains within the necessary hydraulic profile.

Concrete slabs will be provided for components such as emergency showers, blowers, transformers, and piping supports.

### 5.3 Geotechnical

At this preliminary stage, no geotechnical investigations have been conducted. Further geotechnical investigations will be required prior to the completion of detailed design.

## 5.4 Process & Process Mechanical

The main process mechanical components of the revised treatment system are to include:

- New Lift Pumps.
- New Conveyance Piping.
- New Moving Bed Biofilm Reactors (MBBR) 1 and 2.
- New Coagulation Tank.
- New Process Air Blowers.
- New Chemical Dosing Systems.
- Retrofit of Existing Rotating Biological Contactor (RBC) to Secondary Clarifier.

As show on Drawing C-101, a new lift pump will be provided to pump flows from the equalization tank to the new MBBR reactors. For flows that exceed  $100 \text{ m}^3/\text{d}$ , the static overflow on the equalization tank will split the excess flows directly to the outfall through the existing overflow.

### 5.4.1 Screening System

The existing screening system consists of an enclosed wedgewire screen with a 2 mm gap. The screening system is raised above the wet well, where a pump lifts raw wastewater to the screen. Screenings are subsequently discharged into a sump adjacent to the wet well. The screen is supported by welded stainless steel square tubing and anchored to the concrete base via threaded concrete anchors.

To facilitate a one cubic yard capacity plastic “tilt truck” for containment of screenings, the screen would need to be raised by an additional 1,400 mm. This could be accomplished by extending the existing stainless steel support structure. To ensure rigidity, additional cross bracing may be required. The downside of this approach is that the screenings discharged are not dewatered. As such, the screenings contain a significant amount of water that increases its volume (reducing runtime of the “tilt truck” bin) and the odour potential of the screenings. It is recommended that a washer-compactor be installed underneath the screen in order to minimize the water and putrescible content of the screenings to reduce odour potential. Bins should also be covered to minimize odours.

Note that retrofit of the existing screening system will require temporary wastewater diversion and temporary screening.

### 5.4.2 Secondary Treatment System

The new MBBR secondary treatment system will consist of the following equipment outlined in Table 5-1. The MBBR tankage will be filled with plastic media that will facilitate the growth of microbes that will consume the organic matter and oxidize ammonia in the wastewater. MBBR Tank No. 1 will function as the first stage in which  $\text{BOD}_5$  is consumed while MBBR Tank No. 2 will function as the second stage in which ammonia is oxidized to nitrate. The two stages are required as  $\text{BOD}_5$  concentrations are required to be reduced to a concentration ( $< 25 \text{ mg/L}$ ) in Stage 1, allowing ammonia oxidizing bacteria to outcompete heterotrophic bacteria in Stage 2.

The potential for addition of an anoxic cell ahead of the aerobic MBBR reactors is possible. The advantage of this would be the potential for alkalinity recovery, which would result in approximately 70% reduction in caustic usage. However, the implementation of an anoxic cell would require additional tankage ( $\sim 5 \text{ m}^3$ ), nitrified mixed liquor

recirculation pumps, sludge recycling pumps, associated piping, and media sieves. This would significantly increase the overall equipment, cost, equipment footprint, and operational complexity of the system.

**Table 5-1**  
**Preliminary Secondary Treatment Design Criteria**

Design Element	Value
Number of Tanks	3 (T-101, T-102, T-103)
Design Flow	Max Day Flow: 100 m <sup>3</sup> /d Average Dry Weather Flow: 40 m <sup>3</sup> /d
Process Load	BOD <sub>5</sub> : 25 kg/d TSS: 25 kg/d NH <sub>3</sub> -N: 2.4 kg/d (average), 6 kg/d (peak)
<b>MBBR Tank No. 1 (T-101)</b>	
Dimensions (dia x H), m	2.4 x 3.6
Sidewater Depth, m	3.0
Volume, m <sup>3</sup>	13.6
Media Type	Bioportz™ 900
Media Filling Fraction	44%
Dissolved Oxygen Setpoint, mg/L	2.0
<b>MBBR Tank No. 2 (T-102)</b>	
Dimensions (dia x H), m	2.1 x 3.6
Sidewater Depth, m	3.0
Volume, m <sup>3</sup>	10.4
Media Type	Bioportz™ 900
Media Filling Fraction	48%
Dissolved Oxygen Setpoint, mg/L	6.0
<b>Mixing Tank (T-103)</b>	
Dimensions (dia x H), m	2.4 x 3.6
Sidewater Depth, m	3.0
Volume, m <sup>3</sup>	13.6
Hydraulic Retention Time (HRT), hr	3.2 hr (MDF), 8.16 (ADWF)
Mixer Power, hp	9
Velocity Gradient (G), s <sup>-1</sup>	700

In each tank a coarse aeration diffuser system will be installed to provide dissolved oxygen for the bacterial communities and mixing energy to keep the MBBR media suspended. Flow from each tank will be through horizontal sieves that will allow mixed liquor to pass through the sieves while retaining the plastic media. An allowance of 150 mm headloss through each sieve has been provided in the hydraulic profile.

Effluent produced by the MBBR treatment system is anticipated to be less than 15 mg/L BOD<sub>5</sub> and TSS and less than 2 mg/L NH<sub>3</sub>-N for flows under 100 m<sup>3</sup>/d.

A mixing tank downstream of the MBBR tanks will be provided in order to promote coagulation of the sloughed biomass prior to discharge to the secondary clarifier. Mixing will be achieved with a top entry fixed speed mixer. Impeller on the mixer is to be a pitched blade impeller.

Maintenance required in the tankage will be mainly for cleaning of the coarse bubble diffusers. However, as the diffusers have coarse openings, clogging of the aeration ports is very unlikely. If cleaning of the diffusers is required, removal of the MBBR media, likely using a vacuum truck, followed by washdown of the diffusers in-situ or removal will be required. As such, confined space access into the tankage is not anticipated to be a frequent activity, and therefore, permanent access provisions are not required. In the rare event that access into the tanks is required, temporary scaffolding and stairs can be erected to provide access.

The tankage is provided as High-Density Polyethylene (HDPE) tanks. The tanks will be anchored to a concrete slab using suitable hold down straps. HDPE tankage was selected as they are low cost, off-the-shelf items. However, as HDPE is flexible, they cannot be buried beneath grade. For below grade tankage, concrete or coated steel tankage would be required, significantly increasing costs.

Aeration is to be provided via two positive displacement blowers in a duty/standby configuration. Each blower will feature an integrated local control panel and an integrated variable frequency drive for speed control. The integral variable frequency drive is only provided for local speed adjustment of blower speed. Therefore, no feedback control of blower speed will be provided. This is because the air requirements of the MBBRs are anticipated to be dictated by mixing energy (i.e. air required to ensure reactors remained mixed) instead of dissolved oxygen.

Further details of the blower requirements are shown in Table 5-2.

**Table 5-2**  
**Preliminary Blower Design Criteria**

Design Element	Value
Number of Blowers (Positive Displacement)	2 (duty, standby)
Dimensions (LxWxH), mm	800 x 800 x 1,000
Power, hp	7.5 (each)
Airflow, scfm	60 (T-101) and 39 (T-102)
Discharge Pressure, psig	6.8

### 5.4.3 Secondary Clarifier (Repurposed RBC)

The existing RBC is to be repurposed into a secondary clarifier in order to settle particulate matter from the MBBR effluent stream. Removal of the existing RBC media, rotating mechanism, and walkway will be required. To minimize odours, the existing RBC covers will be maintained. If maintaining the existing cover system is not preferred, the clarifiers can be left uncovered if the sludge is removed on a frequent basis to minimize odours.

After removal of the RBC components, the existing final clarifier section will be configured as the sedimentation zone of the secondary clarifier. The area of this final clarifier is approximately  $4.7 \text{ m}^2$ , which will result in a surface overflow rate of  $0.88 \text{ m/h}$  at a peak flow of  $100 \text{ m}^3/\text{d}$ . This will be sufficient to provide the required sedimentation. The existing primary clarifier section will be converted into a storage cell for final polishing.

As no automatic wastage mechanism is provided, a vacuum truck will be required to remove sludge on a periodic basis.

An alternative clarification system was evaluated that consisted of a Dissolved Air Flotation (DAF) clarification system. The DAF relies on finely diffused air bubbles to separate particulate matter from the liquid stream. However, this approach was not deemed feasible due to the large footprint required (for chemical-less DAF clarification), high operational costs (power and maintenance), and increased operational complexity.

### 5.4.4 Chemical System

As a result of shear forces and excess biological growth, biofilms will slough off the MBBR media. This results in biological flocs that are typically small and hard to settle. Aluminum sulphate (alum) is provided to enhance coagulation of sloughed biofilms and enhanced sedimentation in the secondary clarifier.

Estimates for aluminum sulphate demand is based off the following assumptions:

- A “typical” alum dose of  $10 \text{ mg/L}$  (as  $\text{Al}^{3+}$ ).
- Demand under peak hydraulic flowrate of  $100 \text{ m}^3/\text{d}$  (highest alum demand, conservative assumption).

Assuming the typical alum dosage of  $10 \text{ mg/L}$  (as  $\text{Al}^{3+}$ ) and an aluminum sulphate solution concentration of  $30 \text{ w/w\%}$  (as  $\text{Al}_2(\text{SO}_4)_3$ ), the expected volume of alum required per day is  $16.2 \text{ L/d}$ . The appropriate alum dosage to achieve coagulation will need to be confirmed utilizing jar tests performed on actual treated effluent. As the application is a greenfield application, there is little opportunity to accomplish this prior to installation. As such, this dosage will need to be “finetuned” during commissioning. However, the alum dosage utilized for the preliminary design represents a conservative dosage.

Sodium hydroxide is to be dosed to add additional alkalinity that is consumed through nitrification and alum addition.

Estimations for sodium hydroxide demand is based on the following assumptions:

- Demand under average and peak ammonia loadings.
- Demand under peak hydraulic flowrate of  $100 \text{ m}^3/\text{d}$  (highest alkalinity demand to maintain “residual”, conservative assumption).
- No ammonia uptake for biological synthesis ( $\sim 30\%$  greater ammonia load for nitrification, conservative assumption).



- Maintenance of residual alkalinity of 50 mg/L (as CaCO<sub>3</sub>) to maintain sufficient alkalinity buffer.
- Maintenance of sufficient alkalinity residual for alum consumption.

To fully nitrifying ammonia to nitrate, 7.14 mg/L (as CaCO<sub>3</sub>) of alkalinity is consumed per mg/L of ammonia (as NH<sub>3</sub>-N). Under an average ammonia loading scenario, this will result in an alkalinity consumption of 171 mg/L (as CaCO<sub>3</sub>). Under the peak flow scenario, the expected alkalinity in the influent is 161 mg/L (as CaCO<sub>3</sub>). Combined with the requirement to maintain a minimum of approximately 100 mg/L (CaCO<sub>3</sub>) of alkalinity to maintain sufficient alkalinity for alum coagulation and a 50 mg/L residual to prevent a pH crash, this results in an overall alkalinity deficiency of 116 mg/L (as CaCO<sub>3</sub>) and 173 mg/L (as CaCO<sub>3</sub>) under an average and peak ammonia loading, respectively. Assuming the use of 25 w/w% sodium hydroxide solution, the sodium hydroxide consumption is approximately 29.5 L/d and 44 L/d under average and peak ammonia loading. All alkalinity and ammonia will vary in the influent, fine tuning of the dosing parameters and control system will be required in order to optimize sodium hydroxide addition and alkalinity residual.

Utilizing the expected consumption rates for the chemicals, the expected duration of several chemical storage options is provided in Table 5-3. It is recommended to utilize drums as the primary storage method, as it provides sufficient storage volume while requiring the least equipment for transportation (i.e. barrel dolly). HDPE chemical containment pads will be utilized to store the barrels, each pad can contain four barrels at a time. If more volume is desired to be stored on site, the barrels can be stored on additional containment pads inside the building on the treatment plant property.

**Table 5-3  
Treatment Chemical Demand**

Chemical	Drum (159 L)	IBC Tote (1,040 L)
Sodium Hydroxide (25 w/w% NaOH)	5.4 days (Average Loading) 3.6 days (Peak Loading)	35 days (Average Loading) 24 days (Peak Loading)
Aluminum Sulphate (9.9 w/w% Al <sub>2</sub> O <sub>3</sub> )	9.8 days	64 days

The chemicals are to be stored inside the existing building to prevent freezing and to maintain chemical activity. Alum (30 w/w%) has a freezing point of -15°C; however, it should be kept above 15°C to maintain its chemical activity. Sodium hydroxide (25 w/w%) has a freezing point of -18°C. Due to the low freezing point of both chemicals, the dosing lines will not be heat traced or insulated. However, due to the chemicals hazard potential, the dosing lines will be contained within a PVC carrier pipe.

The chemical dosing is to be accomplished using duty/standby peristaltic pumps for both chemicals. Peristaltic pumps are chosen due to their high reliability and high turndown ratio. The dosing pumps will be provided as a “skid” package with required valving and calibration columns pre-installed in a containment pad. Suction on the peristaltic pump will be provided via polyethylene tubing with foot valve that is placed within a drum. A level sensor will be placed on the drum to provide alarm status of chemical levels.

Note that the chemicals to be utilized are classified as hazardous and will required transport via hazardous goods ferries or barge.

## 5.5 Building Mechanical (HVAC and Plumbing) Systems

To accommodate the inclusion of chemical storage and new process air blowers in the existing building, the following components building mechanical components will need to be provided:

- New tempered water system.
- New louver and ducting for process air makeup.
- New louver and fan for building cooling and ventilation.
- New building space heater(s) for building heating.

As no natural gas supply is available at the Maliview WWTP, all heating is to be accomplished utilizing electric heaters.

### 5.5.1 Heating and Ventilation Systems

The modification to the existing building heating and ventilation systems will be designed to conform to the latest approved standards and codes as follows:

- British Columbia Building Code
- British Columbia Fire Code
- ASHRAE Heating and Ventilation Standards
- ACGH Industrial Ventilation
- SMACNA Duct Construction Standard

As the storage building is not designed for continuous human occupancy, the provision of a space heater will only be required to prevent freezing. This will be accomplished by a thermostat-controlled ceiling mounted electric unit heater situated within the building.

Makeup air for the process air blowers will be required for process air and cooling. To eliminate the need for heating of the makeup air stream, a louver with direct ducted intake connection to the blowers is to be provided. Cooling for the additional process mechanical equipment in the building is to be provided with a separate louver and inline fan. All louvers, ducts, and fans are to be of aluminum construction.

### 5.5.2 Emergency Fixtures

In accordance with the WorkSafeBC Occupational Health and Safety Regulation, emergency washing facility must be provided within work areas where a worker's eyes or skin may be exposed to harmful or corrosive chemicals. The Globally Harmonized System (GHS) Hazard Classifications for the chemicals to be utilized in the treatment process are listed in Table 5-4.

**Table 5-4**  
**GHS Classification of Treatment Chemicals**

Chemical	GHS Eye Effects Classification	GHS Corrosion Classification
Sodium Hydroxide (NaOH) 25 w/w%	1 (Irreversible Effect)	1 (Corrosive)
Aluminum Sulphate (Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ) 30 w/w%	1 (Irreversible Effect)	None Stated

Under the WorkSafeBC Chemical Risk Assessment, Sodium Hydroxide is classified as High Risk for both eyes and skin, while aluminum sulphate is classified as High Risk for eyes only. As a result of the High Risk classifications, the following emergency safety equipment must be provided within five seconds walking distance, but no further then six meters.

- Tempered (16 to 38°C) continuous flow eyewash with a minimum duration of 15 minutes.
- Tempered (16 to 38°C) continuous flow emergency shower with a minimum flow of 15 minutes.

The emergency shower will be required to meet the regulatory requirements of the WorkSafeBC Occupational Health and Safety Regulation.

As a tempered emergency shower and eyewash is currently present in the storage building, it is not anticipated that installation of an additional emergency shower and eyewash station will be required.

## 5.6 Electrical

The additional process mechanical components will utilize the existing BC Hydro service feed. Supply voltage for the Maliview treatment plant site is a 200 A, 208 V, 3-Ph service. Following a brief review of the new loads and the existing operating capacity of the facility, it is not anticipated that a utility upgrade will be necessary.

A step-up transformer will be required to supply power to 600 V blower units, which will be pad mounted externally to the storage building.

New and relocated electrical conduit to consist of 50 mm nominal CVPC. All conduit to be buried below grade.

### 5.6.1 Load List

**Table 5-5**  
**Preliminary Load List**

Tag Number	Equipment Description	Load (hp)	Voltage
P-101	Lift Pump	2	208V/3Ph/60Hz
P-102	Lift Pump	1	120V/1Ph/60Hz
P-201	Alum Dosing Pump 1 (Duty)	0.25	120V/1Ph/60Hz
P-202	Alum Dosing Pump 2 (Standby)	0.25	120V/1Ph/60Hz
P-301	Sodium Hydroxide Dosing Pump 1 (Duty)	0.25	120V/1Ph/60Hz
P-302	Sodium Hydroxide Dosing Pump 2 (Standby)	0.25	120V/1Ph/60Hz

Tag Number	Equipment Description	Load (hp)	Voltage
MXR-103	Coagulation Tank Mixer	10	208V/3Ph/60Hz
BL-111	Process Aeration Blower 1 (Duty)	7.5	600V/3Ph/60Hz
BL-112	Process Aeration Blower 2 (Standby)	7.5	600V/3Ph/60Hz
UH-1	Electric Unit Heater	1.5 kW	208/3Ph/60Hz
WH-1	Water Heater	1.5 kW	208/3Ph/60Hz
FAN-1	Ventilation Fan	0.2 kW	208/3Ph/60Hz

## 5.7 Backup Power

Currently no backup power is provided as the Maliview WWTP. Our preference would be to look at the addition of a mobile generator with a manual transfer switch, however under current EPA legislation, any standby mobile generator is required to be Tier 4 emission certified, which results in an additional 100% cost addition to the procurement of a mobile generator.

With the cost differential quite high, our recommendation would be to review the addition of a stationary generator with automatic transfer switch, this will ensure that the generator will operate when required due to the limited outgoing communication.

## 5.8 Instrumentation and Controls

The majority of process equipment will be operated on local controls without process instrumentation or controls. For the MBBRs, the process tankage is mixing limited. As such, the blowers will be run at a fixed speed, as set on the blower local control panel. A handheld Dissolved Oxygen and pH meter will be provided for spot checks of the process tankage.

Sodium hydroxide dosing will be accomplished utilizing a pH feedback control system. In the mixing tank, an online pH probe (4-20 mA) will provide pH readings to a new PLC control panel. The peristaltic dosing pumps speed will be adjusted to maintain the pH setpoint in the mixing tank (6.8 to 7.2).

Alum dosing will be accomplished through peristaltic set to operate at a fixed speed. As wastewater flows vary due to diurnal variations, alum dosages will vary due to varying influent flow. However, as coagulation for enhanced settling is the primary goal, the potential for overdosing is not overly concerning. During detailed design, flow-paced dosing of alum will be investigated as a method to minimize overdosing and reduce the amount of alum required.

Currently there are no communications systems provided at the Maliview treatment facility. As such, integration of alarms is not possible given the current arrangement. Integration of a SCADA communications system will require a cellular alarm dialer or ethernet hardline with VPN. Alarms could then be communicated to the overall SCADA system utilizing SCADApack. In addition, a new HMI will be required at the Ganges facility.

Alarms to be integrated into the overall SCADA integration to include:

- Chemical low level alarm.
- Treatment plant bypass alarm.
- Blower fault alarms.

## **5.9 Odour Control**

As the additional components are not anticipated to be odorous, additional foul air connections to the existing biofilter will not be provided. However, it is recommended that the biofilter bed be renewed and the existing irrigation system be evaluated as part of the future works to the facility.

## 6 PROJECT IMPLEMENTATION

### 6.1 Construction Considerations

Construction activities that could impact the overall project include delivery of the equipment package such as the MBBR treatment package (blowers, media, diffusers, tankage). We recommend the CRD proceed with the procurement of the equipment package at the onset of the detailed design to ensure the design is based on the selected package. Once the supply contract has been established, design and construction will be coordinated with deliveries to ensure minimal disruption to the construction process.

The proposed contract phases for the WTP upgrades are:

- Contract 1 – MBBR Equipment Supply
- Contract 2 – Wastewater Treatment Plant Construction

#### 6.1.1 Commissioning and Tie-in

After installation of the secondary treatment system, the MBBR needs a period of approximately four weeks in order to develop a viable biological community. In order to accomplish this, and maintain the treatment capacity of the facility, a new submersible pump will be installed in the equalization tank. The current pump will be maintained to divert flow to the existing treatment system.

After the MBBRs have achieved steady state, the RBC can be taken offline and converted to a secondary clarifier. During the transition, the Mixing tank (T-103) can be utilized as a temporary secondary clarifier (with mixer turned off). Assuming a tank diameter of 2,400 mm and an influent flowrate of 100 m<sup>3</sup>/d, the hydraulic surface loading to the tank will be approximately 0.92 m/h, which is sufficient to provide clarification on a temporary basis. The resulting effluent will need to be temporarily discharged directly to the outfall while the RBC is converted to a secondary clarifier. This can be accomplished with temporary hoses.

After the RBC is converted to a clarifier, the discharge from the secondary treatment system can be routed to the repurposed secondary clarifier. As the mixer in the mixing tank is turned on, the accumulate sludge will be discharged to the secondary clarifier.

### 6.2 Implementation Schedule

AE has developed a schedule outlining key components of the project including:

- Detailed Design
  - Contract 1: Equipment supply contracts
  - Other components detailed design
- Tendering period
- Construction Kickoff
- Key Construction Time Frame
  - Civil
  - Structural
  - Installation of MBBR
  - Process Mechanical
  - Retrofit of RBC

Capital Regional District  
Salt Spring Island

- Building Mechanical
- Electrical/ Instrumentation
- Final Grading
- Start-up and commissioning
- Training
- Substantial Performance
- Completion

## 7 COST ESTIMATE

### 7.1 Capital Costs

Total estimated Class C capital cost for the project is shown in Table 7-1, which includes a 40% allowance contingency and 20% for Engineering. The 40% allowance contingency is attributed to risks and uncertainties related to regulatory permitting, geotechnical conditions, archaeological risks, cost escalations, and other unknown factors.

**Table 7-1**  
**Preliminary Capital Cost Summary**

#	Item	Cost (\$)
1	General	235,000
2	Civil	39,000
3	Structural	16,000
4	Major Equipment Supply	226,000
5	Process Mechanical	312,000
6	Building Mechanical	42,000
7	Electrical	62,000
8	Instrumentation and Controls	31,000
9	Temporary Works	18,000
	<b>Subtotal</b>	<b>828,000</b>
	<b>Contingency (40%)</b>	<b>393,000</b>
	<b>Engineering (20%)</b>	<b>275,000</b>
	<b>Total Project Cost Estimate</b>	<b>1,649,000</b>

### 7.2 Operations Cost Estimate

An estimate of the operational costs for the facility are provided in Table 7-2.

Operational costs were calculated on an annual average basis, assuming an average dry weather flow of 40 m<sup>3</sup>/d between May and September, and a maximum flow rate of 100 m<sup>3</sup>/d for the remaining months of the year.

- Power costs are based on a total install power of 29kW an average cost of \$9 cents per kWh.
- Chemical costs to aid on settling for the MBBR option were calculated based on an alum dose of 10 mg/L (as Al<sup>3+</sup>) at peak flow, which would be the conservative scenario.
- Sludge production estimates were provided by Nexom.
- Thickening of sludge up to 3% and transportation cost of \$145 per m<sup>3</sup> of sludge hauled per data provided by the CRD.
- Standby power inspection was estimated in \$800 per year and includes changes of fluid and filters.
- Staff labour is expected to be similar for the two options and was estimated to be one hour per day for five days per week at a \$100 per hour rate.



- Annual maintenance costs for all new equipment were estimated to be 1% of the equipment cost.

**Table 7-2**  
**Preliminary Operational Cost Estimate**

#	Item	Annual Cost (\$)
1	Chemicals	32,000
2	Maintenance Materials	9,000
3	Electricity	17,000
4	Sludge Hauling	58,000
5	Standby Power Inspection	1,000
6	Labour	26,000
Total Operational Cost Estimate		143,000

## CLOSURE

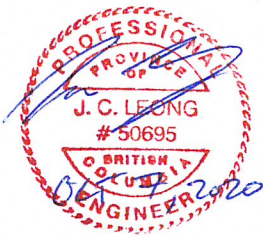
This report was prepared for the Capital Regional District Salt Spring Island to provide a preliminary design for the proposed upgrades to the Maliview Wastewater Treatment Facility to allow the Capital Regional District to proceed with the detailed design of the upgraded facility.

The services provided by Associated Engineering (B.C.) Ltd. in the preparation of this report were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

Respectfully submitted,  
Associated Engineering (B.C.) Ltd.

Prepared by:

Reviewed by:



Jason Leong, M.A.Sc., P.Eng.  
Wastewater Engineer

JL/JB/lpk

A blue ink handwritten signature that reads "J. Bicudo".

José R. Bicudo, Ph.D., P.Eng.  
Senior Process Engineer



## APPENDIX A - SUPPLIER INFORMATION





# MALVIEW WWTP SALT SPRING ISLAND, BC

Design, Supply and Installation  
BioPortz Wastewater Treatment System

February 13, 2020



*technologies for cleaner water*

5 Burks Way · Winnipeg MB · R2J 3R8  
888-426-8180 • [www.nexom.com](http://www.nexom.com)

# Project Overview

A BioPortz™ Wastewater Treatment System is proposed for the Maliview WWTP, BC. The process would consist of the following:

- Retain the existing 2 mm raw sewage screen
- Implement BioPortz MBBR system comprising two aerobic reactors for BOD removal and nitrification
- Implement secondary solids separation (by others)

## Treatment Design Criteria

	Units	Raw Sewage <sup>1)</sup>	Effluent <sup>2)</sup>
Average Dry Weather Flow	m <sup>3</sup> /d	40	
Maximum Flow	m <sup>3</sup> /d	100	
Temperature	°C	8-20	
BOD max	kg/d	28	
	mg/l		15
TSS max	kg/d	28	
TKN max	kg/d	3.7	
	mg/l	60	
Total Ammonia	mg/l		<2

1) Influent wastewater not characterized – typical domestic sewage characteristics were assumed.

2) After secondary solids separation

# Equipment Process Design Parameters

A summary of the BioPortz MBBR design parameters is presented in the following table:

Parameter	Unit	BOD	Ammonia
Media volume	m <sup>3</sup>	6	5
Tank nominal volume	m <sup>3</sup>	13.6	10.4
Tank diameter	m	2.4	2.1
Water depth	m	3	3
Media filling fraction	%	44	48
Effluent media retention screens		1 (4")	1 (4")
Drain		1 (2")	1 (2")

A summary of the BioPortz MBBR aeration parameters is displayed in the following table:

Parameter	Units	BOD	Ammonia
Alpha		0.60	0.70
Beta		0.97	0.97
Elevation	m	20	20
Water depth	m	3	3
Dissolved oxygen	mg/l	2	6.0
AOR Max	kg/d	22	10
Max airflow	scfm	60	39
Normal operating pressure	psi	5.6	5.6
Maximum required pressure	psi	6.8	6.8

A summary of BioPortz IFAS blower parameters is displayed in the following table:

Parameter	Units	Blowers
Quantity	qty	2
Duty / Standby	qty	1 / 1
Nameplate HP	HP	7.5



# Scope of Work

## GENERAL

- Nexom process design, process CAD drawings, and specifications
- Operation and maintenance manuals and project record drawings
- Shipping to site
- Installation and start-up / commissioning of equipment supplied by Nexom

## BIOPORTZ™ MBBR SYSTEM

- One (1) lot of equipment to furnish two (2) BioPortz MBBR tanks
- BioPortz™ 900 media to furnish BOD and Ammonia MBBR tanks
- Two (2) Media retention screens for the effluent (4")
- Two (2) Media retention screens for the tank drains (2")
- Prefabricated aeration grid including HDPE diffusers, HDPE laterals, HDPE floor-mounted header, and HDPE header drop-pipes
- Two (2) 7.5 HP Aerzen positive displacement blowers (i.e., one duty and one standby) with control panel
- One (1) DO and pH handheld field meter with sensors
- Two (2) tank level switches

## CAPITAL COST FOR THE SCOPE OF WORK AS DETAILED ABOVE:

**\$ 166,000 CAD**

All prices are subject to final design review. Taxes extra. Prices valid for 30 days.

## EXCLUSIONS

- Any process equipment not listed within the Scope of Supply
- New building works
- Material offloading and storage
- Civil, mechanical, or electrical works including tanks and power hookup
- Modifications to existing infrastructure
- Influent, interconnecting, and / or effluent process piping / pumping
- Air supply and distribution piping from blowers to edge of process tanks
- Master control center and / or SCADA

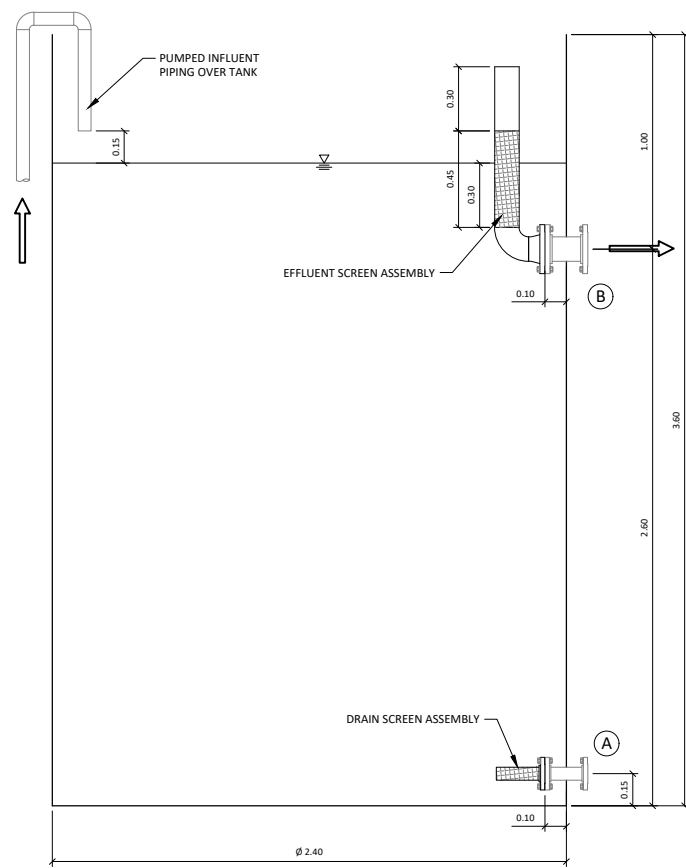
## Questions or comments

Any questions or comments can be directed to:

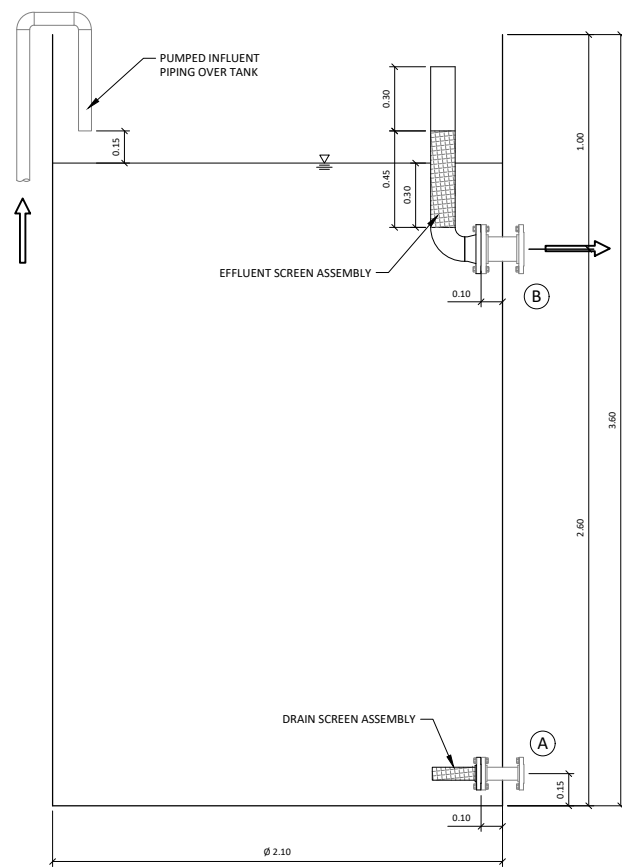
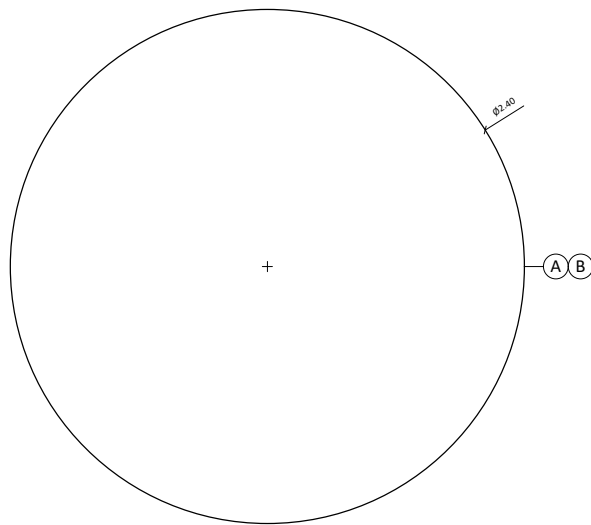
### Nexom

5 Burks Way  
Winnipeg MB R2J 3R8  
888-426-8180  
[www.nexom.com](http://www.nexom.com)

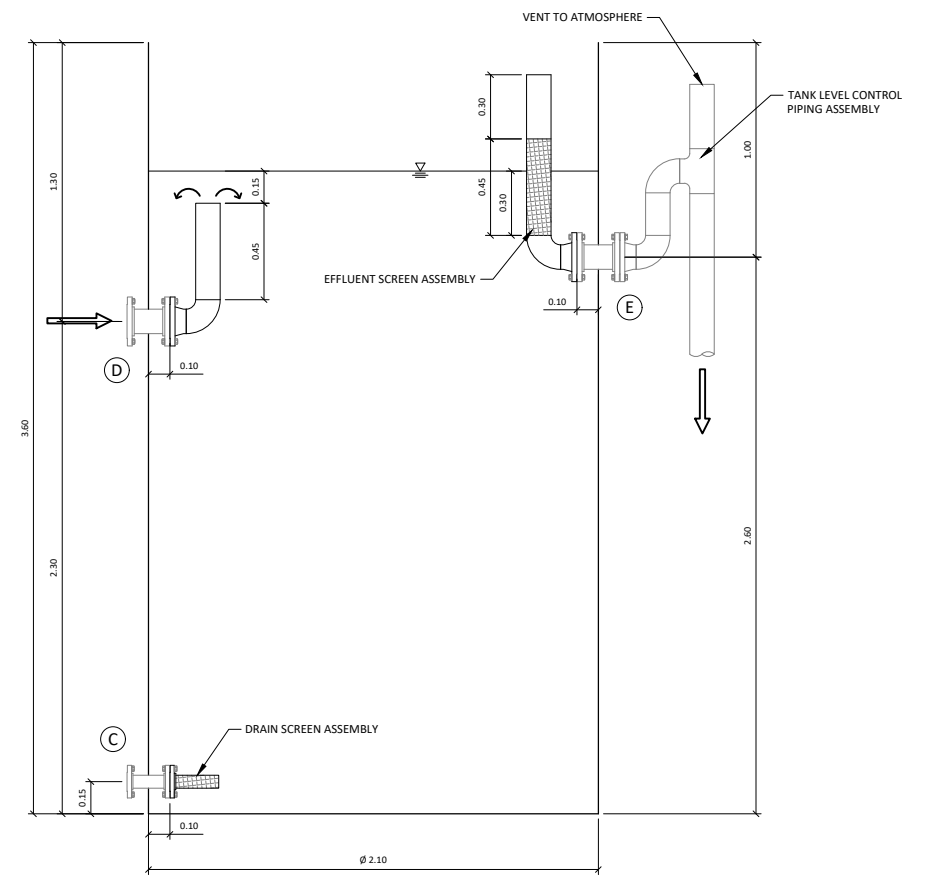
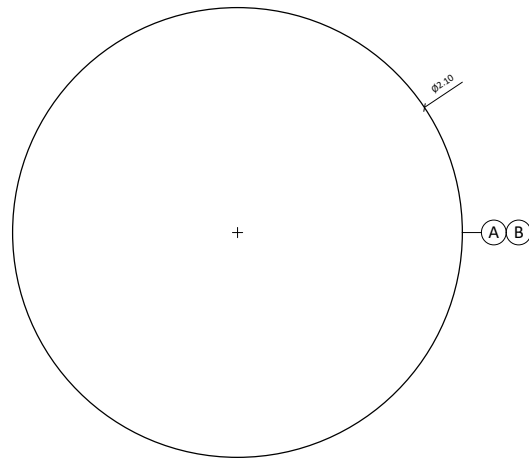




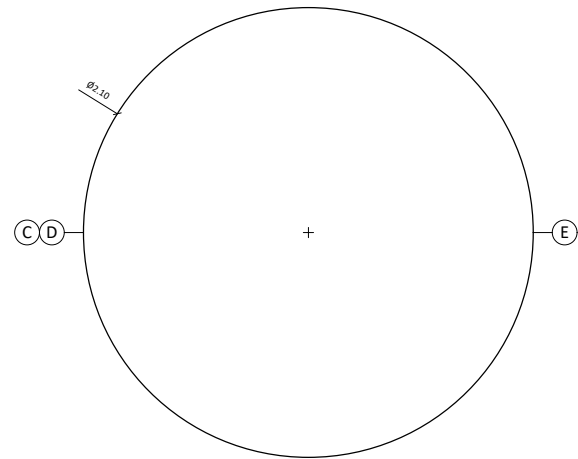
**INFLUENT TANK - 2.4m Ø**  
SCALE: N.T.S.

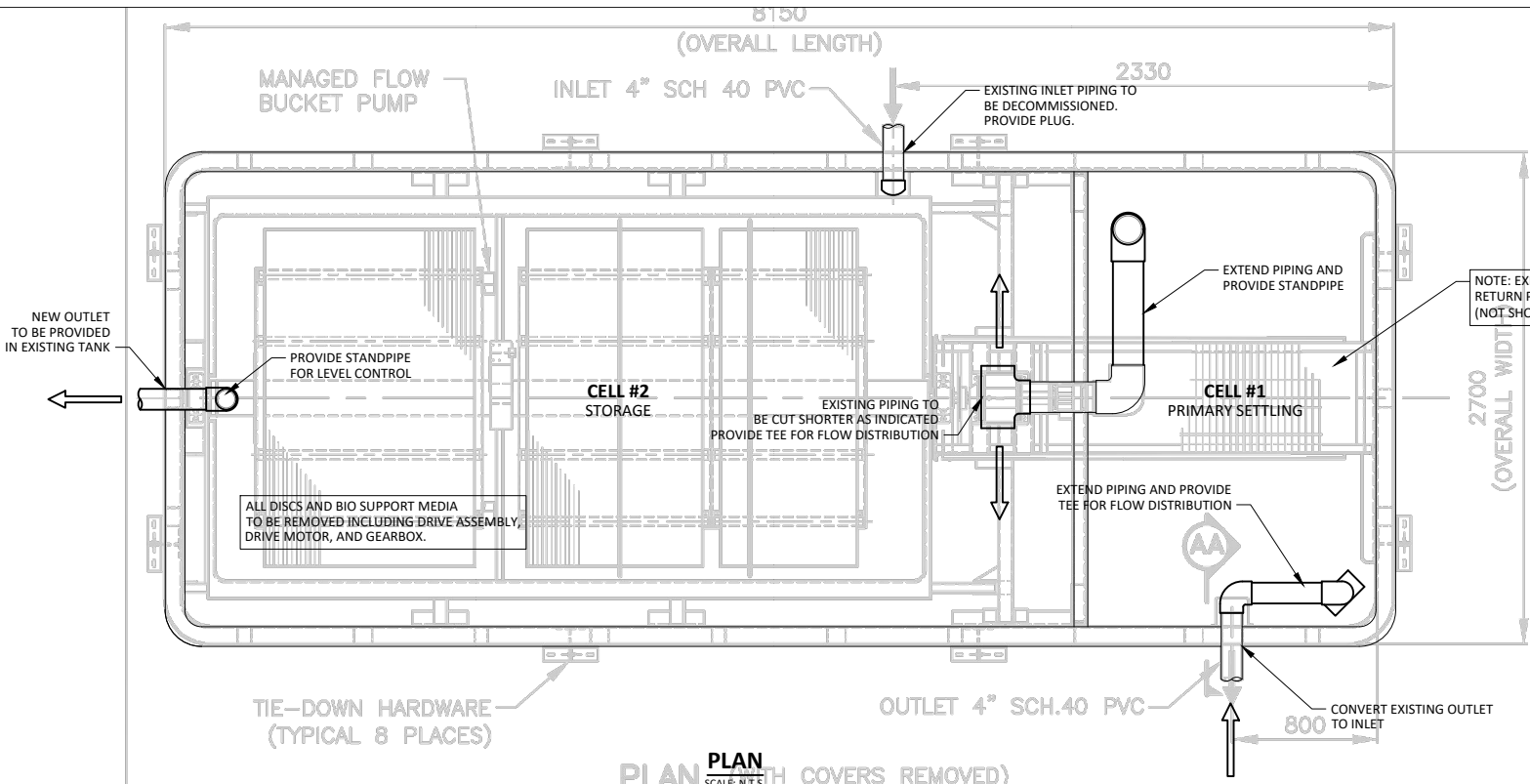


**INFLUENT TANK - 2.1m Ø**  
SCALE: N.T.S.

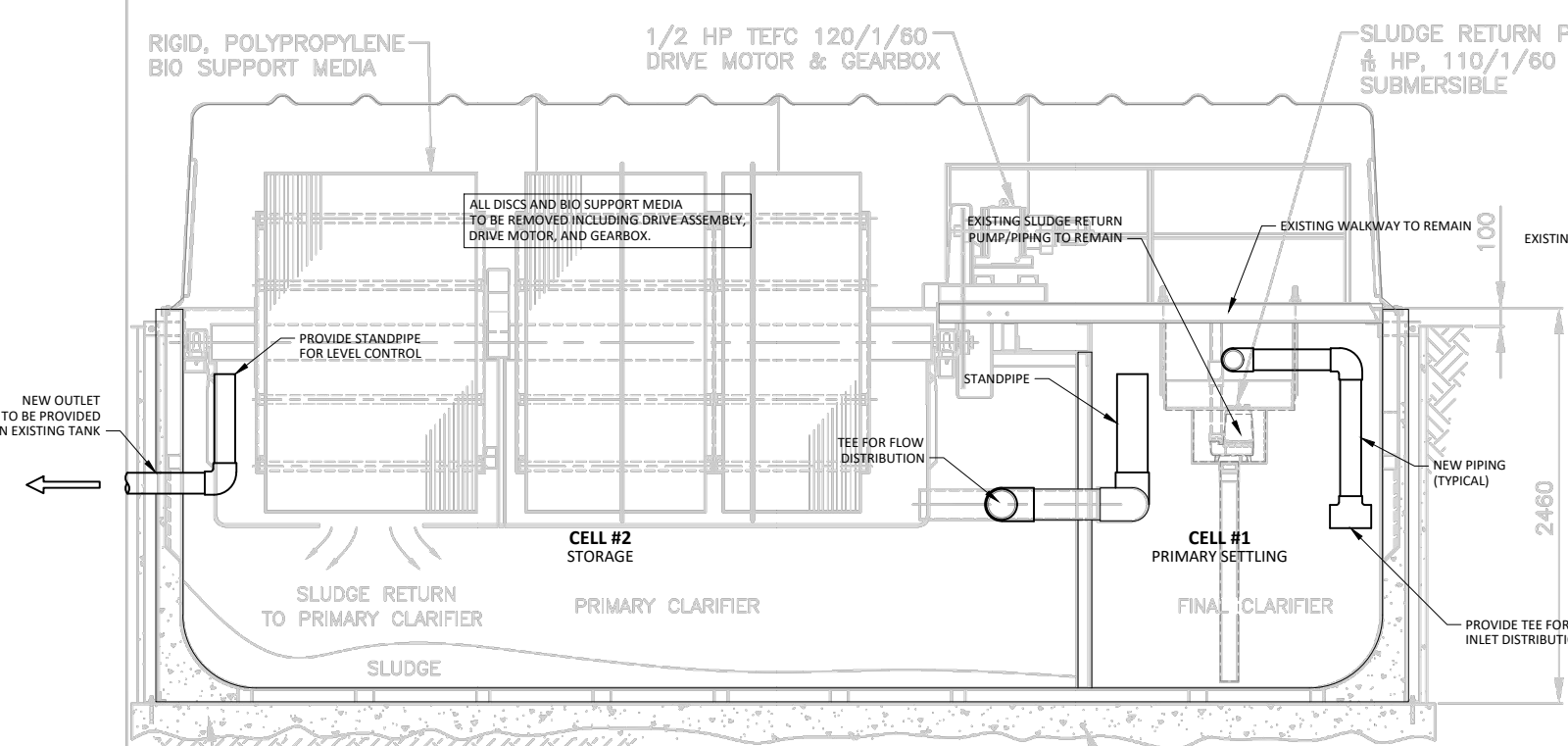


**EFFLUENT TANK - 2.1m Ø**  
SCALE: N.T.S.





PLAN PLAN (H COVERS REMOVED)  
SCALE: N.T.S.



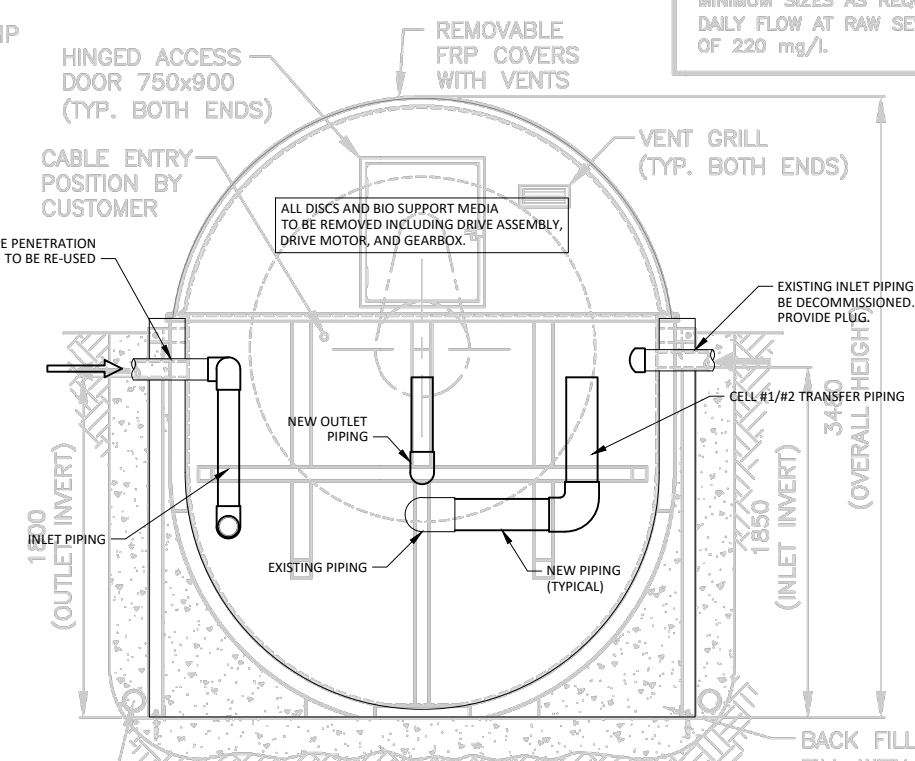
SECTION A  
SCALE: N.T.S.  
SECTION ON CENTRE LINE

NOTE:

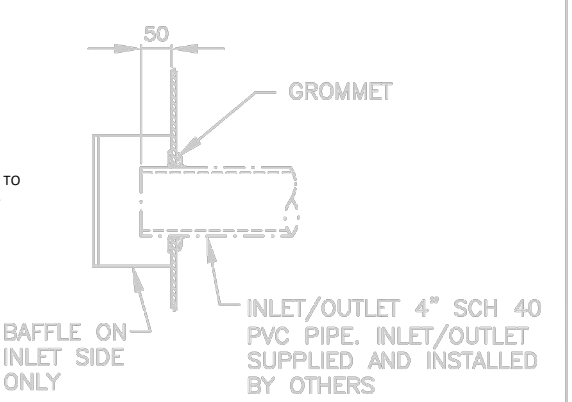
1. TANK AND COVER ARE MANUFACTURED IN FIBERGLASS REINFORCED POLYESTER (FRP), COVER IS FINISHED IN GREEN.
2. ELECTRICAL SUPPLY 110 VOLTS, SINGLE PHASE.
3. FOR INSTALLATION MAINTENANCE AND DESLUDGING DETAILS REFER TO MAINTENANCE HANDBOOK.
4. WITH GROUND WATER AT GRADE LEVEL, THE UPTHRUST ON DE-WATERED UNIT DUE TO FLOATATION IS ESTIMATED TO BE 30,500 Kg.

IF THIS EQUIPMENT, GIVEN THE CORRECT SITE & OPERATING CONDITIONS, MAY BECOME POSITIVELY BUOYANT. IF THERE IS A POSSIBILITY THAT THE AREA SURROUNDING THIS EQUIPMENT HAS OR MAY HAVE HIGH GROUND WATER LEVELS, EVEN IF ONLY TEMPORARY, TIE-DOWN HARDWARE AND A BASE DESIGNED FOR ANTI-FLOTATION WILL BE REQUIRED.

DESIGN CRITERIA	UNITS	SPECIFICS TO PROJECT
AVERAGE DAILY FLOW	M <sup>3</sup> /24hr	60
SOURCE: DOMESTIC SEWAGE		
PEAK FLOW	M <sup>3</sup> /H	7.5
TO BE FLOW BALANCED TO	M <sup>3</sup> /H	2.5
INFLUENT BOD TOTAL: SUMMER WINTER	KG/24hr	13.2
INFLUENT BOD SETTLED	KG/24hr	9.24
INFLUENT SUSPENDED SOLIDS	KG/24hr	13.2
EFFLUENT BOD (AVERAGE)	mg/l	45
EFFLUENT SUSPENDED SOLIDS (AVERAGE)	mg/l	45
TEMPERATURE	°C MIN	11°
	°C MAX	21°
TECHNICAL INFORMATION		
BIO SUPPORTED MEDIA DIAMETER	M	1.85
BIO SUPPORTED MEDIA AREA	M <sup>2</sup>	1098
DISC LOADING: SUMMER WINTER	GM/M <sup>2</sup>	8.4
PRIMARY CLARIFIER		
CAPACITY (INCLUDES SLUDGE)	M <sup>3</sup>	17.6
BALANCING VOLUME	M <sup>3</sup>	3.4
SLUDGE STORAGE CAPACITY	M <sup>3</sup>	8.45
SLUDGE STORAGE TIME	24hr	40
FINAL CLARIFIER		
CAPACITY (INCLUDES SLUDGE)	M <sup>3</sup>	5.75
SLUDGE STORAGE CAPACITY	24hr	0
SURFACE AREA	M <sup>2</sup>	4.3
MINIMUM SIZES AS REQUIRED BY AVERAGE DAILY FLOW AT RAW SEWAGE STRENGTHS OF 220 mg/l.		SHIPPING WEIGHT 5 TONNES OPERATING WEIGHT 28 TONNES



SECTION B  
SCALE: N.T.S.  
VIEW ON DRIVE END



SECTION AA

BACK FILL SUPPLIED AND INSTALLED BY OTHERS. BACK FILL WITH CLEAN GRAVEL (3/4" MINUS), FREE FROM CLAY, LARGE ROCKS OR OTHER PROJECTIONS THAT WILL DAMAGE THE FIBREGLASS SHELL. LEAN MIX, 150 min CONCRETE SURROUND MAY BE USED. DO NOT COMPACT BACK FILL. DO NOT FILL WITH SAND.

NOTE:

1. THE COVERS MAY BE SHIPPED LOOSE FOR FIELD FITTING BY OTHERS.

PROTECTED BY CANADIAN PATENT #2,097,917, U.S. PATENT #5,407,578 AND OTHER NORTH AMERICAN AND WORLD-WIDE PATENTS.  
PROTEGER PAR UN BREVET CANADIEN N°2,097,917 ET PAR D'AUTRES BREVETS NORD AMERICAIN ET INTERNATIONAUX.

DO NOT SCALE THIS DRAWING

DOINÉE DE PROPRIÉTÉ  
CE DESSIN EST EMPRUNTÉ AVEC LA CONCORDANCE EXPRESSE QUE L'INFORMATION Y INCLUSE ET LE DESSIN MÊME APPARTIENNENT A P.J. HANNAH EQUIPMENT SALES CORP. ET NE SERONT PAS COPIÉS, REPRODUITS NI RECRUTÉS A D'AUTRES PERSONNES, ET NE SERONT PAS UTILISÉS DIRECTEMENT OU INDIRECTEMENT POUR LA CONSTRUCTION DES APPAREILS OU DES ÉLÉMENTS DES APPAREILS, SAUF AVEC LE PERMIS ÉCRIT DE P.J. HANNAH EQUIPMENT SALES CORP. VOTRE CONSENTEMENT A RECEVOIR CE DESSIN SERA COMME VOTRE CONSENTEMENT DE LA CONCORDANCE PRÉCÉDENTE.

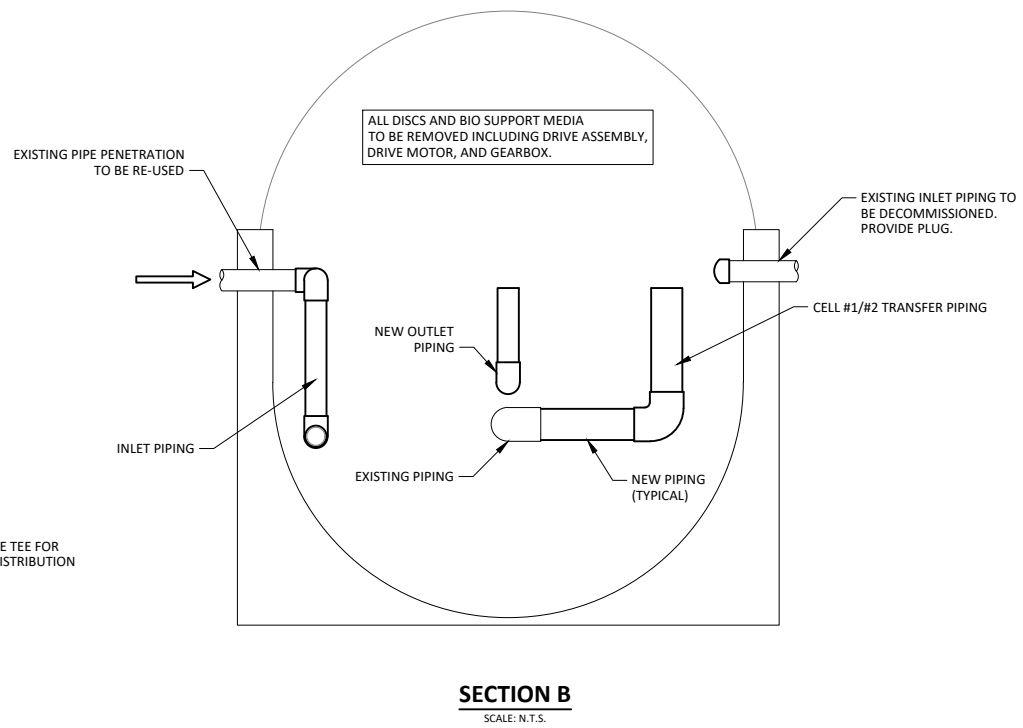
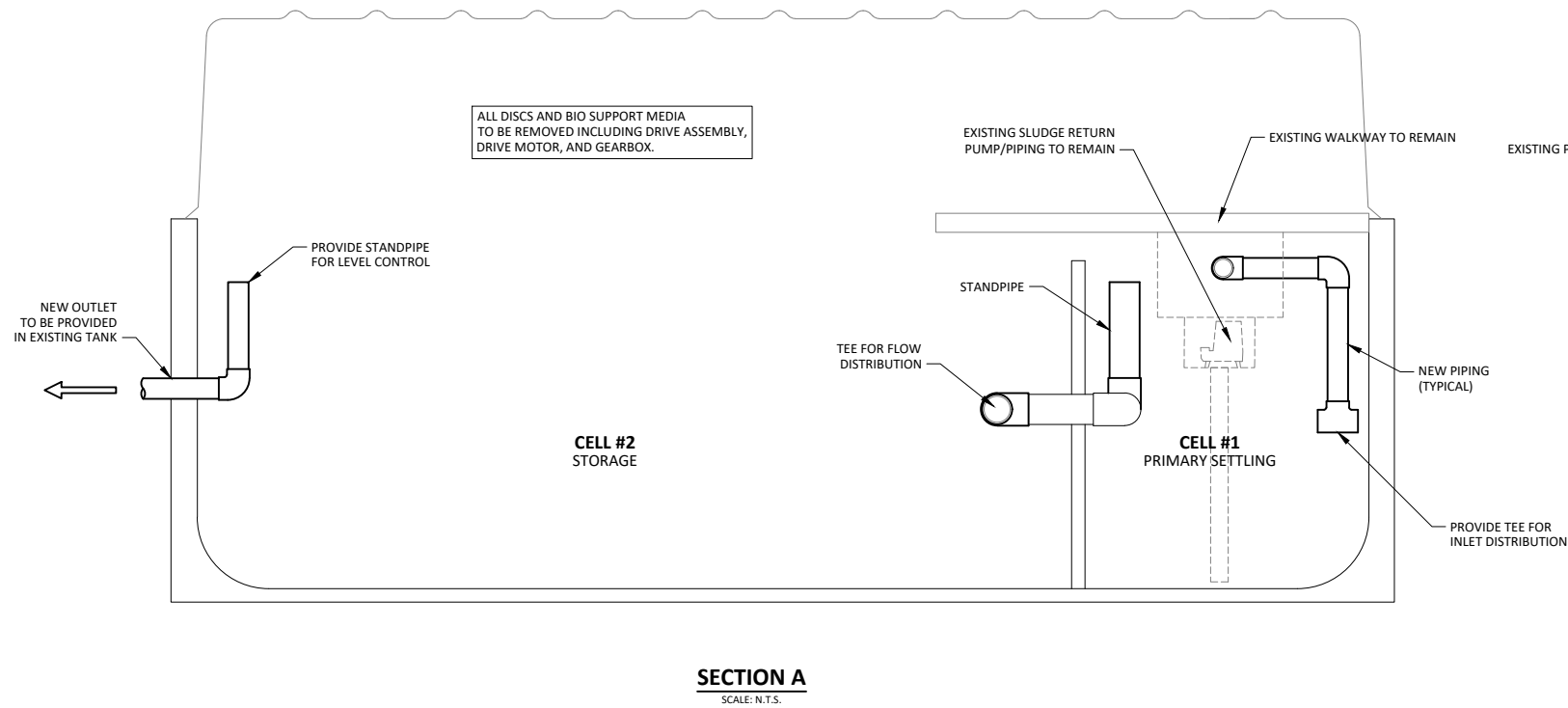
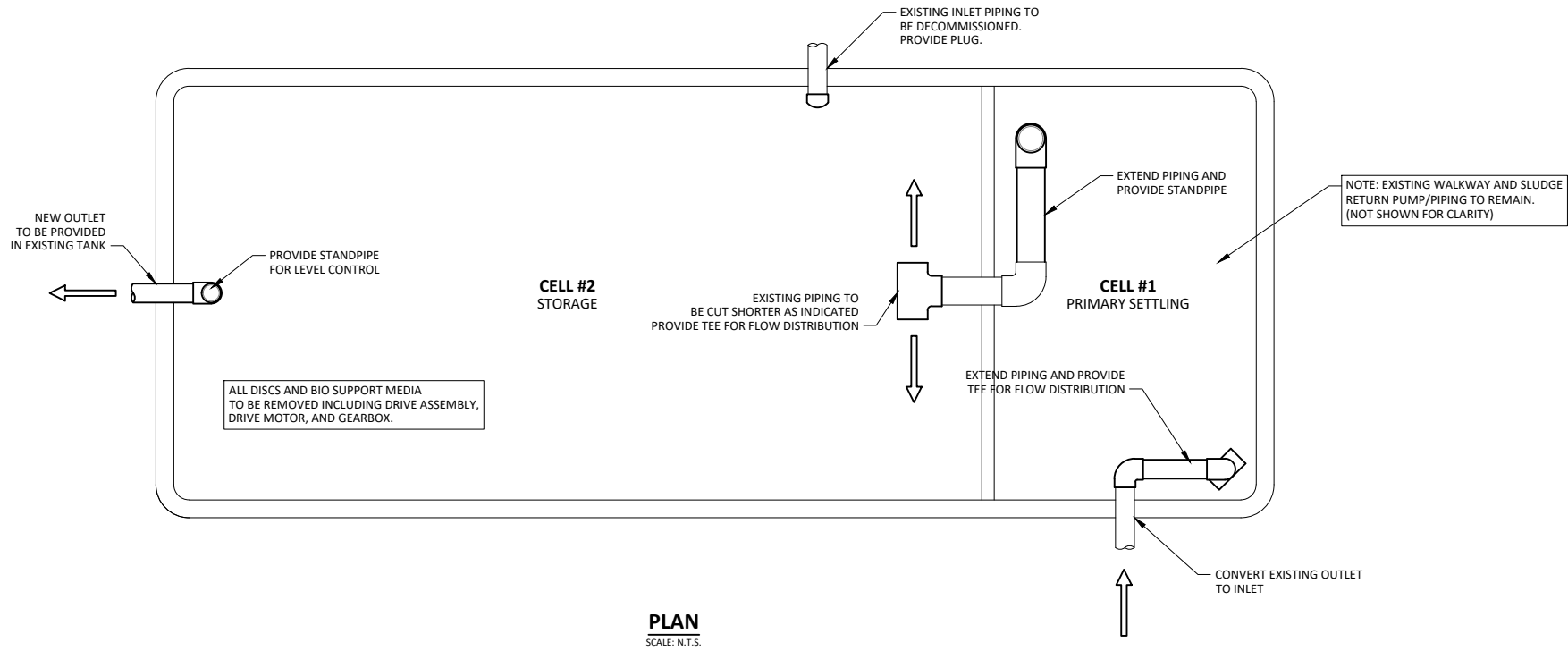
PROPRIETARY DATA  
THIS DRAWING IS LOANED WITH THE EXPRESSED AGREEMENT THAT THE OWNERS AND THE INFORMATION CONTAINED THEREIN ARE THE PROPERTY OF P.J. HANNAH EQUIPMENT SALES CORP. AND WILL NOT BE REPRODUCED, COPIED, DISCLOSED TO OTHERS OR USED DIRECTLY OR INDIRECTLY IN THE MAKING OF APPARATUS OR PARTS THEREOF, EXCEPT UPON WRITTEN PERMISSION OF P.J. HANNAH EQUIPMENT SALES CORP. THE ACCEPTANCE OF THIS DRAWING WILL BE CONSIDERED AS ACCEPTANCE OF THE FOREGOING AGREEMENT.

TOUS LES DIMENSIONS EN mm SINON SPÉCIFIER AUTREMENT / ALL DIMENSIONS IN mm UNLESS OTHERWISE NOTED

CONSULTANT	DELCAN CORPORATION	DRAWN	M.R.E.
PROJECT	CAPITAL REGIONAL DISTRICT - MALHEW SALTSRING ISLAND	DATE	06/01/13
OUR REF. #	K17426	YOUR REF. #	6350-20.25
NOTRE RÉF. #		VOTRE RÉF. #	
GENERAL ARRANGEMENT MODEL BF9-BFP-SP			
CHECKED	DATE	APPROVED	APPROVE
PLT	1:20		

OUTLET & INLET MOVED.	2	06/02/17
OVERALL LENGTH WAS 8080	1	06/01/21
DESCRIPTION	REV.	DATE
 Specialists in pollution control since 1973		
DRAWING NO. DESG.	A1-K17426-7800	
REV.	2	

THIS REVISED DRAWING SUPERSEDES ALL PREVIOUS ISSUES





## APPENDIX B – PRELIMINARY DESIGN DRAWINGS





# CAPITAL REGIONAL DISTRICT

## MALIVIEW WWTP UPGRADES

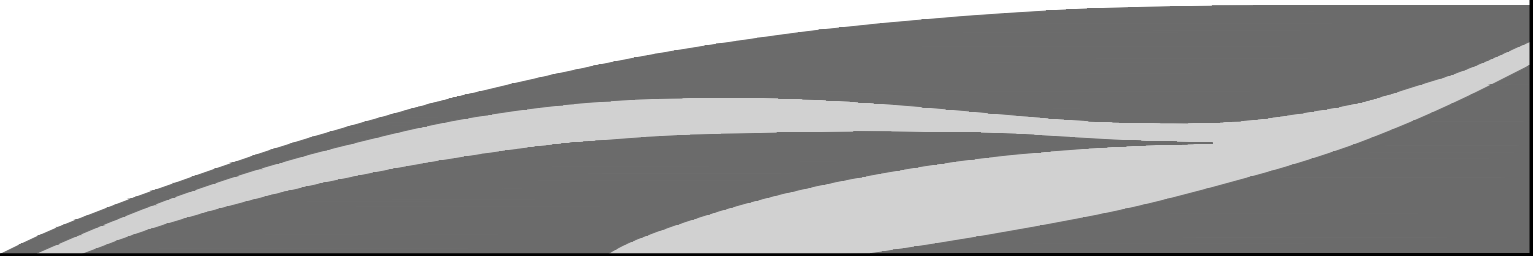
# CONTRACT      XXX-XXX

LIST OF DRAWINGS	
DWG. No.	TITLE
2975-00-G-001	COVER SHEET
2975-00-C-101	CIVIL – SITE PLAN
2975-00-P-001	P&ID – SYMBOLS & ABBREVIATIONS–LEGEND–SHEET 1
2975-00-P-002	P&ID – SYMBOLS & ABBREVIATIONS–LEGEND–SHEET 2
2975-00-P-003	P&ID – SYMBOLS & ABBREVIATIONS–LEGEND–SHEET 3
2975-00-P-004	P&ID – SYMBOLS & ABBREVIATIONS–LEGEND–SHEET 4
2975-00-P-006	PROCESS – HYDRAULIC PROFILE
2975-00-P-009	P&ID – MBBR TREATMENT
2975-00-P-010	P&ID – MIXING TANK
2975-00-P-011	P&ID – ALUM DOSING SYSTEM
2975-00-P-012	P&ID – SODIUM HYDROXIDE DOSING SYSTEM
2975-00-P-013	P&ID – PROCESS AIR BLOWERS

AE Project No. 2020-2975-00



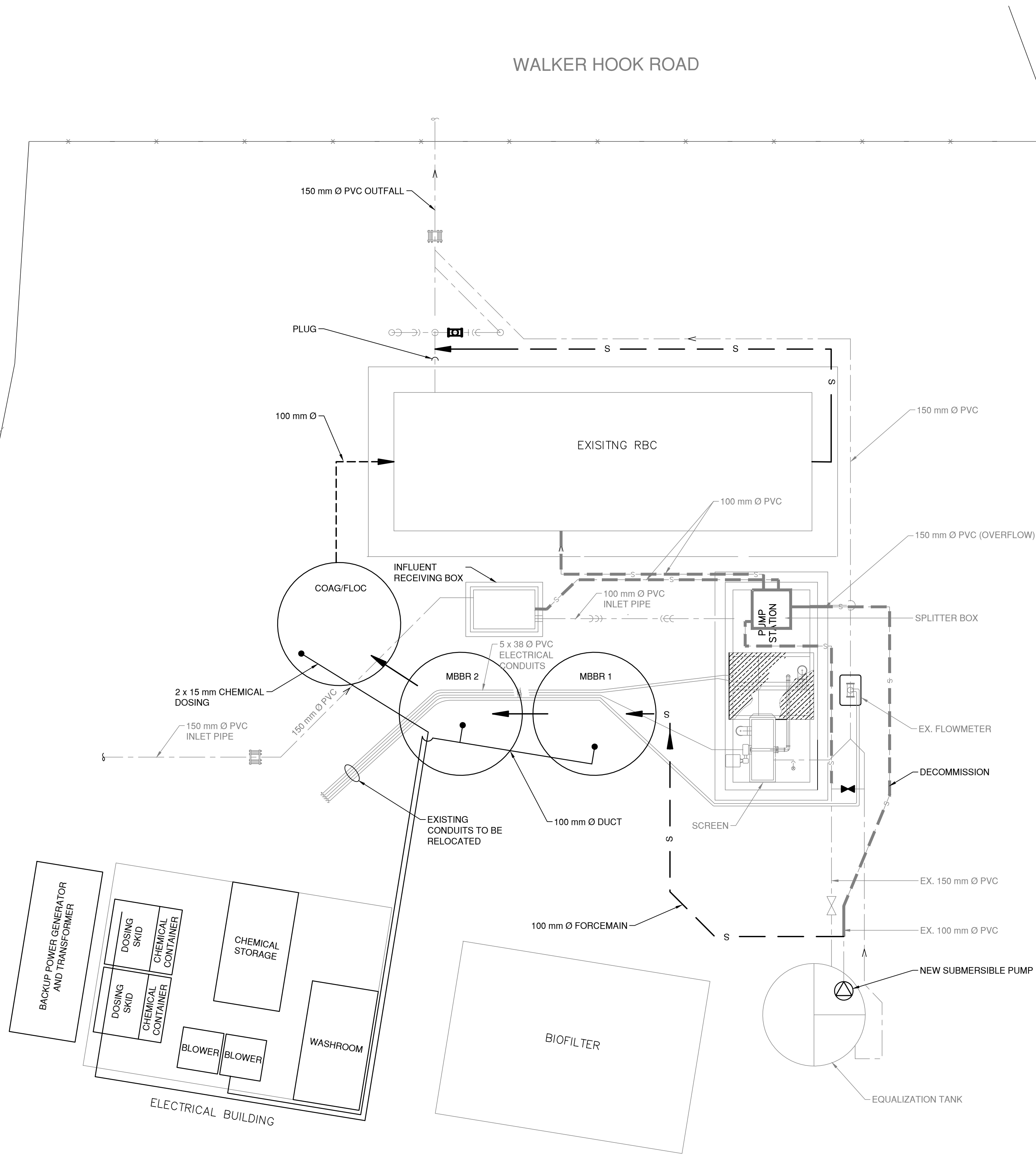
Capital Regional District | Environmental Services  
625 Figgard Street, PO Box 1000  
Victoria, BC V8W 2S6





CAD FILE: \\s-n-c-4-01\working\2019-2795-00-C-101.dwg  
PRINTED BY: WANG, SEPTEMBER 25, 2020 - 2:27 PM

NOTE:  
1. PRELIMINARY LAYOUT NOT BASED ON SURVEY.



LOCATION PLAN  
SCALE 1:1500



SEAL									
BY	DATE	No.	REVISION	ENG.	No.	DATE	ISSUE		
					A	09/25/20	30% DESIGN SUBMISSION		

<b>CRD</b> Making a difference...together		Capital Regional District Wastewater Treatment Project		MALVIEW WWTP					
DESIGNED	J.L.	SURVEYED	N/A	CIVIL - SITE PLAN					
DRAWN	B.W.	DATE	07/06/20						
SCALE HORIZONTAL	1:50	CHECKED	P.G.						
SCALE VERTICAL		APPROVED	E.A.	CONTRACT NUMBER	XXXXXXX	DRAWING NUMBER	2795-00-C-101	ISSUE	A
				1	SHT. No. OF	11			



WASTEWATER COMMODITY ABBREVIATIONS

FA	FOUL AIR
OF	OVERFLOW
PA	PROCESS AIR
PLY	POLYMER
PW	POTABLE WATER
SAM	SAMPLE
SAN	SANITARY SEWER
SAS	SULFURIC ACID SOLUTION
SHS	SODIUM HYDROXIDE SOLUTION
V	VENT

WASTEWATER EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONER
AF	AIR FILTER
AHU	AIR HANDLING UNIT
BL	BLOWER
DIF	DIFFUSER
DR	DRIVE
EF	EXHAUST FAN
EUH	ELECTRIC UNIT HEATER
ESE	EMERGENCY EYEWASH & SHOWER
FAN	FAN
FJ	FLEXIBLE JOINT
FLT	FILTER
HB	HOSE BIB
HST	HOIST
LCP	LOCAL CONTROL PANEL
LG	LEVEL SIGHT GLASS (Calibration Column)
LV	BUILDING AIR LOUVER
M	MOTOR
MCP	MASTER CONTROL PANEL
MXR	MIXER
P	PUMP
PDC	POWER DISTRIBUTION CENTRE
PRV	PRESSURE REDUCING VALVE
RM	ROTAMETER
SCL	SCALE
SCR	SCRUBBER
SLR	SILENCER
SM	STATIC MIXER
SMP	SAMPLER
STR	STRAINER
T	TANK
V	VALVE
VFD	VARIABLE FREQUENCY DRIVE

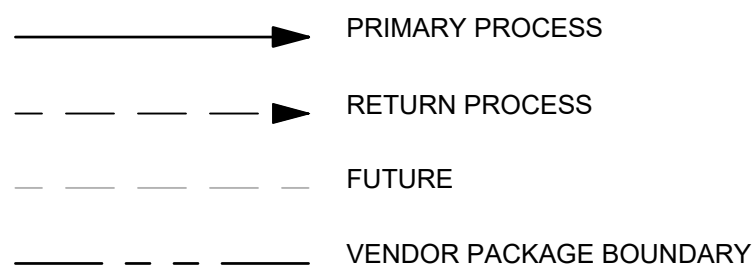
PIPE MATERIAL CODE

CL	COPPER TYPE L
CPVC	CPVC SCHEDULE 80
DI2	GLASS LINED DUCTILE IRON CLASS 53
DWV	PVC SCHEDULE 40 DRAIN WASTE/VENT
DWV2	PVC SCHEDULE 80 DRAIN WASTE/VENT
FRP	FIBREGLOSS REINFORCED PLASTIC 38mm VAC (UV RESISTANT)
MS1	MILD STEEL SCHEDULE 40 (CW/ERW/SEAMLESS)
MS2	MILD STEEL SCHEDULE 80 (ERW/SEAMLESS)
MS3	EPOXY LINED MILD STEEL (CW/ERW)
MS6	GALVANIZED STEEL SCHEDULE 40
MS7	GALVANIZED STEEL, G60
MS8	GALVANIZED STEEL, G90 (INSULATED)
PE1	HDPE SDR21 PE4710
PE2	HDPE SDR17 PE4710
PE3	HDPE SDR13.5 PE4710
PE4	HDPE SDR11 PE4710
PE5	HDPE SDR 9 PE4710
PE9	LDPE TUBING
PTFE	POLYTETRAFLUOROETHYLENE TUBING
PVDF	POLYVINYLIDENE FLUORIDE
PVC3	PVC SCHEDULE 80
PVC4	PVC SCHEDULE 40
SS1	304L STAINLESS STEEL SCHEDULE 10S
SS5	316L STAINLESS STEEL 10S
SS6	316L STAINLESS STEEL 40S
SS7	304L STAINLESS STEEL, 10 GA

VALVE ABBREVIATIONS

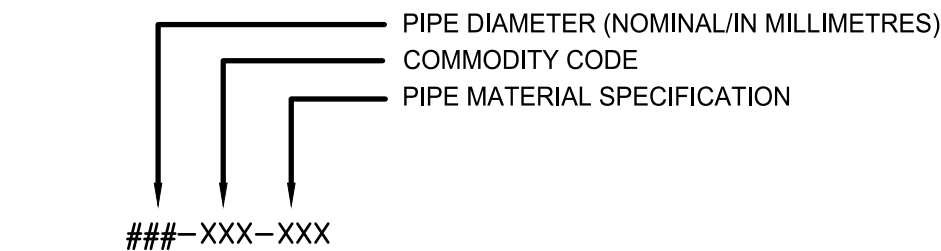
ARV	AIR RELEASE / VACUUM VALVE
BAV	BALL VALVE
BCV	BALL CHECK VALVE
BFD	BUTTERFLY DAMPER
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
CHV	CHECK VALVE
()CV	CONTROL VALVE ( ) - PRIMARY CONTROLLED VALVE MAY HAVE SEVERAL FUNCTIONS F - FLOWRATE L - LEVEL P - PRESSURE S - SURGE T - TEMPERATURE
FD	FLOW CONTROL DAMPER (OPEN/COSED)
FV	FLOW CONTROL VALVE (OPEN/CLOSED)
FVC	FLOW CONTROL VALVE (MODULATING)
GAV	GATE VALVE
GLV	GLOBE VALVE
KGV	KNIFE GATE VALVE
MV	MUG VALVE
NV	NEEDLE VALVE
PLV	PLUG VALVE
PRV	PRESSURE RELIEF VALVE
PSV	PRESSURE SAFETY VALVE
RV	ROTARY VALVE

PROCESS LINES

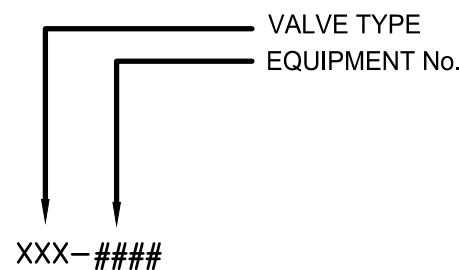


PROCESS, EQUIPMENT AND VALVE IDENTIFICATION

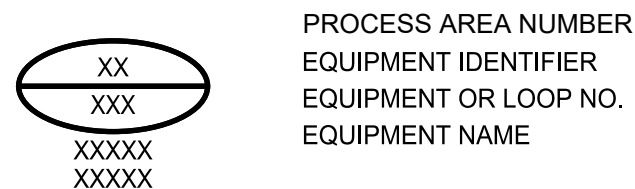
LINE LABEL



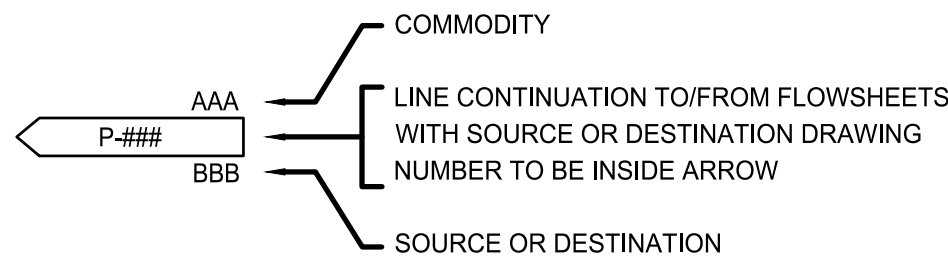
VALVE LABEL



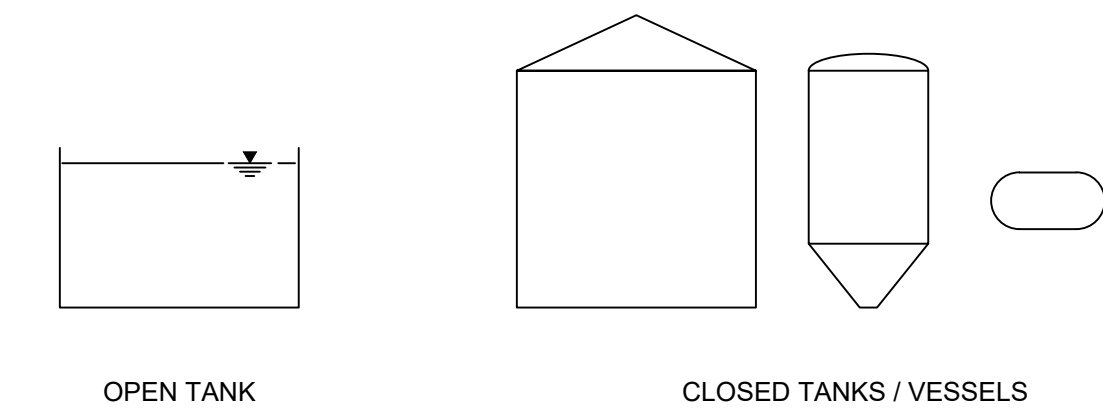
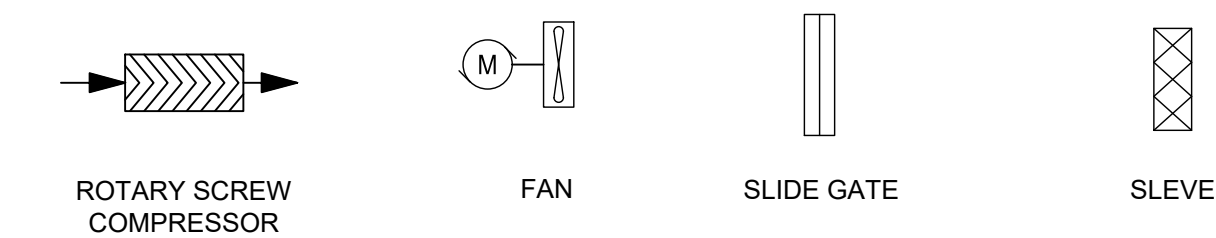
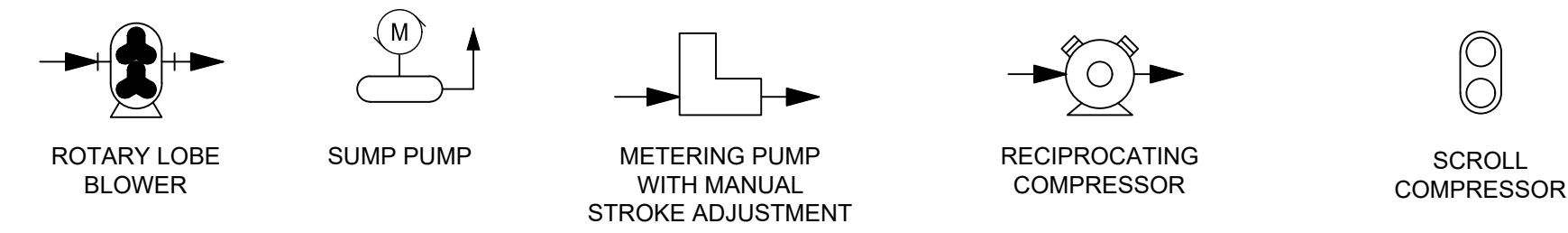
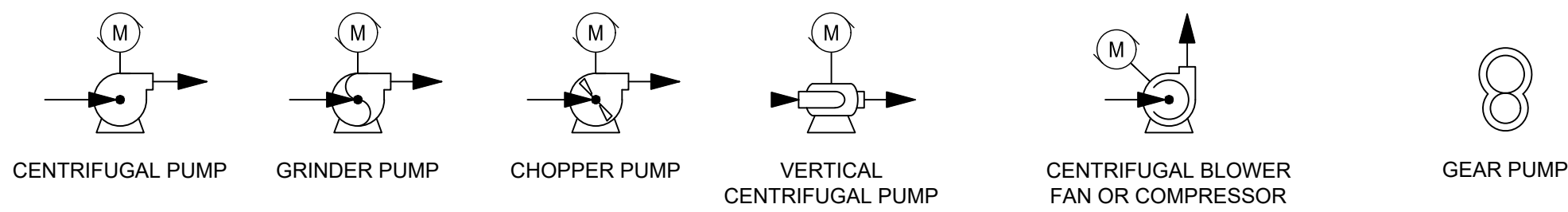
EQUIPMENT TAG



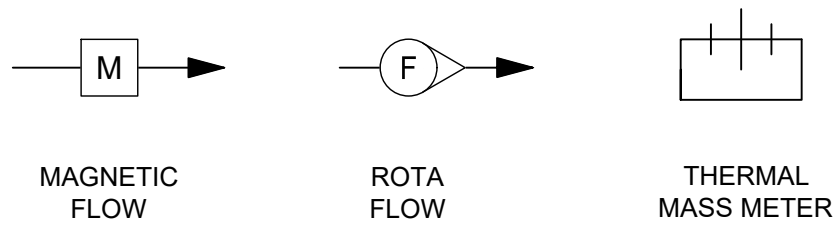
LINE SOURCE OR DESTINATION TAG



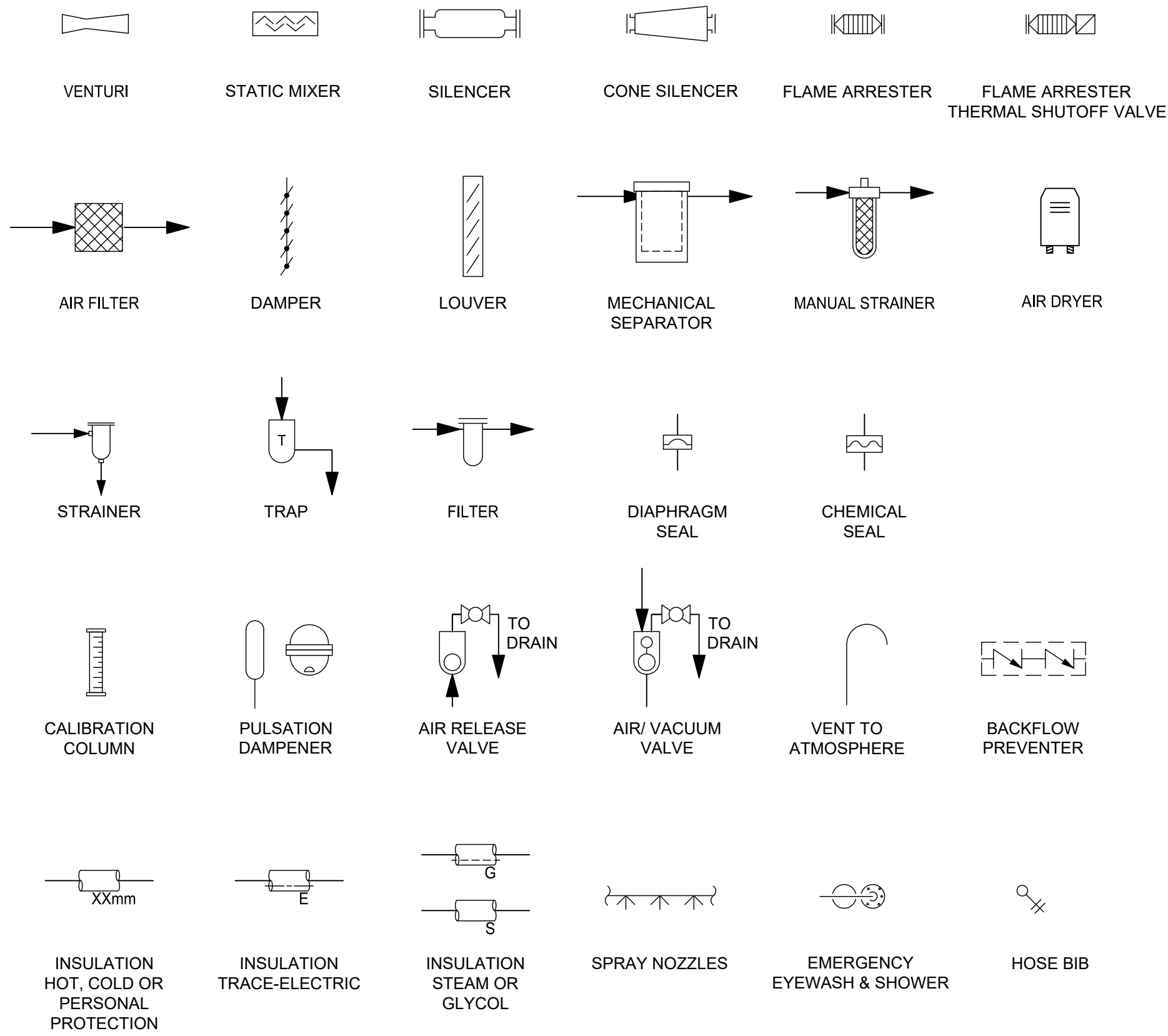
EQUIPMENT




METERING



LINE EQUIPMENT



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	SEAL									<div> Making a difference...together</div>	Capital Regional District Wastewater Treatment Project		RESIDUALS TREATMENT FACILITY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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INSTRUMENT SYMBOLS

	CONTROL ROOM PANEL	FIELD MOUNTED	LOCAL PANEL
DISCRETE INSTRUMENTS			
SHARED DISPLAY SHARED CONTROL eg. SCADA			
COMPUTER FUNCTION eg. FLOW METER			
PROGRAMMABLE LOGIC CONTROL (PLC) (RTU)			

\*SUBSCRIPT ABBREVIATION SPECIFIES INSTRUMENT FUNCTION OR LOCATION.  
eg. IP#1 (INSTRUMENT PANEL #1), SD (SHUTDOWN)

FIELD MOUNTED INSTRUMENTS MAY BE POST OR WALL MOUNTED

STATUS LIGHT SHOW COLOUR INSIDE SYMBOL

SYSTEM LOGIC

MANUAL RESET

EMERGENCY SHUTDOWN LOGIC

PURGE OR FLUSHING DEVICE

ORIFICE PLATE C/W ORIFICE FLANGES

FLOW INDICATOR ROTAMETER TYPE

TURBINE OR PROPELLER TYPE PRIMARY ELEMENT

ANNUBAR OR PITOT TUBE

MAGNETIC FLOW METER

VORTEX FLOW METER

ULTRASONIC FLOW METER

CORIOLIS FLOW METER

NOTES:

- FINAL INTERCONNECTION IS SUBJECT TO PRE-PACKAGED PROCESS EQUIPMENT VENDOR. CONTRACTOR TO PROVIDE ALL POWER, CONTROLS AND SIGNALS REQUIRED TO MEET THE REQUIREMENTS.
- PANEL MOUNTED EQUIPMENT SHOWN FOR FUTURE FIELD DEVICES SHALL BE PROVIDED.

IDENTIFICATION LETTERS

FIRST-LETTER		SUCCEEDING-LETTERS		
MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A ANALYSIS		ALARM		
B BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C CIRCUIT			CONTROL	CLOSED
D DISCONNECT	DIFFERENTIAL			
E VOLTAGE / EMERGENCY		SENSOR (PRIMARY ELEMENT)		
F FLOW RATE	RATIO (FRACTION)			
G GENERAL / COMMENT		GLASS, VIEWING DEVICE		
H HAND OPERATED				HIGH
I CURRENT (ELECTRICAL)		INDICATE		
J POWER	SCAN			
K TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L LEVEL		LIGHT		LOW
M USER'S CHOICE	MOMENTARY			MIDDLE, INTERMEDIATE
N USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O ON / OFF		ORIFICE, RESTRICTION		OPEN
P PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q QUANTITY, STATE	INTEGRATE, TOTALIZE			
R RADIATION		RECORD		
S SPEED, FREQUENCY	SAFETY	STATUS	SWITCH	
T TEMPERATURE			TRANSMIT	
U MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	
W WEIGHT, FORCE		WELL		
X OPEN/CLOSE	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y EVENT OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z POSITION, DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

INSTRUMENT SUBSCRIPT ABBREVIATIONS

ABBR.	DESCRIPTION
ACK	ACKNOWLEDGE
ACP	AREA CONTROL PANEL
A/S	AIR SUPPLY
BRG	BEARING
CT	CURRENT TRANSFORMER
CL2	CHLORINE
COMB	COMBUSTIBLE
CPU	CENTRAL PROCESSING UNIT
DB	DEVICE BUS
DIFF	DIFFERENTIAL
DISCH	DISCHARGE
DO	DISSOLVED OXYGEN
D/P	DIFFERENTIAL PRESSURE
ESO	EMERGENCY SHUTDOWN
ETM	ELAPSED TIME METER
FC	FAIL CLOSED
FO	FAIL OPEN
H	HIGH
HH	HIGH HIGH
HMI	HUMAN MACHINE INTERFACE
HOA	HAND/OFF/AUTO
HORN	ANNUNCIATOR HORN
HOR	HAND/OFF/REMOTE
H2S	HYDROGEN SULPHIDE
IB	INSTRUMENT BUS
IBD	INBOARD
I/I	CURRENT/CURRENT ISOLATION
I/P	CURRENT TO PNEUMATIC
L	LOW
LL	LOW LOW
LCP	LOCAL CONTROL PANEL
LEL	LOWER EXPLOSIVE LIMIT
LOR	LOCAL/OFF/REMOTE
M/A	MANUAL/AUTO
MB	MEGABLOCK
O2	OXYGEN
OBD	OUTBOARD
O/C	OPEN/CLOSE
O/L	OVERLOAD
O/O	ON/OFF
ORP	OXYGEN REDUCTION POTENTIAL
PAR	PROCESS ALARM RELAY
PC	POWER CONDITIONER
PH	PH
PLC	PROGRAMMABLE LOGIC CONTROL
PS	POWER SUPPLY
RESET	RESET
RIO	REMOTE INPUT/OUTPUT
RM	REDUNDANCY MODULE
SO2	SULPHUR DIOXIDE
SP	SET POINT
SW	SELECTOR SWITCH
S/S	STOP/START
TURB	TURBIDITY
UPS	UNINTERRUPTIBLE POWER SUPPLY
VCP	VENDOR CONTROL PANEL
VFD	VARIABLE FREQUENCY DRIVE
VIB	VIBRATION
WDG	WINDING

V-CONE DIFFERENTIAL

FIELDBUS INTERFACE INCLUDED IN MCC PACKAGE

INSTRUMENTS AND/OR CONTROLS INCLUDED IN EQUIPMENT PACKAGE

**VCP** LOCAL CONTROL PANEL INDLUED IN VENDOR PACKAGE

**ACP** AREA CONTROL PANEL

DIGITAL INPUT

DIGITAL OUTPUT

ANALOG INPUT

ANALOG OUTPUT

PULSE INPUT

MODULATING DIGITAL OUTPUT

HAND SWITCH DESIGNATION

ES - EMERGENCY STOP  
HOA - HAND-OFF-AUTO  
HORA - HAND-OFF-REMOTE-AUTO  
J - JOG  
LOR - LOCAL-OFF-REMOTE  
LR - LOCAL-REMOTE  
OC - OPEN-REMOTE  
OO - ON-OFF  
OCR - OPEN-CLOSE-REMOTE

ELECTRICAL EQUIPMENT IDENTIFICATION TAG

725-MCC-001  
SEQUENTIAL LOOP IDENTIFIER  
UNIQUE NUMBER ASSIGNMENT  
BASED ON FUNCTION  
FUNCTIONAL IDENTIFICATION CODE  
PROCESS AREA NUMBER  
(AS REQUIRED)

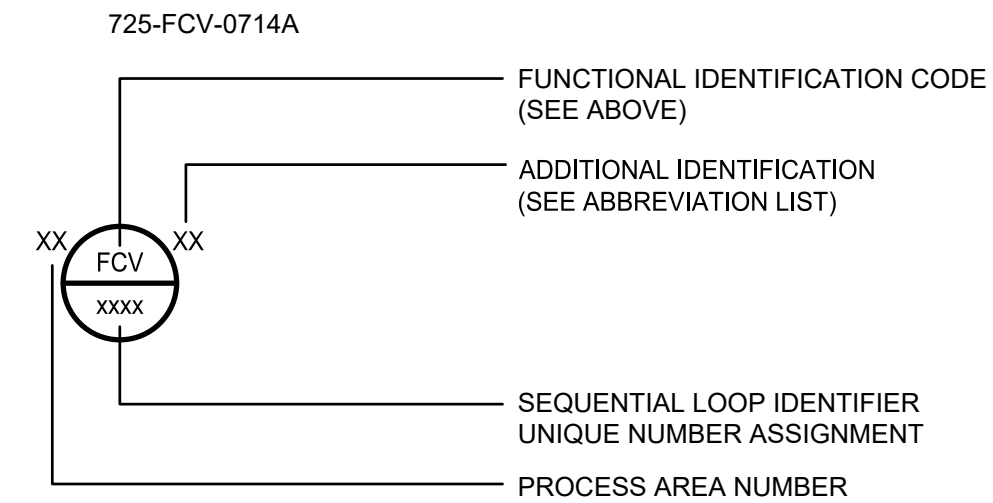
RELAY FUNCTION DESIGNATORS

	ADD		HIGH SELECT
	SUBTRACT		LOW SELECT
	BIAS		ANALOG TO DIGITAL
	GAIN OR ATTENUATE	<b>REV</b>	REVERSE
	EXTRACT SQ ROOT	<b>E/P</b>	POTENTIAL TO PNEUMATIC
	DIVIDE	<b>I/P</b>	CURRENT TO PNEUMATIC
	MULTIPLY	<b>E/I</b>	POTENTIAL TO CURRENT
	BOOST		

INSTRUMENT LINE SYMBOLS

	ELECTRICAL SIGNAL
	PNEUMATIC SIGNAL
	CAPILLARY TUBING
	HYDRAULIC SIGNAL
	CONTROL SYSTEM DATA LINK DEVICENET OR ETHERNET AS NOTED
	DATA LINK OR SYSTEM BUS AND SOFT INTERNAL LINK
	ELECTROMAGNETIC OR SONIC SIGNAL (GUIDED AND NON GUIDED)
	INTERLOCK

INSTRUMENT TAG NUMBERS & IDENTIFICATION



SEAL

BY

DATE

No.

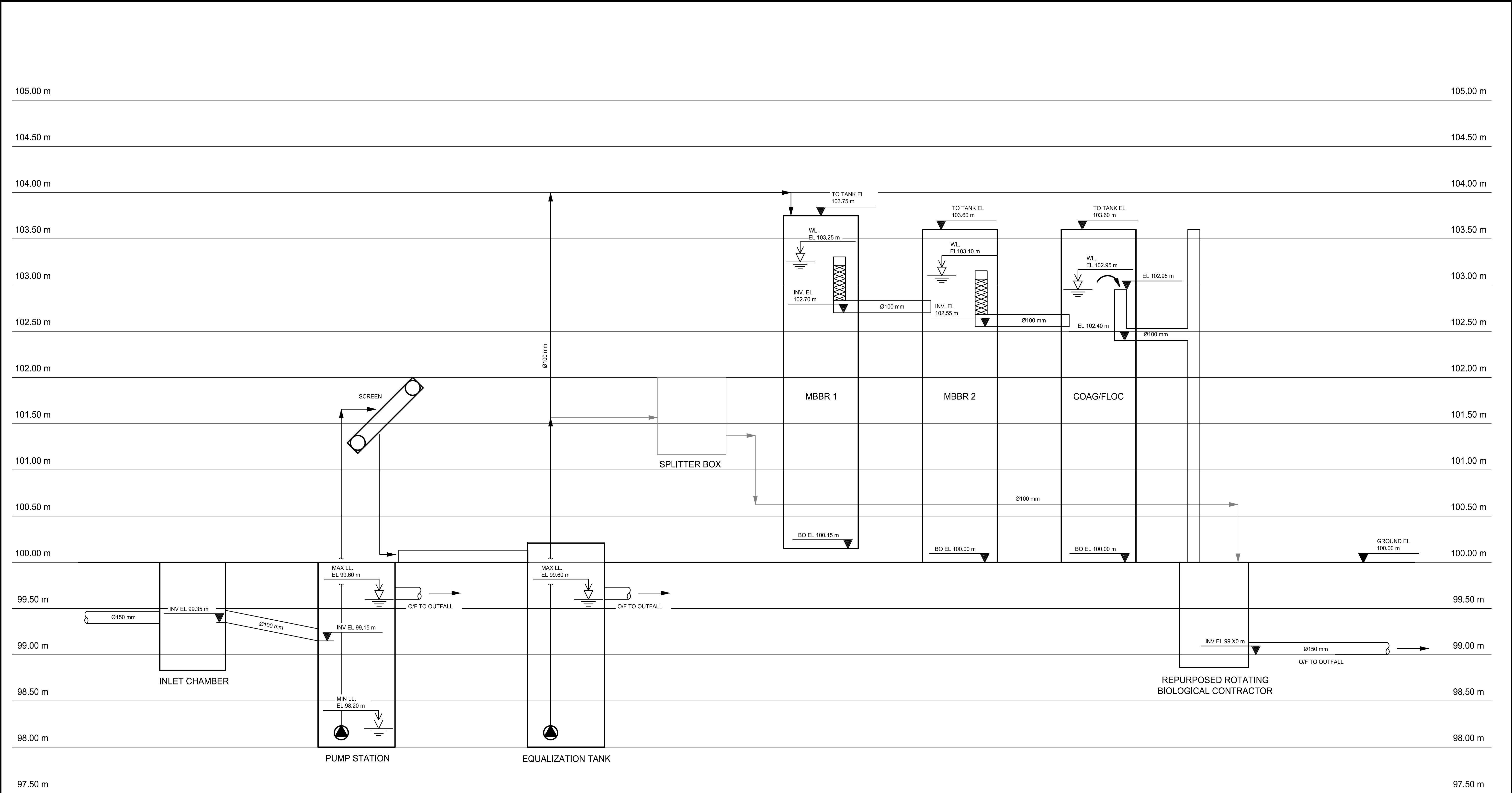
REVISION

ENG.

No.

DATE

ISSUE

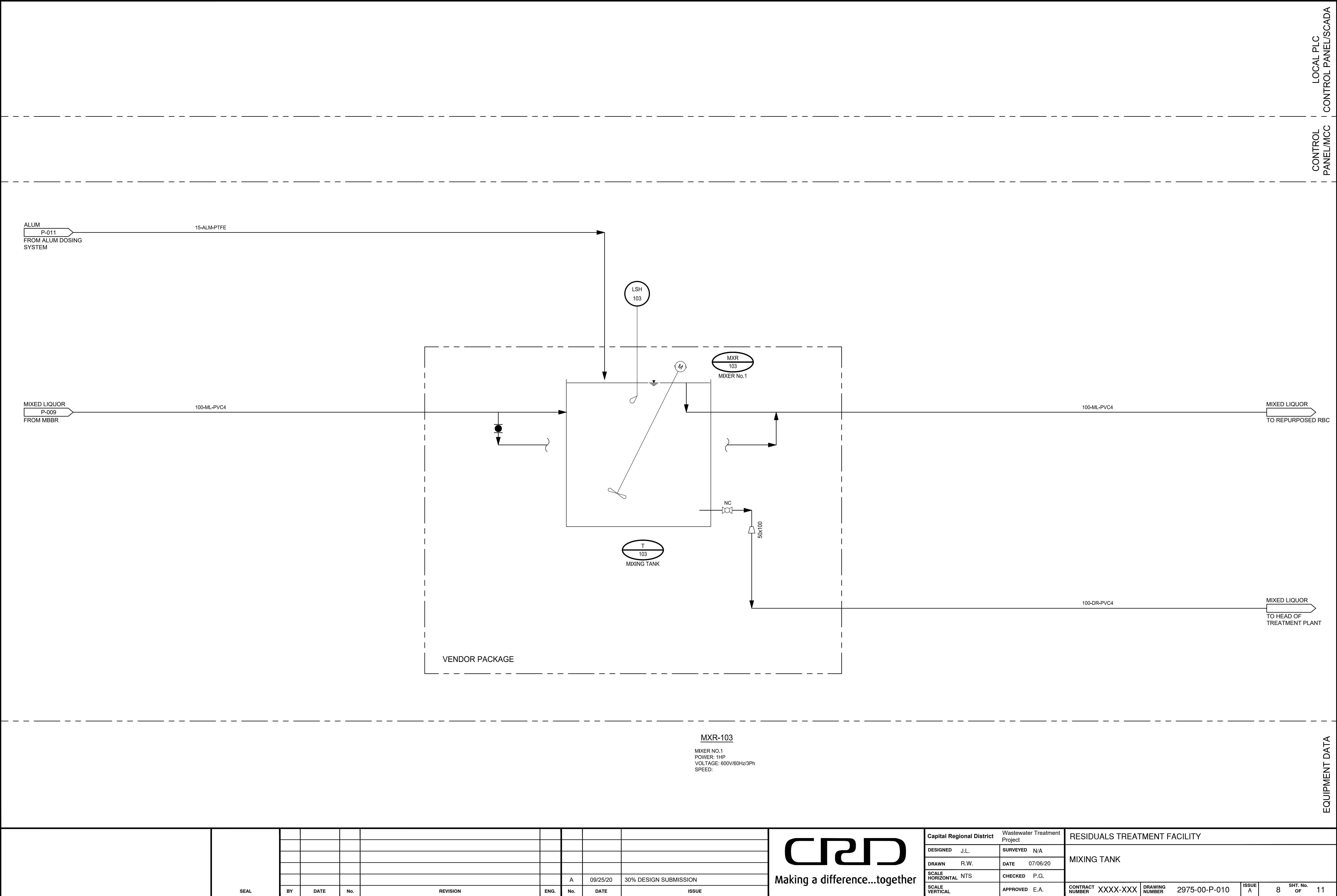


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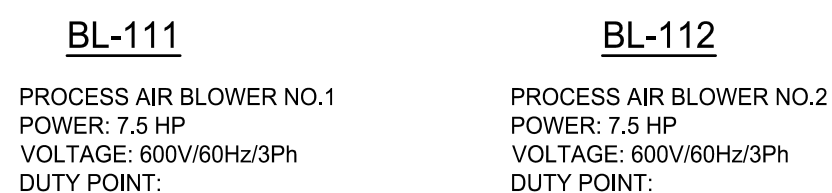




P-302

SODIUM HYDROXIDE PUMP NO.2  
POWER: 0.5 HP  
VOLTAGE: 120V/60Hz/3Ph  
DUTY POINT:

**CRD**  
Making a difference...together



SEAL								
						A	09/25/20	30% DESIGN SUBMISSION
	BY	DATE	No.	REVISION	ENG.	No.	DATE	ISSUE



Capital Regional District		Wastewater Treatment Project		RESIDUALS TREATMENT FACILITY								
DESIGNED	J.L.	SURVEYED	N/A	PROCESS AIR BLOWERS								
DRAWN	R.W.	DATE	07/06/20									
SCALE HORIZONTAL		NTS	CHECKED									P.G.
SCALE VERTICAL		APPROVED	E.A.	CONTRACT NUMBER	XXXX-XXX	DRAWING NUMBER	2975-00-P-013	ISSUE	A	11	SHT. No. OF	11

## APPENDIX C - COST ESTIMATE





Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

**Client:** Capital Regional District  
**Subject:** Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: JLeong

Checked by:

Type of Estimate: Pre-Design

## Cost Estimate Summary

1	GENERAL	\$	235,000
2	CIVIL SITE WORKS	\$	39,000
3	STRUCTURAL AND ARCHITECTURAL	\$	16,000
4	MAJOR EQUIPMENT SUPPLY	\$	226,000
5	PROCESS MECHANICAL	\$	312,000
6	BUILDING MECHANICAL	\$	42,000
7	ELECTRICAL	\$	62,000
8	INSTRUMENTATION AND CONTROLS	\$	31,000
9	TEMPORARY WORKS	\$	18,000

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Subtotal	\$	981,000
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Allowance Contingency	40%	\$	393,000
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Subtotal	\$	1,374,000
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Engineering	20%	\$	275,000
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TOTAL PROJECT COST ESTIMATE	\$	1,649,000
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## NOTES:



3of13



<b>Client:</b>	<b>Capital Regional District</b>
<b>Subject:</b>	<b>Maliview Preliminary Cost Estimate</b>

Type of Estimate: Pre-Design

Item	Description	Qty.	Units	Unit Price	Extension
1	Site Grading Allowance	1	LS	25,000	25,000
2	Decommission of Existing PVC Piping	33.5	lm	85	3,000
3	Decomission of Existing Splitter Box	1	LS	1,500	2,000
4	Stripping and Subgrade Preparation	25	sq.m	85	3,000
5		0	LS	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 33,000



Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

Client: Capital Regional District  
Subject: Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: <insert>

Checked by:

Type of Estimate: Pre-Design

### Structural & Architectural

Item	Description	Qty.	Units	Unit Price	Extension
1	Structural Slab	16.25	cu.m	800	13,000
2		0	ea	1	-
3		0	ea	1	-
4		0	ea	1	-
5		0	ea	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 13,000



Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

Client: Capital Regional District  
Subject: Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: <insert>

Checked by:

Type of Estimate: Pre-Design

### Major Equipment Supply

Item	Description	Qty.	Units	Unit Price	Extension
1	MBBR Process Package	1	LS	190,900	191,000
2		0	ea	1	-
3		0	ea	1	-
4		0	ea	1	-
5		0	ea	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 191,000



Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

**Client:** Capital Regional District  
**Subject:** Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: <insert>

Checked by:

Type of Estimate: Pre-Design

## Process Mechanical

Item	Description	Qty.	Units	Unit Price	Extension
1	T-103 Mixing Tank, 2400 x 3400 (dia x H)	1	ea	5,130	6,000
2	MXR-103, Mixer with Support Stand	1	ea	12,075	13,000
3	100 mm PVC SDR35 Conveyance Piping	28.7	lm	400	12,000
4	100 mm PVC SDR35 Drain Piping	10	lm	400	4,000
5	Submersible Pump	1	ea	8,000	8,000
6	Chemical Dosing Skid	2	ea	15,000	30,000
7	Chemical Containment Pad	2	ea	1,000	2,000
8	15 mm Polyethylene Chemical Dosing	35	ea	100	4,000
9	100 mm Process Air Duct	21.8	ea	200	5,000
10	100 mm Damper	2	ea	1,500	3,000
11	Miscellaneous Piping Supports	1	LS	5,000	5,000
12	Splitter Box	1	LS	5,000	5,000
13	Emergency Shower and Eyewash	1	ea	8,500	9,000
14	RBC Retrofit	1	LS	75,000	75,000
15	Screen Modification	1	LS	25,000	25,000
16	Screening Washer Compactor	1	LS	57,500	58,000
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 264,000



Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

Client: Capital Regional District  
Subject: Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: <insert>

Checked by:

Type of Estimate: Pre-Design

### Building Mechanical

Item	Description	Qty.	Units	Unit Price	Extension
1	Louvre	3	ea	10,000	30,000
2	Unit Heater	1	ea	5,000	5,000
3		0	ea		-
4		0	ea	1	-
5		0	ea	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 35,000



Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

Client: Capital Regional District  
Subject: Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: DD

Checked by:

Type of Estimate: Pre-Design

### Electrical

Item	Description	Qty.	Units	Unit Price	Extension
1	600V Step Up Transformer	1	ea	3,000	3,000
2	600V Distribution Panel	1	ea	4,000	4,000
3	208V Distribution Panel	1	ea	4,000	4,000
4	Conduit and Cabelling	180	lm	80	15,000
5	Generator	1	ea	18,700	19,000
6	Automatic Transfer Switch	1	ea	3,425	4,000
7	Main Breaker	1	ea	1,000	1,000
8	Generator pad	1	ea	2,000	2,000
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 52,000



<b>Client:</b>	<b>Capital Regional District</b>
<b>Subject:</b>	<b>Maliview Preliminary Cost Estimate</b>

Type of Estimate: Pre-Design

Item	Description	Qty.	Units	Unit Price	Extension
1	Control Panel excl. Programming	1	ea	9,000	9,000
2	pH Probe / Transmitter	1	ea	4,500	5,000
3	SCADA Upgrade	1	LS	12,000	12,000
4		0	ea	1	-
5		0	ea	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 26,000





<b>Client:</b>	<b>Capital Regional District</b>
<b>Subject:</b>	<b>Maliview Preliminary Cost Estimate</b>

Type of Estimate: Pre-Design

Item	Description	Qty.	Units	Unit Price	Extension
1	Temporary Works for Commissioning	1	LS	15,000	15,000
2		0	ea	1	-
3		0	ea	1	-
4		0	ea	1	-
5		0	ea	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 15,000



Associated  
Engineering

GLOBAL PERSPECTIVE  
LOCAL FOCUS.

## Cost Estimate

**Client:** Capital Regional District  
**Subject:** Maliview Preliminary Cost Estimate

Date: Oct 7, 2020

Project Number: 2019-2795

Prepared By: <insert>

Checked by:

Type of Estimate: Pre-Design

## Allowances

Item	Description	Qty.	Units	Unit Price	Extension
1		1	LS	1	1,000
2		0	ea	1	-
3		0	ea	1	-
4		0	ea	1	-
5		0	ea	1	-
6		0	ea	1	-
7		0	ea	1	-
8		0	ea	1	-
9		0	ea	1	-
10		0	ea	1	-
11		0	ea	1	-
12		0	ea	1	-
13		0	ea	1	-
14		0	ea	1	-
15		0	ea	1	-
16		0	ea	1	-
17		0	ea	1	-
18		0	ea	1	-
19		0	ea	1	-
20		0	ea	1	-
	Subtotal				\$ 1,000
	Northern Allowance	0%			\$ -
	Subtotal				\$ 1,000
	Contingency	10%			\$ 1,000
	Subtotal				\$ 2,000
	Engineering	15%			\$ 1,000
	<b>Total</b>				<b>\$ 3,000</b>



British Columbia News

## Province opens applications for infrastructure funding to build stronger communities

<https://news.gov.bc.ca/22503>

Thursday, June 25, 2020 8:00 AM

**Victoria** - The Province is now accepting applications from local governments, community groups and First Nations for nearly \$160 million in infrastructure grants to help strengthen communities throughout British Columbia.

The funding targets projects ranging from recreation and cultural centres to drinking water and wastewater facilities.

In partnership with the Government of Canada, the funds are being made available as part of the second intake of the Community, Culture and Recreation (CCR) infrastructure stream and the Rural and Northern Communities (RNC) infrastructure stream, both part of the Investing in Canada Infrastructure Plan.

“Investment in infrastructure is an investment in people. We saw with the first intake in 2018 that there was huge demand for upgrading arenas, building new community centres and improving natural disaster resiliency,” said Selina Robinson, B.C.’s Minister of Municipal Affairs and Housing. “Projects like these will strengthen communities by bringing people together, celebrating our province’s diversity and improving services to support economic growth.”

The provincial and federal governments are investing up to \$58.7 million under the RNC program and up to \$100.6 million under the CCR program.

“Investing in community centres, recreation and cultural facilities means children and youth will have a safe place to play and learn, seniors have a place to meet and our clubs and groups can have a home. These facilities build strong, dynamic communities where people want to put down roots and do business,” said Catherine McKenna, federal Minister of Infrastructure and Communities. “Together with the Province, we are supporting projects that will create jobs and bring residents new facilities and programs that will make a real difference in people’s lives for years to come.”

The CCR program provides access to funding for projects that will provide upgrades or build new recreation facilities, recreational trails, local community centres and arts and cultural spaces. The program also supports health and educational facilities that uphold the Truth and Reconciliation Commission's Calls to Action. The total federal-provincial contribution for the first intake of CCR was nearly \$134 million. The first six successful applicants were announced last fall and the rest will be announced soon.

“Investment in infrastructure such as trail and cycling networks, arts and cultural installations and improving accessibility is so valuable to the tourism sector,” said Lisa Beare, B.C.’s Minister of Tourism, Arts and Culture. “This funding will help drive visitation, create jobs and increase revenues, benefiting the people in the tourism industry, which is especially important as we work towards recovering from the impact of COVID-19.”

The RNC program responds to the unique needs of British Columbia’s small, rural and remote communities that have populations under 25,000. As with the first round of applications under this fund, provincial and federal funding has been set at a higher level to ensure that communities under 5,000 people will have all eligible project costs covered, while those in communities up to 25,000 people will only have to cover 10%.

Project criteria support a wide range of infrastructure needs and priorities, including broadband connectivity,

efficient and reliable energy, Indigenous health and educational facilities, local public transit and reliable road, air or marine infrastructure, as well as improved resilience to natural disasters and environmental quality. The total federal-provincial contribution for the first intake of RNC is more than \$94 million and successful applicants will be announced soon.

Local governments and Indigenous communities, as well as for-profit (RNC only) and not-for-profit organizations, are encouraged to submit applications for these programs, through the Investing in Canada Infrastructure Program on the B.C. government website: [www.gov.bc.ca/Investing-in-Canada-Infrastructure-Program](http://www.gov.bc.ca/Investing-in-Canada-Infrastructure-Program)

Approvals for the second intake are expected to be made public in 2021.

### Quick Facts:

- Through the Investing in Canada Infrastructure Plan, the Government of Canada is investing more than \$180 billion over 12 years in public transit projects, green infrastructure, social infrastructure, trade and transportation routes, and Canada's rural and northern communities.
- \$25.3 billion of this funding supports social infrastructure in Canadian communities.
- For each project in the Community, Culture and Recreation infrastructure stream, projects may receive the following funding toward eligible costs:
  - Up to 33.33% provincial funding and up to 40% federal funding for local government projects;
  - Up to 15% provincial funding and up to 75% federal funding for Indigenous off-reserve projects(i);
  - Up to 75% federal funding for Indigenous on-reserve projects\*;<sup>(i)</sup> and
  - Up to 25% provincial funding and up to 40% federal funding for not-for-profit projects.

(i) Indigenous ultimate recipients may access additional funding for a project up to a maximum of 100% of eligible expenditures from all federal sources.
- For each project in the Rural and Northern Communities infrastructure stream, projects may receive the following funding toward eligible costs:
  - Up to 40% provincial funding and up to 60% federal funding for local government projects depending on population:
    - Small communities under 5,000 people may receive up to a combined total of 100% funding.
    - Communities with populations between 5,001 and 25,000 may receive up to a combined total of 90% funding.
  - Up to 25% provincial funding and up to 75% federal funding for Indigenous off-reserve projects(i);
  - Up to 75% federal funding for Indigenous on-reserve projects\*;<sup>(i)</sup>
  - Up to 25% provincial funding and up to 50% federal funding for not-for-profit projects, and
  - Up to 15% provincial funding and up to 25% federal funding related to for-profit projects.

(i) Indigenous ultimate recipients may access additional funding for a project up to a maximum of 100% of eligible expenditures from all federal sources.

### Learn More:

Canada's COVID-19 Economic Response Plan: <https://www.canada.ca/en/departement-finance/economic-response-plan.html>

Government of Canada takes action on COVID-19: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/canadas-reponse/government-canada-takes-action-covid-19.html>

BC's Restart Plan: <https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/covid-19-provincial-support/bc-restart-plan>

Investing in Canada Plan Project Map: <http://www.infrastructure.gc.ca/map>

Federal infrastructure investments in British Columbia: <https://www.infrastructure.gc.ca/investments-2002-investissements/bc-eng.html>

Government of British Columbia's infrastructure program: [www.gov.bc.ca/Investing-in-Canada-Infrastructure-Program](http://www.gov.bc.ca/Investing-in-Canada-Infrastructure-Program)

## **Media Contacts**

**Ministry of Municipal Affairs and Housing**

Media Relations

778 584-1255

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

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**SUBJECT**     **Enerkem Facility Update**

**ISSUE SUMMARY**

To provide an overview of the Enerkem gasification facility.

**BACKGROUND**

At its September 16, 2020 meeting, the Environmental Services Committee requested that staff report back on the Enerkem technology for processing municipal solid waste. Staff have met virtually with David Zheng, Commercial Development Coordinator at Enerkem. This report provides a summary of the Enerkem Technology from publicly available information and information provided by David Zheng.

Enerkem is a company that aims to produce renewable methanol and ethanol from non-recyclable, non-compostable waste through a gasification process. Feedstock can include solid waste, plastic waste or biomass residues. The waste recovery process uses “advanced gasification” to react the feedstock material at high temperatures to generate pure syngas, methanol and ethanol. These products can then be further processed to generate renewable chemicals or transportation fuels. In addition, at least three levels of solids are produced, a small percentage of which are considered hazardous. A processing and transfer facility, along with facilities to process waste that can’t be gasified, are also necessary to fully process the feedstock materials.

The first Enerkem facility, the Enerkem Alberta Biofuels Commercial Demonstration Facility (EAB), was constructed as part of the Edmonton Waste-to-Biofuels Initiative between 2013 and 2014. The initiative is a partnership between the City of Edmonton, the Government of Alberta, through Alberta Innovates–Energy and Environment Solutions, and Enerkem. According to information on the City of Edmonton website (Appendix A), the project includes three facilities:

- Integrated Processing and Transfer Facility, owned and operated by the City of Edmonton with an approximate capital cost of \$40 million,
- Waste to biofuels and chemicals facility owned and operated by Enerkem Alberta Biofuels (EAB) with an approximate capital cost of \$100 million,
- Advanced Energy Research Facility owned and operated by the City of Edmonton with a capital cost of \$11 million.

Also located on the site are a recycling centre and a composting centre.

The Enerkem facility has a contract with the City of Edmonton to process up to 100,000 dry tonnes of municipal solid waste per year for 25 years. The EAB commercial demonstration facility is designed to produce up to 38 million litres per year of biofuels. The facility started producing ethanol in 2017 and is currently focused on maintaining continuous operations using a mixed waste feedstock, before maximizing the volume of material being processed. A recent partnership

between Enerkem and Suncor has brought in the Suncor management team to support the operation of the EAB commercial demonstration facility.

A second Enerkem facility is currently under development in Varennes, Quebec, incorporating the learnings from the EAB commercial demonstration facility into the design of this second facility. There are also several other facilities in the feasibility or development phases globally. According to Enerkem, the optimal size of the technology is a two-train gasification plant of 350,000 tonnes per year of post recycling municipal and/or industrial, commercial and institutional waste (220,000 dry tonnes/year). In 2019, Hartland accepted approximately 145,000 tonnes of municipal solid waste. To obtain further information about the Enerkem Technology, process effectiveness and costs, the Capital Regional District would need to enter into a non-disclosure agreement. This information could be reported back to the committee in a closed report.

### **CONCLUSION**

The Enerkem technology uses gasification to process waste into syngas, methanol and ethanol. Enerkem currently has a commercial demonstration facility in Edmonton, Alberta, and other plants in development, including one in Quebec. The optimal plant size to achieve economies of scale is approximately 350,000 tonnes of municipal solid waste per year. To obtain further information about the Enerkem Technology to better understand their process effectiveness and costs, the Capital Regional District would need to enter into a non-disclosure agreement.

### **RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: City of Edmonton Factsheet – Waste-to-Biofuels Initiative

# Factsheet - Edmonton Waste-to-Biofuels Initiative

- The City of Edmonton, the Government of Alberta, through Alberta Innovates - Energy and Environment Solutions, and Enerkem, under Enerkem Alberta Biofuels (EAB), have partnered to create this sustainable initiative which will convert waste that can't be recycled or composted into valuable products such as clean fuels and biochemicals.
- The Waste-to-Biofuels and Chemicals Facility will produce 38 million litres of clean fuels and biochemicals when operating at full capacity. While initially the biochemical methanol will be produced, the biorefinery operation will later shift to produce ethanol as a valuable biofuel. The annual production capacity of ethanol is enough to fill the tanks of 400,000 cars using a 5% ethanol blend. Footprint of the Waste-to-Biofuels and Chemicals Facility: 2.8 hectares (7 acres).
- Feedstock for conversion into biofuels is prepared from residuals from the City of Edmonton's composting, recycling and processing facilities – waste that would otherwise be landfilled. Annual amount of this refuse derived fuel (RDF) is 100,000 tonnes.

## The initiative is composed of three facilities located at the Edmonton Waste Management Centre:

### 1. Waste-to-Biofuels and Chemicals Facility

(Inaugurated on June 4th, 2014) – Owned and operated by Enerkem Alberta Biofuels, will produce 38 million litres of clean fuels and biochemicals annually when operating at full capacity.

### 2. Advanced Energy Research Facility

(Opened in 2011) – Owned and operated by the City of Edmonton, this facility is attracting world-class energy research.

### 3. Integrated Processing and Transfer Facility

(Opened in 2010) – Owned and operated by the City of Edmonton, this facility sorts organic waste for composting and prepares RDF as a feedstock for the Waste-to-Biofuels and Chemicals Facility.



## Partner Contributions

### Waste-to-Biofuels and Chemicals Facility

Owner/Operator: Enerkem Alberta Biofuels  
Capital Cost: approx. \$100 million  
(construction cost)

### Integrated Processing and Transfer Facility

Owner/Operator: City of Edmonton  
Capital Cost: \$40 million  
(RDF feedstock preparation)

### Advanced Energy Research Facility

Owner/Operator: City of Edmonton  
Capital Cost: \$11 million

Alberta Innovates - Energy and Environment Solutions (AI-EES) contributed \$29 million to the overall Waste-to-Biofuels initiative. AI-EES staff served on the steering committee that directed and guided the execution of this project, and provided technical input and advice.



# Factsheet - Edmonton Waste-to-Biofuels Initiative

## Benefits

### Environment/Energy

- Reduces Alberta's greenhouse gas emissions by approximately 60% when compared to fossil fuel production and landfilling activities;
- Provides a cost-effective alternative to landfilling;
- Increases energy diversification and greens Alberta's energy basket;
- Contributes to the goals of the City of Edmonton's environmental plan – The Way we Green;
- Helps meet federal and provincial 5% renewable fuels standards.

### Economy

- Creates high quality green jobs;
- Implements a new local biorefinery industry – the production of advanced biofuels and chemicals;
- Increases domestic production of biofuels and reduces biofuels imports;
- Commercial facility alone expected to generate \$65M in net annual economic benefits in the local area.

### Innovation

- Elevates Alberta's profile as a leader in clean technology;
- The Advanced Energy Research Facility:
  - » enables the development of technologies capable of converting a wide variety of residual waste streams into biofuels and green chemicals;
  - » creates a network of top researchers from Alberta, Canada and around the world - particularly those specialized in thermo-catalysis; and
  - » contributes to the advancement of a new line of advanced chemicals and hydrocarbon fuels suitable for today's carbon reality.

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

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**SUBJECT     Provincial Plastics Action Plan Update and Next Steps**

**ISSUE SUMMARY**

To update the committee with regard to the BC Ministry of Environment and Climate Change Strategy (ENV) Plastics Action Plan.

**BACKGROUND**

In July 2019, ENV released its Plastics Action Plan, which proposed amendments to the BC Recycling Regulation (BCRR) to address plastic waste management in BC. The Plastics Action Plan outlined the following four main approaches to the issue:

- **Bans on single-use plastic packaging:** Determining which types of plastic packaging to phase out altogether, as well as any necessary exemptions, such as for health, safety and accessibility to keep products available for the people who need them.
- **Dramatically reduce single-use plastic in landfills and waterways:** Requiring producers to take responsibility for a wider range of plastic products, ensuring more single-use items, like sandwich bags, straws and cutlery, get recycled.
- **Plastic bottle and beverage container returns:** Expanding the deposit-refund system to cover all beverage containers – including milk and milk-substitutes – with a ten cent refundable deposit, keeping millions more containers out of landfills and waterways.
- **Reducing plastics overall:** Supporting effective ways to prevent plastic waste and making sure recycled plastic is reused effectively.

ENV sought feedback on its Plastics Action Plan between July and September 2019 and, in November 2019, it published a report of the results of that consultation process, a copy of which is provided for information in Appendix A.

Based on the results of the consultation, the Province passed an Order in Council on June 29, 2020 to amend the BCRR to take new steps to better manage plastics in BC. Information regarding this amendment was provided in the September 16, 2020 information report to the Environmental Services Committee. Highlights of the changes include:

- increasing the minimum deposit on refundable beverage containers from five cents to ten cents, effective June 29, 2020;
- requiring that all milk and milk substitute beverage containers become subject to a deposit/refund system, effective February 1, 2022; and
- expanding the range of packaging and paper products that are subject to the BCRR to include packaging-like products and single-use products, effective January 1, 2023.

A copy of the Order in Council is provided for information in Appendix B.

In further response to the Plastics Action Plan feedback, the ENV also released an Intentions Paper on September 12, 2020 to solicit feedback on further expanding the BCRR. Feedback is being sought on expanding the BCRR to include:

- mattresses
- additional household hazardous waste products, such as:
  - pool chemicals
  - fire extinguishers
  - flares
  - medical syringes
  - bear spray
  - fertilizer
  - additional paints, sealers and adhesives
  - veterinary pet medicines
- electric car batteries
- solar power equipment
- non-residential industrial, commercial and institutional packaging and paper products

ENV is accepting feedback on the Intentions Paper (Appendix C) up to November 20, 2020. Staff will be providing feedback in support of moving forward with expanding the BCRR to include all of the proposed materials.

The expansion of the BCRR to include industrial, commercial and institutional packaging and paper products will, in combination with the inclusion of packaging-like products and single-use products announced through the Order in Council on June 29, provide mandated recycling alternatives for single-use polystyrene cups and containers from both residential and non-residential sources. This will help to significantly address the issues associated with a variety of single-use items, including polystyrene cups and containers and diminish the need for a model bylaw to ban their use, as was considered Environmental Services Committee at its October 23, 2019 meeting.

On October 7, 2020, the federal government announced a ban on single-use plastic items where they are found in the environment, are often not recycled, and have readily available alternatives. Based on those criteria, bans are proposed for plastic checkout bags, straws, stir sticks, six-pack rings, cutlery and foodware made from hard-to-recycle plastics. The federal government wants to hear from Canadians and stakeholders on this approach and comments will be accepted until December 9, 2020. CRD staff will review and provide feedback on the proposed bans. Regulations will be finalized by the end of 2021.

## **CONCLUSION**

In July 2019, the BC Ministry of Environment and Climate Change Strategy (ENV) released its Plastics Action Plan to help address plastics waste management in BC and, based on feedback received, the province announced the expansion of the BCRR to include packaging-like products and single-use products. More recently, ENV has released an Intentions Paper soliciting feedback on further expanding the regulation to include an array of additional products, including all non-residential packaging and paper products. Staff will be providing feedback in support of the proposed expansion. The expansion of the regulation announced on June 29, 2020, combined with the proposed expansion outlined in the Intentions Paper, significantly addresses the issues associated with a variety of single-use items in BC.

**RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:

That the Plastics Action Plan and Next Steps report be received for information.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENTS**

- Appendix A: Plastics Action Plan, Policy Consultation Paper – BC Ministry of Environment and Climate Change Strategy – July 2019
- Appendix B: Province of British Columbia Order in Council – June 29, 2020
- Appendix C: Recycling Regulation Policy Intentions Paper – BC Ministry of Environment and Climate Change Strategy – September 12, 2020



# Plastics Action Plan

## POLICY CONSULTATION PAPER



*The ministry is seeking feedback on new policy opportunities and proposed amendments to the Recycling Regulation of the Environmental Management Act by September 30, 2019 to address plastic waste.*

*Instructions on how to provide comments are provided on the last page of this consultation paper.*



## Introduction

British Columbians want action on plastic waste. Too often plastic packaging and single use items end up as litter in our communities, waste in landfills or debris in lakes, rivers and oceans. Plastic pollution hurts wildlife and harms ecosystems, and it is increasing year after year. The Ministry of Environment and Climate Change Strategy recognizes that new steps are needed and is proposing action in four connected areas.

### 1 BANS ON SINGLE-USE PACKAGING



*Determining which types of plastic packaging to phase out altogether, as well as any necessary exemptions, such as those for health, safety and accessibility to keep products available for the people that need them.*

### 2 DRAMATICALLY REDUCE SINGLE-USE PLASTIC IN LANDFILLS & WATERWAYS



*Requiring producers to take responsibility for more plastic products, ensuring more single-use items like sandwich bags, straws and cutlery get recycled.*

### 3 PLASTIC BOTTLE AND BEVERAGE CONTAINER RETURNS



*Expanding the deposit-refund system to cover all beverage containers — including milk and milk-substitutes — with a 10-cent refundable deposit, keeping millions more containers out of landfills and waterways.*

### 4 REDUCING PLASTICS OVERALL



*Supporting effective ways to prevent plastic waste in the first place and ensuring recycled plastic is re-used effectively.*

Through the release of this consultation paper, B.C. is engaging on the development of new policy options and seeking feedback on proposed amendments to improve existing programs.

B.C. has been actively involved in the development of a Canada-wide Strategy and Action Plan on Zero Plastic Waste ([Strategy](#) and [Action Plan](#)), and will continue to support and align with longer-term proposed federal initiatives to ban harmful single-use plastics.

## Dramatically Reducing Plastic Use

### DEVELOPING A PATH FORWARD WITH NEW POLICY OPTIONS

The Ministry of Environment and Climate Change Strategy (the ministry) recognizes that waste prevention is the highest priority. Plastic bans have been adopted in different forms in different jurisdictions to address the growing problem of plastic pollution — for British Columbia, it's critical that we solicit public input on what forms potential bans on plastic packaging could take. For instance, there may be items of interest to British Columbians which are not covered by the proposed federal ban and that are within B.C.'s jurisdictional authority, or that are a priority due to B.C.'s coastal and remote geography.

There are also actions being taken by local governments in B.C. that could be supported by a provincial harmonized approach. B.C. proposes to collaborate with all levels of government both to avoid duplicating regulatory initiatives, and to progress actions that would have an immediate impact and protect B.C.'s environment. In addition, B.C. proposes to work with the federal government to develop national recycled content standards to ensure that in the longer term any new plastics and packaging produced contain recycled plastic.

#### NEW POLICY OPTIONS

- » Consider provincial bans for plastic packaging under the *Environmental Management Act*.
- » Support the development of recycled content performance standards being led by the federal government.



*More than 40% of plastic is used only once. We can do our part to change this, and we want your thoughts and ideas on how to do it best.*

## Expanding Recycling and Recovery

### AMENDMENTS TO THE RECYCLING REGULATION

By expanding recycling and recovery of plastics that are in use, we can significantly reduce the waste that accumulates in landfills and waterways. By doing this as efficiently as possible, we can improve the supply of clean recycled plastics for re-manufacturing. When this strategy is combined with higher recycled content standards for products, it can reduce the need for new plastics to be created.

Both expanding producer responsibility and expanding B.C.'s beverage container return system can be achieved through changes in existing regulations. B.C. currently regulates Extended Producer Responsibility (EPR) for many products, requiring producers (manufacturers, distributors and retailers) of designated products to take responsibility for the life cycle of their products, including collection and recycling. This shifts the responsibility from taxpayers, local government or Indigenous communities to the producers and consumers of a product.

By requiring producers to be accountable, EPR programs reduce waste by incentivizing producers to design products that are recyclable and durable in order that they can be recovered for future use instead of going to disposal. This further supports a circular economy approach to waste management where resources are continually conserved and reused as raw materials.

B.C. proposes to expand existing EPR by including single-use items and packaging-like products under the [Recycling Regulation](#)<sup>1</sup> to ensure that these items are being managed responsibly through EPR programs prior to any potential federal bans coming into force (estimated for 2021 and beyond).

B.C. is able to move quickly in this regard as the North American leader with more than twenty-two EPR programs already in place. Expanding EPR to cover these items enables B.C. to capture any items that are beyond the scope or exempted from any federal ban.

<sup>1</sup> <https://bit.ly/2Oaqi5n>



The proposed amendments also include an update to the beverage container deposit system that would reduce the prevalence of littered single-use bottles in the environment and landfills by an estimated 50 million bottles per year.

As these actions would result in an increase in plastic items to be recycled, the Province would work with the federal government to develop national recycled content standards — ensuring that new single-use plastics and packaging-like products are produced using recycled plastic content.

#### PROPOSED AMENDMENTS TO THE RECYCLING REGULATION

- » Add 'packaging-like products' and 'single-use items' as obligated products to the Recycling Regulation to be recovered and recycled by producers.
- » Add all single-use beverage containers to the deposit-refund system.
- » Amend the refundable deposit amount to 10 cents for all beverage containers.
- » Allow electronic refund options for beverage containers in addition to cash.

*Too often plastic packaging and single use items end up as litter in our communities, waste in landfills or debris in lakes, rivers and oceans. Plastic pollution hurts wildlife and harms ecosystems, and it is increasing year after year.*



## We Want Your Input

### HERE ARE SOME SOLUTIONS WE ARE CONSIDERING

#### 1 BANS ON SINGLE-USE PACKAGING



*Determining which types of plastic packaging to phase out altogether, as well as any necessary exemptions, such as those for health, safety and accessibility to keep products available for the people that need them.*

The *Environmental Management Act*<sup>2</sup> (EMA) governs the management of waste in British Columbia, to protect public health and the environment. The EMA allows for the banning of packaging by prohibiting, regulating or restricting the use or sale of packaging materials. British Columbia is considering bans as a policy option for plastic packaging and would like input on viable approaches.

Bans can be an effective policy tool to prevent plastic waste from occurring in the first place and help reduce the use of plastics that are commonly found in the environment and littered in our communities. Bans can also be used to divert recyclable plastics away from landfills to recycling facilities. They are also used to stop the use of plastics that are not recyclable or are considered difficult to recycle and manage.

Plastic packaging includes items such as plastic films (e.g., plastic bags, pouches or wraps) and containers (e.g., bottles, cups, tubs, and other hard plastics) that are used to package food and beverage products, consumer goods, cosmetics and personal care items.

Recent studies have shown that plastic packaging accounts for approximately 47% of all plastic waste discarded, and the majority of single-use plastics are used as packaging<sup>3</sup>.

<sup>2</sup> <https://bit.ly/1FETB2d>

<sup>3</sup> <https://bit.ly/320HPTJ>



## EXAMPLES OF BANS

- » The European Union will ban single-use plastic products (plastic cotton swabs, cutlery, plates, straws, drink stirrers and sticks for balloons), as well as cups, food and beverage containers made of polystyrene foam and all products made from oxo-degradable plastics by 2021.
- » Many US states such as Maine, Vermont, California, and New York have enacted bans on plastic packaging including plastic bags and polystyrene foam.

### B.C. Local Governments:

- » The City of Vancouver single-use item reduction strategy includes bans for plastic straws, foam cups and foam take-out containers beginning in 2020.
- » More than 23 communities in B.C. have been actively working on developing bans for single-use plastic items such as bags and straws.

Plastic packaging bans are typically implemented through the following approaches:

- » **Bans to regulate the sale or use:** regulate the supply of certain plastic packaging into the marketplace or prevent or restrict the use of certain plastic packaging — e.g., a ban on the use of polystyrene foam in packaging and takeout containers and cups, or a ban on an identified type of packaging, such as a ban on plastic bags to contain or transport goods at the point of sale.
- » **Disposal bans:** prohibit the disposal of plastics that instead can be readily recycled. These bans are typically implemented at the disposal site located within the jurisdiction applying the ban — e.g., an energy-from-waste facility or landfill — and at transfer facilities where wastes are aggregated for transport to a final disposal facility. Bans on the disposal of materials, such as plastics, are implemented after systems are in place to collect and recycle the banned materials (such as those created under EPR programs).

Globally there are a number of new regulations banning plastics. Bans on the sale of plastic bags have been introduced in 65 countries, as well as many regional and local jurisdictions. The federal government recently announced their intention to ban harmful single-use plastics as early as 2021 to reduce pollution from single-use plastic products and packaging, such as shopping bags, straws, cutlery, plates, and stir sticks.

British Columbia communities have also taken significant steps to implement strategies, including bans, levies or fees on plastic bags. Beyond plastic bags, many B.C. communities are pursuing single-use plastic bans on items including plastic bags and straws, polystyrene foam, disposable cups and takeout food containers.

The City of Victoria was the first municipality in B.C. to ban plastic bags in July 2018 through a business licensing bylaw. Municipalities may regulate in relation to a number of areas under the *Community Charter*. On July 11, 2019 the B.C. Court of Appeal ruled, however, that the intent of the bylaw was for the *protection of the natural environment* and therefore under the *Community Charter*, municipalities wishing to exercise their regulatory authority for protection of the natural environment are required to obtain Provincial approval. The Province is currently reviewing all aspects of the decision and recognizes that local governments need clarity on what their authorities are and the process for acting on those authorities should they so desire. Feedback from this engagement process will inform actions and processes moving forward.

*Recent studies have shown that plastic packaging accounts for approximately 47% of all plastic waste discarded, and the majority of single-use plastics are used as packaging.*



When policy tools, such as a ban, are evaluated, it is important to consider all impacts and to ensure that viable alternatives are available. For example, research has shown that switching from single-use plastic bags to single-use paper bags results in simply trading one set of environmental costs for another. A single-use paper bag can require up to four times as much energy to manufacture and produces two times the greenhouse gas emissions when compared to a single-use plastic bag; however, they are bio-degradable and do not persist in the environment like plastic bags do. Successful policies have included the use of bans, generally in combination with levies and fees to decrease unnecessary single-use consumption and to encourage the reuse of bags and other sustainable alternatives. It is critical to find the right policy approach that results in the fewest unintended consequences.

In addition, exemptions to the ban are often required where no viable alternative is found, or to ensure that the essential safety, health, and wellness of all individuals is maintained. For the remaining plastic packaging and single-use plastics, EPR programs are necessary to ensure these materials can be collected and recycled back into new packaging and products.

- » **Do you think bans on plastic packaging should be implemented in B.C.? What plastic packaging products are a priority for B.C. to ban?**
- » **What types of bans should be considered (examples include bans on sale of a certain type of packaging or ban on use of a certain type, or bans on disposal)?**
- » **If a ban was applied, how should exemptions be considered?**
- » **Bans can be implemented in some form by all levels of government due to the different regulatory powers in place. Are there bans best suited for implementation at the federal, provincial or local government level? Should local governments be given the authority to ban problematic plastic items in their community? What types of bans should be considered?**

## 2 MORE RECYCLING OPTIONS



*Dramatically reduce single-use plastic in landfills and waterways: requiring producers to take responsibility for more plastic products, ensuring more single-use items like sandwich bags, straws and cutlery get recycled.*

### EXPANDING PRODUCER RESPONSIBILITY FOR PACKAGING-LIKE PRODUCTS AND SINGLE-USE ITEMS

British Columbia is a national leader in recycling with the widest range of regulated items collected — its existing province-wide Extended Producer Responsibility (EPR) program regulates recycling of packaging and paper products. The inclusion of packaging-like products and single-use items in the Recycling Regulation would expand the type of plastic products that producers are required to collect for recycling from sectors that may include, but are not limited to, residential and municipal properties province-wide.

Packaging-like products are materials that are sold as a product but are in turn used as packaging. This includes re-usable plastic containers, freezer/sandwich bags, canning jars, wrapping paper, and moving boxes. Single-use items are materials that are not necessarily packaging but similarly serve a one-time purpose. This includes plastic straws, stir sticks, cutlery and 'disposable' items purchased in multiples, such as plates, bowls, cups, and party supplies that could be easily diverted in a manner similar to packaging and packaging-like products. This change would require an amendment to the Recycling Regulation.

- » **Do you have comments or suggestions regarding the ministry's proposal to include packaging-like products in the Recycling Regulation? Are there any packaging-like products you believe should be exempt from the Recycling Regulation?**
- » **Do you have comments or suggestions regarding the ministry's proposal to add single-use items to the Recycling Regulation? Are there any single-use items you feel should be exempt from the Recycling Regulation?**

# 3

## EXPANDING PLASTIC BOTTLE AND BEVERAGE CONTAINER RETURNS



*Improving the deposit-refund system to cover all beverage containers — including milk and milk-substitutes — with a 10-cent refundable deposit, keeping millions more containers out of landfills and waterways.*

### EXPANDING RECOVERY AND RECYCLING OF BEVERAGE CONTAINERS

Expanding the EPR deposit-refund system to cover all beverage containers and standardizing the refundable deposit to 10 cents, as well as modernizing the system, would capture and recycle millions more single-use containers, while reducing consumer and retailer confusion over what is and is not covered under a deposit-refund program.

Beverage containers that are currently excluded from the deposit-refund system would now be included, such as milk and milk substitutes (e.g., rice milk, soya milk, flavoured milk, and the array of milk-like products including energy drinks and caffeinated milk beverages). Milk and related products are currently under the residential packaging and paper products schedule of the Recycling Regulation. Obligating these products under the beverage container deposit-refund schedule would provide the needed incentive for greater returns from residents and would capture all containers from commercial generators (e.g., restaurants, schools, offices) that are currently exempted from the Recycling Regulation.

This change would require an amendment to the Recycling Regulation, which currently has a range of deposit-refund amounts from 5 to 20 cents depending on the container type. Creating a uniform 10 cent deposit-refund for all beverage containers translates into an estimated additional 50 million beverage containers diverted from landfills and our environment. Most plastic beverage containers sold today have a 5 cent deposit and are frequently discarded, yet beverage containers with a 10 cent deposit, such as beer cans/bottles, are returned more often by consumers.

The Recycling Regulation currently requires all refunds for returning beverage containers to be paid in cash. Modernizing the Recycling Regulation to also allow refunds to be electronic and paid in an alternative form of cash (e-transfer, cheque, in-store credit, charitable donation, or similar alternatives), would increase ease and efficiency for the consumer. An example includes convenience options such as drop-and-go systems where customers set up an account, tag their mixed bag of containers and drop it in an automated receiving system. Bags are later picked up and sorted, and credit is applied to the customer's account. The existing depot network and cash refunds would still be maintained as an option to ensure those individuals and communities depending on cash refunds continue to have access to this immediate source of income.

Other jurisdictions have seen success with raising deposit-refund rates, expanding to more products and modernizing return systems. Oregon's recovery rate was stagnant at 65% in 2016 until a doubling of deposit-refunds from 5 to 10 cents (for all beverage containers), coupled with enhanced return options such as drop-and-go bags, resulted in an overall return rate of 90% in 2018. In 2008, Alberta increased deposit-refunds to a minimum 10 cents and expanded the program to include milk and related products, resulting in total recovery rates since increasing from 75% to 85%.

In two years' time, B.C would review the impact of the deposit rate changes to determine if further increases to the beverage container deposit rate are required to improve the recovery rate.

- » **Do you have comments or suggestions on the ministry's proposal to include milk and milk substitutes in the beverage container deposit-refund schedule?**
- » **Do you have comments or suggestions on the ministry's proposal to create a uniform 10 cent deposit-refund for all beverage containers?**
- » **Do you have comments or suggestions on the ministry's proposal to allow refunds to be electronic and paid in an alternative form of cash (e-transfer, cheque, in-store credit, charitable donation, or similar alternatives)?**

# 4

## REDUCING PLASTICS OVERALL



*Supporting effective ways to prevent plastic waste in the first place and ensuring recycled plastic is re-used effectively.*

### DEVELOPMENT OF NATIONAL RECYCLED CONTENT PERFORMANCE STANDARDS

Recycled content performance standards (standards) go hand in hand with extended producer responsibility programs. EPR programs collect and recycle the materials, turning them into recycled plastic commodities. Standards create the demand for recycled plastic materials by requiring a minimum content of recycled plastic in new packaging and products.

Standards help producers of plastic products to design products with recyclability in mind, which helps to eliminate products that are hard to recycle. Having a common national standard provides clarity and avoids a patchwork approach across provinces and territories for producers. National standards also incentivize and complement government procurement policies and targets requiring purchased plastic products to contain recycled plastic. Procurement policies at all levels of government can stimulate and support market development in this area.

Increasing the levels of recycled plastic content in products can also result in greenhouse gas emissions reductions to help meet the goals set out in [CleanBC<sup>4</sup>](#), the Government's plan to reduce carbon pollution. The production and manufacturing of packaging and products, including the increasing use of plastics, generates greenhouse gas emissions. These emissions can be substantially mitigated by ensuring that packaging and products are reused and, once they reach the end of their life, are collected to be recycled back into new packaging and products. This reduces the need to produce more plastic from virgin materials and fossil fuels.

Recycling plastic beverage containers, for example, has been shown to reduce greenhouse gas emissions by almost 70% compared to producing plastic from virgin resources<sup>5</sup>.

As noted earlier, B.C. has been actively involved in developing the Canada-wide Action Plan on Zero Plastic Waste<sup>6</sup> which identifies the federal government as leading the development of national performance requirements and standards for plastics. British Columbia has a significant opportunity to collaborate and influence the development of these standards, in particular with the proposed recycled content standard.

- » **What should B.C. consider in the development of a national standard on recycled content and any associated targets?**
- » **Do you have comments or suggestions on any related provincial policies or actions?**

*Recycling plastic beverage containers, for example, has been shown to reduce greenhouse gas emissions by almost 70% compared to producing plastic from virgin resources.*



<sup>4</sup> <https://cleanbc.gov.bc.ca/>

<sup>5</sup> <https://bit.ly/30UDrkd>

<sup>6</sup> <https://bit.ly/2Q0QVtP> and <https://bit.ly/2XbqmAx>



## Implementation

The actions proposed in this consultation paper will further advance the reduction, diversion and recyclability of plastics and other single-use items in B.C.

Feedback received will help B.C. determine other potential actions that should be developed or further consulted upon at the provincial level. Your input is welcomed regarding other potential products for inclusion in the Recycling Regulation, or other policy initiatives to minimize plastic waste.

All comments received through webinars, meetings, mail or email by 30 September 2019 will be compiled for review by ministry staff before final drafting of the regulatory amendments. This is expected to be completed in 2019.

*By expanding recycling and recovery of plastics that are in use, we can significantly reduce the waste that accumulates in landfills and waterways.*



## Additional Information Sessions

The ministry will conduct a series of webinars on the proposed revisions. The webinars will review the information contained in this consultation paper and provide an opportunity to ask questions and provide comments.

If you are interested in participating in a webinar, please contact the email below:

Email: [Plastics@gov.bc.ca](mailto:Plastics@gov.bc.ca)

## Providing Feedback

The ministry welcomes comments on the information and proposals outlined in this consultation paper, and has provided the following opportunities for feedback:

- 1. Complete the public survey at:**  
<https://cleanbc.gov.bc.ca/plastics>
- 2. Send a formal submission to: [Plastics@gov.bc.ca](mailto:Plastics@gov.bc.ca)**  
**Read the guidelines for formal submissions at:**  
<https://cleanbc.gov.bc.ca/plastics>
- 3. Email your comments to: [Plastics@gov.bc.ca](mailto:Plastics@gov.bc.ca)**
- 4. Mail your comments to:**  
*Ministry of Environment and Climate Change Strategy –  
Recycling Regulation Amendments  
PO Box 9341 Stn Prov Govt  
Victoria, BC V8W 9M1*

All comments received through the public survey, formal submission, webinars, mail or email by September 30, 2019 will be compiled for review by ministry staff before final drafting of the amendments to the Recycling Regulation or other policy changes. This is expected to be completed in 2019.

Please note that each organization's submission with opinions and identifiers could be made public either through a decision by the Ministry or if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

*Thank you for your time and comments.*



# Plastics Action Plan

## WHAT WE HEARD REPORT

November 2019

Prepared for: Ministry of Environment and  
Climate Change Strategy

Prepared by: R.A. Malatest & Associates Ltd.



A person is seen from behind, standing on a white paddleboard and holding a long paddle. They are on a very calm lake that reflects the surrounding landscape. In the background, there are large, rugged mountains with patches of snow. The sky is filled with soft, white clouds. The overall scene is peaceful and scenic.

## Contact Information

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# Introduction

## *Background*

The Government of British Columbia is considering a variety of proposed amendments to the Recycling Regulation of the *Environmental Management Act*. The amendments are all aimed at addressing plastic waste in the province, and fall within four main topic areas:

- ***Bans on single-use plastic packaging*** – Determining which types of plastic packaging to phase out altogether, as well as any necessary exemptions, such as for health, safety and accessibility to keep products available for the people that need them.
- ***Dramatically reduce single-use plastic in landfills and waterways*** – Requiring producers to take responsibility for a wider range of plastic products, ensuring more single-use items, like sandwich bags, straws and cutlery, get recycled.
- ***Plastic bottle and beverage container returns*** – Expanding the deposit-refund system to cover all beverage containers – including milk and milk-substitutes – with a 10 cent refundable deposit, keeping millions more containers out of landfills and waterways.
- ***Reducing plastics overall*** – Supporting effective ways to prevent plastic waste and making sure recycled plastic is re-used effectively.

The purpose of each of these proposed changes is to reduce the amount of plastic waste created in British Columbia (B.C.), and thus reduce the environmental impact of plastic pollution.

# The Engagement Process

## *Engaging with Indigenous Communities and First Nations*

The Province is committed to working closely with Indigenous peoples, governments and organizations. As part of the CleanBC Plastics Action Plan, the Government of British Columbia will continue to engage with Indigenous communities to address plastic waste. The information obtained through the engagement process summarized in this report from Indigenous communities is not considered to represent all Indigenous views. Further engagement on these topics is ongoing and will continue to be considered as part of an in-depth policy review occurring over the coming months.

## *Public Engagement*

The Government of British Columbia was interested in collecting feedback on the proposed changes from interested parties, affected groups, and the general public. To collect this feedback, the Citizen Engagement Team, Ministry of Citizen Services, Government Digital Experience office

led by the Ministry of Environment and Climate Change Strategy (Ministry) undertook a series of public engagement activities.

### ***Online Survey***

Feedback from the public was largely collected using a standardized survey tool, available online at <https://cleanbc.ca/plastics>. The survey consisted of eight survey questions on the topics of plastic waste reduction, recycling, beverage container deposit-refund systems, and recycled content standards. Seven of these items were closed-ended questions, while one was an open-ended text box for participants to write in their comments. The survey also included five demographic questions, to collect information about participant type, region, and other variables. A copy of this survey instrument is attached in **Appendix A**.

The online survey was available from July 25 to September 30, 2019. The engagement was originally scheduled to close September 18 but was extended to September 30, 2019 due to the high level of interest in the engagement. During this period, a total of 35,611 survey responses were received.<sup>1</sup> Of these, 216 participants identified themselves as living outside of B.C. these cases were removed from analysis and reporting, resulting in a total of 35,397 survey responses incorporated into this report.

### ***Submissions from the General Public***

Members of the general public who wanted to provide more in-depth comments on the Plastics Action Plan than was possible via the survey had the option of sending an email to [plastics@gov.bc.ca](mailto:plastics@gov.bc.ca). Emails were accepted throughout the consultation period (July 25 to September 30, 2019). During this time, 131 email comments were received from the general public. In addition, 15 long-form written submissions were received from members of the public.

### ***Written Submissions from Local Governments, Indigenous Communities and Interested Stakeholders***

Local governments, Indigenous communities and interested stakeholders such as businesses, producers, and non-governmental organizations (NGOs) were able to submit long-form written submissions through email to [plastics@gov.bc.ca](mailto:plastics@gov.bc.ca). Submissions were required to adhere to a set of guidelines published on the engagement website; these guidelines can be found at <https://cleanbc.gov.bc.ca/plastics-submission-guidelines>.

Written submissions were accepted throughout the consultation period (July 25 to September 30, 2019). During this time, 129 submissions were received from local governments, Indigenous communities and interested stakeholders.

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<sup>1</sup> “Responses” includes both full survey completions and partial completes.

For analysis purposes, submissions received from local governments, Indigenous communities and interested stakeholders, were examined separately from those received from members of the general public.

### ***Webinars***

A series of four webinars was conducted by the Ministry to provide detailed information about the changes being considered, and to offer the opportunity for a question and answer period. A variety of groups joined these webinars, including representatives from local governments, businesses and producers, non-governmental organizations and members of the general public. In total 142 people attended the webinars.

Transcripts were made of the question and answer sessions during the webinars, and these documents were incorporated into the qualitative analysis conducted on feedback received.

### ***Participants***

#### ***Online Survey***

In total, 35,397 valid survey responses from B.C. residents were received during the engagement period. The large majority of participants who answered the survey identified as citizens (96.6%),<sup>2</sup> followed by business and industry (2.9%).<sup>3</sup> The remainder of the participants (<1%) were composed of local government representatives, and non-governmental organizations.

#### ***Submissions from General Public***

In total, 131 email comments and 15 formal written submissions were received from citizens throughout the engagement period. While some submitters did include information about themselves such as their involvement in the issue, their region, or other information, this was not required and was not reported consistently in all emails. Therefore, details on the breakdown of email submissions by participant type, region, or other information are not available.

#### ***Written Submissions from Local governments, Indigenous Communities and Interested Stakeholders***

A total of 129 written submissions were received from local governments, Indigenous communities and, interested stakeholders during this engagement process.

---

<sup>2</sup> Due to apparent confusion among respondents regarding the definition of “recycler”, the categories of “general public” and “recycler” were collapsed. Based on review of the data, it appears that some members of the general public identified themselves as recyclers as they participate in their local recycling programs, whereas the intended definition was organizations and businesses that undertake the work of recycling products, such as bottle depots.

<sup>3</sup> Due to small cell counts for several groups (retailers, small business owners, and producers), these categories were collapsed into one and titled “business and industry”.

### ***Webinar Participation***

Four webinars were held during the engagement period to provide in-depth information about the proposed changes to local and interested stakeholders, and offer time for these groups to have their questions about these issues answered. Each webinar was approximately one hour long. These sessions consisted of a half-hour presentation to attendees on the proposed changes, followed by a half-hour question and answer session.

### ***Analysis of Feedback Received***

Analysis of feedback, from all information channels, was conducted by R.A. Malatest and Associates Ltd. (Malatest) for the client. Findings from these analyses are summarized in this report; the next sections describe analysis methods and approaches for quantitative and qualitative data.

### ***Qualitative Analysis***

Submissions received from members of the general public were coded using a pre-developed coding framework; up to three codes were applied per written submission.

Written submissions from local governments, Indigenous communities and interested stakeholder groups, and transcripts of question and answer sessions from webinars, were qualitatively coded using an inductive, iterative approach with the software package NVivo. An initial coding framework was developed based on the first 25 documents received in the consultation process. This coding framework was then reviewed and refined as new submissions arrived; every time a code was added or revised in the coding framework, previously coded content was reviewed to identify whether changes to coding were required in those documents. This iterative revision was undertaken on 65 documents, at which point saturation was reached and the remaining content was coded according to the existing framework.

The online survey included several open-ended text fields where participants had the opportunity to provide more in-depth answers to select questions (please refer to **Appendix A** to see these questions). These open-ended comments were coded, grouping similar themes and ideas together. The coding framework was developed based on review of a random sample of 1,000 survey completions; all responses to the open-ended text fields in these 1,000 completions were reviewed and themes identified through an inductive, iterative coding process. This coding framework was then shared with representatives from the Ministry for their input, to ensure that the themes identified were an accurate reflection of the issues at hand.

### Quantitative Analysis

The majority of survey responses were analyzed quantitatively. Summary statistics methods were used to create an overall picture of responses to closed-ended questions. Open-ended text fields in the survey were coded thematically according to a coding framework (attached in **Appendix B**) and the codes applied were then also summarized using statistical methods.

Due to the high volume of responses, a random sample of all comments was selected for coding and summary. For all open-ended fields, a minimum 20% sample of comments was taken, although the specific proportion varied by field. For the field with the greatest variability in responses – Q8, asking participants what change would help them recycle more – a higher proportion of responses was sampled and coded.

For all fields, efforts were made to ensure that the sample would be large enough to provide a statistically reliable understanding of the general themes and content brought up by participants to the survey. **Table 1** below summarizes the number of responses to each open-ended field, the sample taken for coding, and the proportion of all responses that were coded.

**Table 1: Samples of Comments from Open-Ended Text Fields**

Survey Field	Number of Responses Received	Number of Responses Coded	Proportion of all Responses Coded
Q2 other: What are some barriers you face when it comes to recycling?	12,054	2,475	20.5%
Q3 other: What would help you to recycle more?	4,658	976	21.0%
Q8: What change would make the biggest difference for you when it comes to reducing plastic waste?	28,060	18,755	66.8%

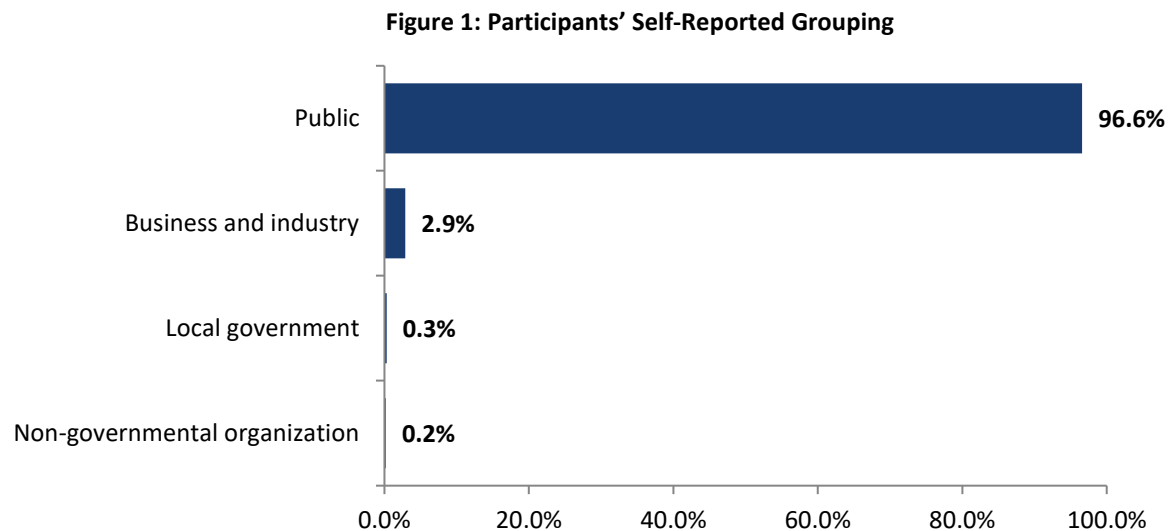
Where appropriate, some cross-tabulations and comparisons of responses by group type (e.g. by region, by group) were undertaken to identify what, if any, differences exist in responses among these sub-groups. Demographic variables of interest for these comparisons were identified *a priori* by the client in consultation with Malatest, based on existing knowledge about these sub-groups and interest in better understanding diverging trends among them.

## What We Heard from the Online Survey

### Summary of Participants

#### Type of Participant

The large majority of survey participants identified themselves as citizens, followed by business and industry. The breakdown of participant type is summarized in the figure below.



Valid n=34,885.

Sample numbers may change across survey items due to missing or skipped questions.

Source: CleanBC Plastics Action Plan Survey, 2019

For more information, please see Table C1 in Appendix C.

#### Region

A majority of survey responses (91%) came from the three most populous regions in the province: the Lower Mainland/Fraser Valley, Vancouver Island and the Sunshine Coast, and the Thompson/Okanagan. The table below provides a summary of the proportion of responses from each region of B.C., and the proportion of B.C.'s population that resides in each of these regions (as of the 2016 Census).

**Table 2: Breakdown of Survey Responses, and B.C. Population, by Region**

Region	Number of Survey Responses	Proportion of Survey Responses	Proportion of B.C. Population
Lower Mainland / Fraser Valley	13,686	39.2%	60.9%
Vancouver Island and Sunshine Coast	13,648	39.1%	17.2%
Thompson / Okanagan	4,500	12.9%	11.8%
Kootenay	1,526	4.4%	3.3%
Cariboo	530	1.5%	3.4%
Northwest and North Coast	400	1.1%	1.2%
Nechako	358	1.0%	0.8%
Northeast	238	0.7%	1.5%

Valid n=34,886

Sample numbers may change across survey items due to missing or skipped questions.

Source: CleanBC Plastics Action Plan Survey, 2019; Census Profile, 2016 Census

For more information, please see Table C2 in Appendix C.

### ***Indigenous Representation***

Indigenous people represent 6% of B.C.'s total population (based on 2016 Census figures).

Indigenous people represented 4% of participants to the CleanBC Plastics Action Plan Survey.

Please refer to Table C5 in Appendix C for more information.

### ***Gender***

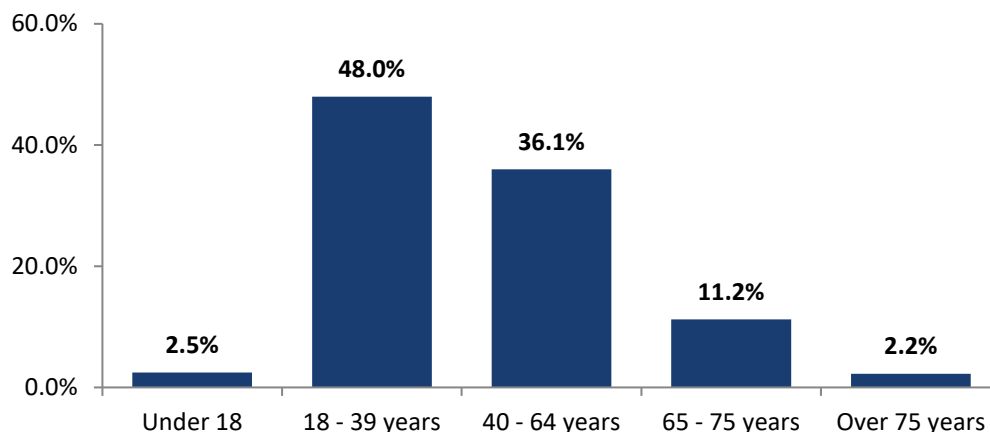
Women made up 71% of participants (n=24,721), men made up 27% (n=9,362), and those who identified as gender diverse represented 2% of survey participants (n=624). These findings are summarized in Table C3 of Appendix C.

### ***Age***

Participants under 39 years of age made up slightly more than one-half of the total survey sample. Those aged 40 to 64 represented slightly over one-third of the sample, and those aged 65 and over made up approximately 13% of the survey sample.



Figure 2: Participants' Self-Reported Age Groups



Valid n=34,756

Sample numbers may change across survey items due to missing or skipped questions.

Source: CleanBC Plastics Action Plan Survey, 2019

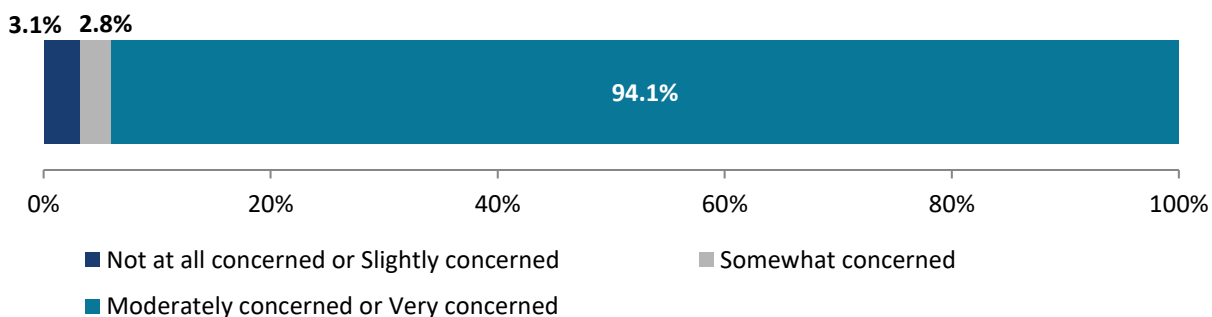
For more information, please see Table C4 in Appendix C.

## Survey Findings

### Concern about Plastic Waste

Participants in the online survey reported high levels of concern about plastic waste: 84% said they were “very concerned” and a further 10% said they were “moderately concerned”.

Figure 3: How concerned are you about the problem of plastic waste?



Valid n=35,032

Sample numbers may change across survey items due to missing or skipped questions.

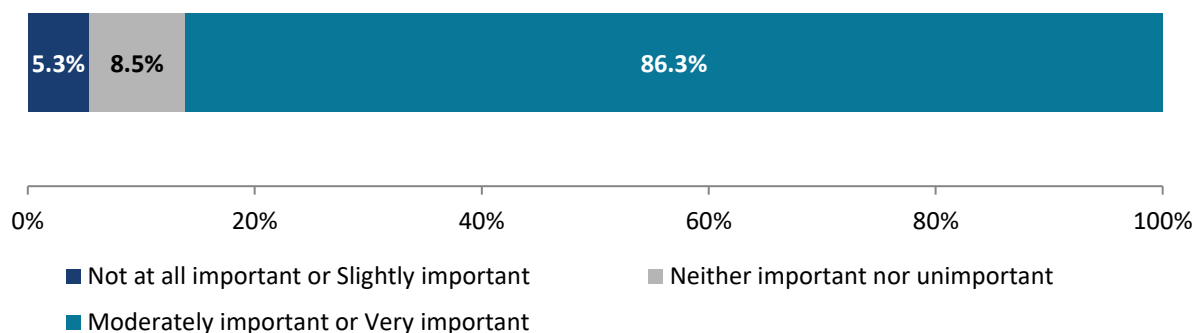
Source: CleanBC Plastics Action Plan Survey, 2019

For more information, please see Table C6 in Appendix C.

The large majority of survey participants reported that they placed high importance on purchasing goods made with recycled content, although participant endorsement for this was slightly lower than self-reported concern about plastic waste. Fifty-six percent reported that purchasing items

with recycled content was “very important” to them, and a further 30% reported that it was “moderately important” to them.

**Figure 4: If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?**



Valid n=35,003

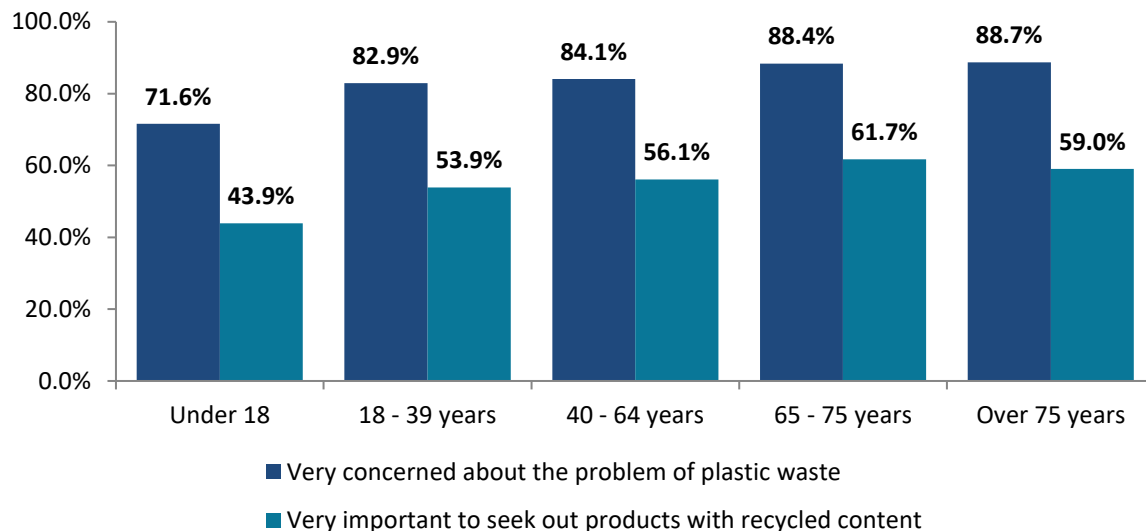
Sample numbers may change across survey items due to missing or skipped questions.

Source: CleanBC Plastics Action Plan Survey, 2019

For more information, please see Table C15 in Appendix C.

Older participants were significantly more likely to report high levels of concern around the issue of plastic waste, with the proportion of participants reporting being “very concerned” increasing with increasing age. Similarly, older participant groups reported greater willingness to seek out products made with recycled content (with the exception of participants over 75 years old, who did not differ significantly from other adult age categories).

**Figure 5: Concerns about Plastic Waste, by Age Group**



Concern about plastic waste valid n=31,328

Important to seek out products with recycled content valid n=31,487

Sample numbers may change across survey items due to missing or skipped questions.

Source: CleanBC Plastics Action Plan Survey, 2019

For more information, please see Table C17 in Appendix C.

Participants in the Northeast region reported high levels of concern about the problem of plastic waste, however levels were somewhat lower compared to participants from other regions of the province; approximately 82% reported being “somewhat” or “very” concerned about the problem of plastic waste, compared to the province-wide average of 94%.<sup>4</sup> Participants from this region were also less likely to report that it was important to them to buy products made with recycled content – 69% of participants from this region reported it was important or very important to them to purchase goods made with recycled plastics, compared to the province-wide average of 85%.<sup>5</sup>

There were no differences by participant type in level of concern about plastic waste – across all groups, approximately 84% of participants reported that they were “very concerned” about the problem of plastic waste. Business and industry participants were more likely than members of the general public to report that it was “very important” to them to purchase items made with recycled content (65% of business and industry, compared to 58% of the public).<sup>6</sup>

<sup>4</sup> Please refer to Table C18 in Appendix C for further details.

<sup>5</sup> *Ibid.*

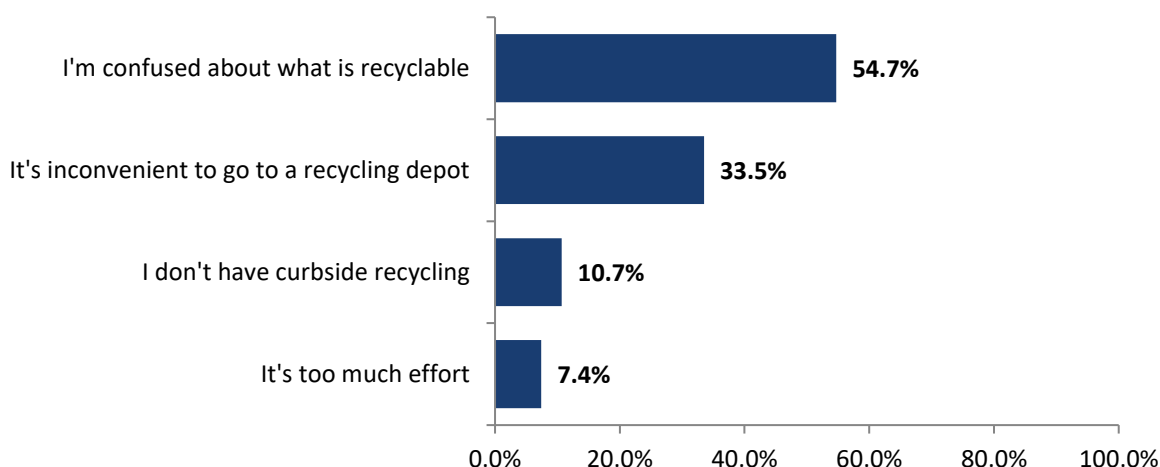
<sup>6</sup> Please refer to Table C19 in Appendix C for further details.

### Barriers to Recycling and Possible Solutions

Survey participants were asked to indicate what barriers they face when it comes to recycling. Participants were able to select as many as applied from a list of four options, and also had the opportunity to write in other reasons in an “Other, please specify” field. A sample<sup>7</sup> of written comments was summarized by theme and coded for analysis; the coding scheme can be found in **Appendix B**.

Confusion about what is recyclable was the biggest barrier to recycling reported by participants, with 55% of all participants indicating that this was an issue for them. The next-most common barrier was inconvenience of recycling depots, which one-third of participants cited as a challenge.

**Figure 6: What are some barriers you face when it comes to recycling? (Closed-Ended Response Options)**



Valid n=35,397

Sample numbers may change across survey items due to missing or skipped questions.

Percentages may add to more than 100% due to multiple responses.

Source: CleanBC Plastics Action Plan Survey, 2019

For more information, please see Table C7 in Appendix C.

Among participants who provided written answers that were coded, the most common other barriers to recycling were items not being recyclable in any program (23%), certain items not being recyclable in curbside or private recycling programs (20%), and item or recycling bin contamination and the belief that items are going to landfill (14%).<sup>8</sup>

*“Further to confusion around what is recyclable, there are good websites in place to tell me but they're not exhaustive. I find I always end up with ‘unknowns’. The hard plastic caps they're using on cans instead of 6 pack rings now, for example. I*

<sup>7</sup> Due to the high volume of responses, a random sample of all comments was selected for coding and summary. Please refer to the section on how analysis was conducted, on pages 5 and 6, for more details.

<sup>8</sup> Please refer to Table C8 in Appendix C for further details.

*feel like everything sold that's plastic should be recyclable, and the onus should be on the manufacturer to relay how and where to recycle it.” – Citizen*

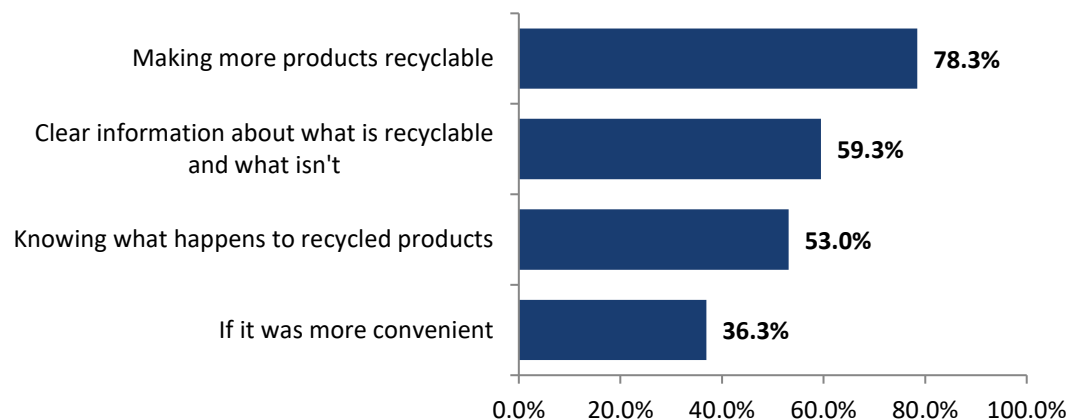
*“News about the ineffectiveness or compromised integrity of some recycling programs makes it very frustrating.” – Citizen*

*“Not all items are accepted to be recycled together by curb side collecting programs (i.e. have to sort out plastic bags/wrap and bring to depot separately), this makes recycling less convenient and less appealing to public. Also public areas do not offer as many recycling bins as garbage bins, so recyclable items end up in trash.” – Citizen*

*“Too many items are still produced that are not recyclable, thus leaving no option but to throw away or to try not to purchase in the first place.” – Citizen*

Participants endorsed a number of suggestions to improve or support their recycling habits. More than one-half of participants reported that making more products recyclable, having clear information about what is recyclable and what is not, and knowing what happens to recycled products would all help them to improve their recycling habits.

**Figure 7: What Would Help You to Recycle More?**



Valid n=35,397

Sample numbers may change across survey items due to missing or skipped questions.

Percentages may add to more than 100% due to multiple responses.

Source: CleanBC Plastics Action Plan Survey, 2019

For more information, please see Table C9 in Appendix C.

Among participants who provided written answers that were coded, the most common other ways to support recycling included requiring reductions or bans on plastic packaging (10%), financial penalties or incentives aimed at producers and businesses (9%), and required reductions or bans on all plastics (8%).<sup>9</sup>

*“If it is sold, it should be recyclable. If it can't be recycled it should not be used.” – Citizen*

*“Bottles and papers and compost are simple enough. But when it comes to plastic packing what can and cannot be recycled is super confusing.” – Citizen*

*“Even for a devoted recycler such as myself, it's confusing and I can see why others don't bother (but it's no excuse).” – Citizen*

*“I strongly want to emphasize the ‘knowing what happens to recycled products’ category. Having a better understanding of what happens to recycled products and how much actually gets reused helps me to engage in the process.” – Citizen*

*“There are so many rumours that the plastics aren't getting recycled. That it is just sitting in a warehouse somewhere or it ends up going to the landfill. If people don't feel like their community is dealing with the recycling then they get disheartened and stop recycling.” – Citizen*

*“I would prefer not to have to recycle at all and would totally support zero-packaging stores and ‘bring your own bag/container’ etc. initiatives” – Citizen*

### **Public Attitudes towards Bans**

Overall, participants were highly supportive of the provincial government considering bans on both single-use plastic packaging and polystyrene foam<sup>10</sup> packaging: 93% believed it was important to consider a ban on single-use plastic packaging, and 94% found it important to consider a ban on polystyrene foam packaging.<sup>11</sup>

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<sup>9</sup> Please refer to Table C10 in Appendix C for further details.

<sup>10</sup> It should be noted that polystyrene foam is often referred to as Styrofoam™, a trademarked brand name of polystyrene.

<sup>11</sup> Please refer to Tables C11 and C12 in Appendix C for further details.

With the exception of participants under 18, there were no differences by age in interest on bans for polystyrene foam packaging – approximately 86% of all adult participants reported it was “very important” that the government consider a ban on polystyrene foam packaging (while only 66% of those under 18 found this very important). Interest in considering a ban on single-use plastic packaging, however, varied by age. Participants aged 65 and over were significantly more likely to support considering a ban on single-use plastic packaging, compared to younger age cohorts.<sup>12</sup>

Though overall support was still high, participants from the Northeast region were less likely than participants in other regions to report that considering bans on single-use plastic and polystyrene foam packaging was important to them. In most regions of B.C., interest in considering a ban on single-use plastic packaging was around 93%, whereas in the Northeast it was 79%. In most of B.C., interest in considering a ban on polystyrene foam packaging was around 95%, whereas in the Northeast it was 82%.<sup>13</sup>

There were no major differences in interest in considering a ban on single-use plastic packaging across participant group types; across all groups, approximately 93% of participants reported that it was “moderately” or “very important”. Similarly, approximately 94% of all participants reported that it was “moderately” or “very important” for the provincial government to consider a ban on polystyrene foam packaging; there were no differences by participant type.

*“I would like the province to ban single use plastic bags in grocery stores, as well as single use cutlery and Styrofoam containers. These three would make the biggest change in my everyday life. I cannot stand what it does to our planet!” – Citizen*

*“Ban SINGLE USE all together... Make it clear and concise for people as to what is recyclable. Make it convenient.” – Citizen*

*“Ban plastic straws, plastic cutlery. Find a way to ensure that grocers and stores always have to provide an option that doesn't make use of single-use plastics or containers.” – Citizen*

*“The change that would make the biggest difference, by far, is to ban all single-use and limited-use plastic, including plastic food wrap and plastic shipping materials. It is not enough to expand recycling programs; we should not even be using these plastics in the first place.” – Citizen*

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<sup>12</sup> Please refer to Table C17 in Appendix C for further details.

<sup>13</sup> Please refer to Table C18 in Appendix C for further details.

### ***Public Attitudes towards Changes to the Deposit-Refund Schedule***

Most survey participants were supportive of increasing the beverage deposit amount to 10 cents: 71% of participants were “very supportive” and a further 14% were “somewhat supportive”. Only 7% of participants were opposed to this change.<sup>14</sup> A slightly smaller proportion of participants supported including milk and milk-substitute containers in the deposit-refund schedule: 58% of participants strongly agreed with this change, and a further 20% agreed with it. Ten percent of participants disagreed or strongly disagreed with the change.<sup>15</sup>

Older participants (those aged 40 years and over) were significantly more likely than younger age cohorts (under 40) to support increasing the beverage container deposit to 10 cents. Participants aged 65 and over were significantly more likely to support including milk and milk-substitute containers in the recycling deposit-refund schedule, compared to participants under 65.<sup>16</sup>

Across B.C., there was high support (85%) for increasing the deposit-refund on beverage containers to 10 cents. Support for this change was lower in the Northeast region with 76% of participants supporting the change, and 16% opposed to it (compared to an average of 6% of participants opposed across all other regions).<sup>17</sup> Participants in this region were also less likely to support the inclusion of milk and milk-substitute containers in the deposit-refund schedule with 69% of participants supporting the change compared to an average of 79% of participants across all other regions in B.C.<sup>18</sup>

Support for raising the deposit fee on beverage containers to 10 cents, and for including milk and milk-substitute containers in the recycling deposit-refund schedule, was roughly equal across all groups; no major differences among the general public, business and industry, local government, or non-governmental organizations were noted.<sup>19</sup>

*“Introduce deposits for all containers. We already have the system for pop and liquor containers. Just expand it.” - Citizen*

*“Have higher deposits (10 cents is great, but I'd like to see at least 20 cents). Add more containers to the deposit system, making it more worthwhile to make the trip to depots...” - Citizen*

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<sup>14</sup> Please refer to Table C13 in Appendix C for further details.

<sup>15</sup> Please refer to Table C14 in Appendix C for further details.

<sup>16</sup> Please refer to Table C17 in Appendix C for further details.

<sup>17</sup> Please refer to Table C18 in Appendix C for further details.

<sup>18</sup> Please refer to Table C18 in Appendix C for further details.

<sup>19</sup> Please refer to Table C19 in Appendix C for further details.



## What We Heard from the Public

During the engagement period, 146 submissions were received from members of the public in response to the call for public feedback. These submissions were then coded for content related to the topics of the public consultation – namely, themes related to changes to the beverage container deposit-refund schedule, a ban on single-use plastic packaging, expanded Extended Producer Responsibility (EPR) programs, and national efforts to improve recycling and reduce overall plastic waste.

It should be noted that a large number of the submissions received contained content that was coded as off-topic (n=55, 38%). Examples of off-topic content included discussion of environmental issues not specifically pertaining to plastic waste (e.g., the environmental cost of personal vehicle use, emissions from wood burning fireplaces).

### ***Feedback on Plastic Packaging Bans***

Plastic packaging bans were the most commented on issue in submissions from the public; 62 submissions addressed this issue. Of these 62 submissions, 42 were supportive of bans on single-use plastic packaging. These comments tended to simply state support for the proposed change, encouraging the Province to move forward with a ban on single-use plastic packaging.

*“I am writing you to ask that you move ahead with eliminating single use bags (focused on plastic) from commercial outlets in British Columbia. The environmental impact these items are having on our environment are considerable and the adverse human health impacts are only now becoming clear.”*

*“...Yes, bans on some single use plastic packaging should be implemented province-wide. There are readily available alternatives for consumers (e.g., re-useable shopping bags, paper straws, re-useable beverage containers, etc.) and changes in consumption habits can negate many of the perceived “needs” for such items. I would not ban plastics required for acute health care. I think polystyrene (Styrofoam) use should be discouraged – it has many advantages over alternatives for packaging some materials such as fresh meat, but few others. Polystyrene is also problematic to recycle, although that may be due to handling costs, rather than technical constraints...”*

A large number of respondents (n=18) recommended modifications to the single-use plastic packaging ban; the majority of these modifications encouraged going *further* in provincial bans, such as banning all single-use plastics (not just packaging), or banning plastics altogether.

*“Please work to ban all single use plastics within an overall plan to dramatically reduce plastic overall. You need more recycling - not just at curb side, but in condos and in industry. Make it more expensive to buy anything made in or wrapped in plastic and offer greater incentives to recycle.”*

In one submission from the public, the issue of accessibility was raised. This submission noted that a ban on single-use plastic products (such as plastic straws) with exemptions for accessibility requirements does not support accessibility; instead, it creates a barrier to accessibility by requiring a person in need of a utensil to ask for one from a server or retail worker, rather than having free access to the tools they need to participate fully in society.

*“...Exemptions for health and accessibility need to be considered. However, it may not be feasible to have every store still carry plastic straws only for people with disabilities. If people have invisible disabilities, and ask for a straw, they would have to then out their disability...”*

### ***Feedback on More Recycling Options and Extended Producer Responsibility (EPR) Programs***

Twenty-five members of the public who submitted emails discussed the proposal to expand EPR programs in the province. Of these, 23 submissions either indicated support for the expansion of EPR programs or recommended even further expansion to what was proposed in the consultation paper. Two submissions expressed mixed support; these submissions acknowledged that in principle expanded producer responsibility and enhanced recycling options are good, but indicated that they had concerns about practical issues that may be involved in implementing the changes.

Of those who urged the government to expand EPR programs even further than what was proposed in the consultation paper, all advocated the inclusion of additional materials in EPR programs. The most common materials or products that members of the public recommended for inclusion in EPR programs were:

- Polystyrene foam, particularly foam used for dock flotation (n=16);
- Industrial, Commercial, and Institutional (ICI) generated waste and recyclables (n=8); and
- Mattresses and soft furnishings (n=4).

*“...Extend EPR to packaging-like products (straws, utensils, bags, reusable containers, etc.). These products are problematic for consumers to recycle – we try to avoid many of the packaging-like items listed or reuse them if possible and then place them in the blue box, hoping they are recyclable. As consumers, we don’t know if they are recycled or if they are contaminants...”*

*“...work needs to be done on recycling in the ICI sector,<sup>20</sup> as well as textiles. Right now, the majority of people likely throw away their textiles in the garbage...”*

A few submissions (n=4) also highlighted their concerns about the efficacy of EPR programs, due to the perception that many materials collected do not end up being recycled but instead are incinerated or shipped overseas. These submissions recommended changes to the recycling system to end these practices.

### ***Feedback on Changes to the Beverage Deposit-Refund Schedule***

Thirty-one submissions spoke to the issue of changes to the beverage container deposit-refund schedule; of these, 23 were supportive, with nine of these submissions encouraging the government to go further still in its beverage container deposit-refund changes. A further seven submissions expressed mixed support or suggestions for modifications to the proposed changes. Only one submission was opposed to the changes.

Public submissions that were supportive of the changes to the bottle deposit rates universally praised the change as being likely to motivate consumers to return their beverage bottles, thus reducing waste of recyclable materials. Among those respondents who encouraged the government to go further with its changes to the beverage container deposit rates, all agreed that 10 cents is likely to be too low to encourage large changes in recycling behaviours, and recommended higher deposit-refund rates. The recommended rates suggested varied, with some suggesting rates as high as \$1 or \$2, but most of these respondents indicated that a 20 or 25 cent deposit rate would be appropriate.

Among those who expressed mixed support, the most prevalent concern identified was the impact of higher deposit rates on low-income households. In particular, expanding deposit-refund rates to include milk and milk-substitute containers was identified as having the potential to cause hardship for some households. Further, two submissions noted that return of containers can be challenging for people living in rural and remote communities, where access to depots and recycling facilities may be limited.

*“The deposit system is a brilliant system to encourage recycling and facilitating litter and landfill reduction. I support including as many items as possible in our deposit system even beyond beverage containers. Having a unified deposit amount for all sizes makes good sense as it simplifies the system...”*

*“...Larger containers might need a bigger incentive than 10 cents. Should someone collecting bottles see larger containers (e.g. wine bottle) and something smaller (e.g. juice box), there wouldn't be as much incentive to collect the wine bottles*

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<sup>20</sup> “ICI” refers to the Industrial, Commercial, and Institutional sector.

*since they're heavier and take up more space, may crack etc. if you get the same amount of money for it..."*

None of the submissions from the public commented on the proposal to allow refunds to be electronic and paid in an alternative form of cash (e.g. e-transfer, cheque, in-store credit, charitable donation, or similar alternatives), at collection facilities.

### ***Feedback on Reducing Plastics Overall***

Few submissions from the public discussed efforts to reduce plastics overall or the issue of national harmonization of recycled content standards. Among the submissions that did discuss overall reduction of plastics (n=13), most discussed a need for a cultural and lifestyle shift among Canadians. Issues identified in these types of comments included common expectations about convenience that need to be re-assessed (e.g. single-serving meal products packaged in plastic, the accessibility of plastic checkout bags), and a need to move to "slower", more sustainable options such as reusable glass containers for beverages, and waste-free bulk shopping options.

*"All consumers need to stop using plastics before the manufacturer will discontinue their use of plastics. Sell milk in glass only. Sell coffee, spices, etc. by using potato sack materials...We need to think back to how groceries were purchased 100 years ago. That is the only way to deal with our pollutants!"*

*"...In my view this is a very serious global problem and BC and Canada needs to set an example on how to eliminate plastic from the environment."*

# What We Heard from Local Governments, Indigenous Communities and Interested Stakeholders

## Summary of Respondents

As mentioned previously, this engagement received a total of 129 written submissions from a variety of groups. These submissions were grouped according to type; a summary of the number of submissions received from each group is provided below.

**Table 3: Breakdown of Groups Participating in Submission Process**

Impacted Group Type	Number of Submissions Received
Indigenous communities	1
Local governments	53
Businesses and retailers	38
Producers and recyclers*	12
Non-governmental organizations	25
<b>Total</b>	<b>129</b>

\*Note: Recyclers refer to organizations and businesses that undertake the work of recycling products, such as bottle depots.

## Views on Plastic Packaging Bans

### Overall Attitudes towards a Single-Use Plastic Packaging Ban

Attitudes towards single-use plastic packaging bans tended to vary from supportive to mixed. Slightly less than one-half of all submissions that spoke to the overall issue of a single-use plastic packaging ban were supportive (46%), and slightly less than one-half were mixed (48%); 20% of submissions indicated negative views towards single-use plastic packaging bans.<sup>21</sup>

Responses that were supportive of a ban on single-use plastic packaging tended to emphasize two themes: the urgency of the environmental impacts being created by plastic waste, and the effectiveness of bans in preventing that waste from being created in the first place. For example, an Indigenous community indicated majority community support for a ban on all single-use plastic products, not just single-use plastic packaging products. Community members also indicated that they would prefer to see fewer plastics so readily available in the marketplace, in order to encourage reduction in use of plastics and overall plastic waste. The vast majority of supportive submissions came from local governments and from NGOs: 41 of 43 submissions expressing support on a ban came from these two groups.

Among those responses that indicated mixed attitudes towards a single-use plastic packaging ban, one major concern emerged. Both local governments and business and retail interests expressed

<sup>21</sup> Submissions could voice multiple opinions on issues, and so percentages may add to more than 100%.

concern that banning single-use plastic packaging could result in replacement packaging that has more severe environmental impacts (e.g. using glass containers instead of plastic which are heavier to transport and result in greater greenhouse gas emissions).

Submissions that expressed negative or unsupportive views towards a plastics packaging ban tended to come from businesses and retailers, or plastics producers; 17 of 19 submissions that expressed views opposing the ban on single-use plastic packaging came from these two groups. Concerns raised in these submissions included: the potential net negative environmental impact of a change to non-plastic packaging alternatives; food safety requirements that make plastics the material of choice; and, overall economic competitiveness with other jurisdictions (both within Canada, such as other provinces, and internationally).

### ***Recommendations for a Ban***

#### ***Types of Bans***

Written submissions responded to several questions in the consultation paper regarding how such a ban should be implemented, including details such as what types of bans should be used, what products are priorities to ban, and what level of government should be responsible for the certain bans.

The most popular type of ban identified was a ban on the sale and distribution of types of single-use plastic packaging. Twenty-six submissions explicitly endorsed such a ban type, while only two were opposed. Similar to the support for a ban on single-use plastic packaging generally, submissions that endorsed a ban on sale and distribution emphasized that such a ban would be the most effective way to prevent plastic waste from being created at all.

A disposal ban was favoured by 12 submissions, but opposed by 18. Submissions that favoured a disposal ban tended to focus on the possibility of recycling single-use plastic packaging content and emphasized increasing diversion from landfill to recycling. Among those who opposed a disposal ban, however, the issue of resources was frequently raised, particularly by local governments. It was noted that disposal bans can be challenging and costly to implement, and often download responsibility for waste management away from the producers of the waste to municipalities and taxpayers. Further, some local governments noted that rural and remote regions of the province may not have easy access to recycling facilities, putting local residents in the position of either holding on to their recyclables indefinitely, or illegally dumping them (whether at landfills, in contravention of a disposal ban, or in public spaces).

#### ***Priority Items for Banning***

One of the topics included in the invitation for submissions was what, if any, items should be a priority for banning under a single-use plastic packaging ban. Forty submissions identified specific items or types of items to be prioritized for a ban. Priority items for banning included:

- Plastic straws (n=28);

- Plastic bags (n=25);
- Polystyrene packaging (n=18);
- Oxo-degradable plastics (n=15);
- Biodegradable or compostable plastics (n=13); and
- Take-out containers, single-use utensils and cutlery (n=12).

### Exemptions

Fifty-four submissions discussed exemptions to a ban on single-use plastic packaging. Among those submissions that included discussion of exemptions, nearly all identified reasons for identifying exemptions, rather than specific items to be exempted. The most common considerations or reasons that were considered to be valid for exemptions included medical, health, and disability or accessibility issues. Eleven submissions identified food safety concerns as grounds for exemptions; seven of these submissions came from business and retail groups.

One submission, from an advocacy organization for people with disabilities, responded specifically to the concern that single-use plastic straws would be targeted for banning. This respondent strongly discouraged government not to ban plastic straws, even with exemptions for accessibility needs. This submission noted that most single-use straw alternatives (e.g. those made from silicone, stainless steel or bamboo) do not meet the accessibility needs of some people with disabilities and therefore cannot be substituted if a ban on plastic straws were to come into effect. Further, this respondent noted that making plastic straws available upon request for accessibility needs does not support true accessibility for people with disabilities, as it forces these people to undertake additional effort to have access to the utensils they need, and requires them to “out” themselves as having a disability in order to get access to a straw.

### Appropriate Levels of Government to Manage Bans

A large number of submissions touched on the issue of what level of government should be responsible for bans on single-use plastic packaging: 72 submissions addressed this issue. Nine submissions stated that bans should be implemented at the highest level of government possible, to ensure consistency and stability for business and reduce cross-jurisdictional disposal (e.g. residents dumping or recycling their materials in other towns). Five of these nine submissions came from business and retailers.

Forty of the submissions discussed the implementation of bans at the provincial or federal levels. Although there were a variety of views expressed, major trends within the submissions indicated that bans on the production, sale, and/or distribution of specific plastic products were preferable at the provincial or federal level, as it helps to create consistency for businesses and aligns with the environmental protection responsibilities of these levels of government. Some (n=6) local governments indicated that they would like the authority to ban problematic plastics in their communities *in addition to* bans at these higher levels of government, as they believed that



municipal governments would be more flexible and able to respond quickly to plastics that were creating waste issues in their communities. This issue coincided with the concern about a need for clarity on municipal authority, described below.

Thirty-nine submissions addressed the issue of municipal authority over single-use plastic packaging bans; the vast majority of these submissions came from local governments throughout B.C. In these submissions, two themes emerged:

1. A need for clarity on the authority of municipal governments to ban problematic items, given the recent B.C. Supreme Court decision against the City of Victoria Checkout Bag Regulation Bylaw; and
2. The implications that a province-wide *disposal* ban could have on smaller municipalities and regional districts, which may not have the capacity to properly check and filter loads for unacceptable plastics.

## ***Views on More Recycling Options and Extended Producer Responsibility (EPR) Programs***

### ***Items for Inclusion in an Expanded EPR Program***

The overall sentiment towards inclusion of packaging-like and single-use items in an expanded EPR program was positive. Thirty-eight submissions were supportive, while only 10 were unsupportive, and 27 expressed mixed views; mixed views were defined as being supportive in principle of an expanded EPR program, but alongside identification of practical issues, or the limitations of recycling to reduce material use.

Support for this change came from a variety of groups, including local governments, Indigenous communities, NGOs, plastics producers and recyclers, and retailers and businesses. Mixed responses to this change were largely concerned with three issues:

1. Recycling infrastructure capacity and the challenges that an increase in the return of recyclable materials could create;
2. The limitations of recycling in reducing the use of single-use items, as consumers will continue to purchase single-use items and then recycle them, rather than cut down on their use of the items; and,
3. Concerns about the efficacy of existing EPR programs in B.C. given recent media coverage of recyclable materials being incinerated or shipped overseas.

Similar issues were raised by submissions that were opposed to the change, in addition to two businesses or retailers' groups opposing government intervention in the market.



Few submissions identified specific items to be included in expanded EPR regulations, compared to comments on items for banning. Specific items identified as appropriate for inclusion in an expanded EPR program included:

- Plastic films and soft plastics often used in Industrial, Commercial, and Institutional (ICI) sectors (e.g. plastic pallet wrap, bubble wrap, building and lumber wrap) (n=3);
- Disposable hot and cold drink cups (n=3);
- Plastic cigarette filters (n=2); and
- Polystyrene foam (n=2).

### ***Exemptions***

Fourteen submissions addressed packaging-like products or single-use items that should potentially be exempt from the recycling regulations under an expanded EPR scheme. Four of these submissions indicated that no exemptions should be granted – these submissions came from local governments and NGOs. A further six submissions identified exemptions based on health and safety – for example, contaminated building materials, biomedical waste, and plastics required for food safety. Finally, four submissions from plastics producers, retailers and businesses indicated that any plastics that can be reused – even if intended or marketed as a single-use item, like a plastic take-out container or a sandwich bag – should be exempted.

### ***Overall Attitudes towards more Recycling Options and Expanded EPR Programs***

A large number of submissions identified adding waste (in particular, packaging) from the Industrial, Commercial, and Institutional (ICI) sector to the Recycling Regulation. Fifty-one submissions – mainly local governments and non-governmental organizations – identified this as a recommendation to the provincial government. Many of the submissions reported that participating in private diversion programs for businesses is largely driven by the market value of diverted materials (i.e. the cost markets are willing to pay for recycled plastics). In situations where the value of those materials is low, ICI waste producers have little incentive to participate in diversion programs as it becomes more costly for them to do so. It was suggested that including ICI materials with a focus on packaging in the *Recycling Regulation* would make diversion a requirement for these businesses, rather than an optional activity.

In general, attitudes towards expanding the EPR program were highly mixed: 47 submissions expressed mixed attitudes towards it, 18 were supportive, and one was negative or unsupportive.

Of the 47 submissions that expressed mixed attitudes towards the proposed expansion of the EPR program, 37 came from local governments. “Mixed attitudes” were defined as expressing some level of support for recycling programs and the principle of recycling materials that cannot be reused, but identified challenges with the implementation of the changes or limitations on the ability of recycling programs to reduce overall use of the targeted materials. Among these submissions, a few commonly expressed concerns or themes emerged:

1. Some local governments and businesses expressed concern that current recycling infrastructure is not equipped to handle an increase in recycling volume that the suggested expansion of EPR would entail, and that significant investment in recycling facilities would be necessary;
2. Making items recyclable does not support a reduction in their use or a move to more sustainable alternatives, and bans on single-use plastic products are preferable to recycling them; and
3. Concerns about the efficacy of the current EPR model in B.C. and the perception that the collection of recyclable materials does not result in them being recycled.

Submissions that were supportive of an expanded EPR program tended to comment on the overall justness or appropriateness of a “polluter pays” principle. Some of these supportive submissions (n=6) also noted that an expanded EPR program would be beneficial to the production of goods made with recycled plastics, as more recycling of products would result in more feed stocks available to plastics manufacturers in B.C.; all six of the submissions that raised this consideration came from organizations that are involved in the production, distribution, and/or recycling of plastic products.

### ***Views on Changes to the Beverage Deposit-Refund Schedule***

#### ***Uniform 10 cent Deposit on Beverage Containers***

Fifty-one submissions commented on the proposed change to make the deposit-refund on all beverage containers a uniform 10 cents. Of these, 18 indicated support, two were unsupportive, and 32 expressed strong support and urged the government to go further by raising the deposit-refund rate even higher.<sup>22</sup>

Among those local governments, Indigenous communities and interested stakeholders who indicated support, nearly all supported the idea of a uniform deposit level as it would promote clarity and ease for consumers. Thirty-two respondents disagreed with the deposit level proposed. These submissions suggested that 10 cents was too low to incentivize bottle returns, and a higher level such as 25 cents should be set for all beverage containers instead.

The two submissions that indicated opposition to the proposed change suggested instead that B.C.’s beverage container deposit-refund levels be harmonized with Alberta’s, which are currently set at 10 cents for containers under one litre and 25 cents for containers over one litre.

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<sup>22</sup> Submissions could voice multiple opinions on issues, and so numbers may add to more than the total number of submissions that commented on an issue.

### ***Addition of Milk and Milk-Substitute Containers to Deposit-Refund Schedule***

Fifty-four submissions discussed the proposal to include milk and milk-substitute containers in the deposit-refund schedule. Forty-two submissions indicated support for this proposal, while 14 indicated mixed support or suggestions for modifications to the plan, and one was opposed to the idea.<sup>23</sup>

Among the 42 submissions that were supportive of including milk and milk substitute containers in the deposit-refund schedule, the benefit noted by nearly all was that adding a deposit to these containers would incentivize their return and increase recovery rates. A small number of submissions simply voiced their support for the change without expanding on why they supported it or any benefits expected to be seen from the change.

Submissions that indicated mixed support for the proposal identified a few areas of concern for the implementation of such a change. These included:

- Affordability concerns, particularly if the deposit applied to larger “family-sized” milk containers rather than just single-serving milk and milk-substitute beverage containers;
- The ability of households in rural communities to recoup their deposits, as some rural and remote regions of the province do not have easy access to a bottle collection facility; and
- Capacity issues for retailers obligated to accept beverage container returns, as larger gallon-sized milk jugs are bulky and difficult to store.

### ***Non-cash Refund Options***

Forty-two submissions addressed the proposal to allow facilities to offer non-cash refund options for beverage container returns. This proposal was largely received positively: 35 submissions were supportive of the idea, and a further seven expressed mixed support. Among those whose attitudes were mixed, the primary concern was that facilities should be required to continue offering cash refunds to those who prefer that payment option, and cash refunds should not be replaced by alternative payment forms. Some of these submissions noted that binners<sup>24</sup> may be particularly impacted by this change, and so a requirement that facilities continue to offer cash refunds is necessary to protect this vulnerable group.

### ***Views on Reducing Plastics Overall***

Forty-one submissions commented on the topic of B.C.’s participation in creating national recycled content performance standards for post-consumer recycled content and on EPR regulations. Of

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<sup>23</sup> Submissions could voice multiple opinions on issues, and so numbers may add to more than the total number of submissions that commented on an issue.

<sup>24</sup> A binner is a person “who collects redeemable containers and other things from bins to sustain their livelihood and to divert waste from landfills”; Definition courtesy of <https://www.biddersproject.org/>

these, 31 expressed support, 11 were mixed or suggested modifications to the plan, and two were unsupportive of the plan.<sup>25</sup>

Among submissions that expressed support for the introduction of national recycled content standards, a number of expected benefits were identified. The most common anticipated benefits of such recycled content standards included:

1. High recycled content standards at the national level would strongly incentivize the design, development, and production of goods that use less virgin plastics and more recycled plastics;
2. Requirements for high levels of recycled content in goods would increase the value of feed stocks (i.e. post-consumer recycled plastics) which would in turn incentivize return rates and reduce the amount of recyclable plastics being dumped, or otherwise lost to create waste in the environment; and
3. This effort being most impactful at the national level, as individual provinces and territories may have economies and plastics supply chains that are too small to effectively implement these changes in a way that can be competitive and cost effective in a global marketplace.

Among those who expressed mixed support, or no support, for nationally harmonized recycled content standards, six identified issues relating to the broader national and/or global markets for recycled plastics, including both supply (e.g. the capacity of other provinces currently to collect and supply sufficient plastic materials to support the production of post-consumer recycled plastic feed stocks) and demand (e.g. the capacity for post-consumer recycled plastics to be priced competitively against virgin plastics in global markets).

A further five submissions expressing mixed or no support indicated that certain plastic product uses are not appropriate for post-consumer content. In some cases, there are health and safety regulations limiting the quality of plastics that can be used for a specific purpose (e.g. food packaging plastics); in others, concerns were raised about the overall reduction in quality of plastics through the recycling process and that recycled plastics can typically only be used for lower-quality purposes when compared to virgin plastics.

Submissions identified some other suggestions related to reducing plastics overall, beyond what was included in the consultation paper. The most common recommendations included:

1. Setting strong targets for both plastic waste diversion and post-consumer recycled content (n=32);

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<sup>25</sup> Submissions could voice multiple opinions on issues, and so numbers may add to more than the total number of submissions that commented on an issue.

2. Increasing demand for recycled plastic content by including stipulations for such plastic content in its own procurement initiatives (either at the federal or provincial levels) (n=28); and
3. Investing in research and innovation to reduce plastics such as chemical recycling, alternative materials to plastics, and composting technology for biodegradable plastics (n=17).

### ***Additional Views Brought Forward***

In addition to the specific questions put forward in the engagement invitation, many submissions from local governments, Indigenous communities and interested stakeholders identified issues to be incorporated into considerations regarding these changes, as well as suggestions for additional or alternative actions that the Province could undertake.

Some of the considerations or issues raised by groups through their submissions included:

- The need for coordination at multiple levels of government (including from disparate ministries such as the Ministry of Health), Indigenous communities, as well as impacted groups such as coastal communities (n=37);
- Recommendations to take a phased-in approach to banning or expanding EPR to packaging-like and single-use plastic items (n=28);
- Recommendations that the Province take a life cycle analysis perspective when considering what types of single-use plastic packaging to ban (n=21); and
- Recommendations to consult with industry on all proposals (n=20).

Further, there were specific actions or policies that some groups recommended that the Province pursue. The most commonly recommended actions or policies included:

- Government support to make packaging-free shopping more accessible (n=34);
- Holding stewards under EPR programs more accountable for recovery rates and the final destination of materials they collect (n=32);
- Using government policy and incentives to emphasize higher levels of the waste reduction hierarchy (redesign of packaging, reusable packaging, reduction of overall packaging) rather than recycling (n=28);
- Government support for research into alternatives to plastics, environmental impacts of plastics, and other studies to support moving away from plastics (n=17); and
- Increasing consumer awareness of how to recycle, what can be recycled, and benefits of recycling (n=17).

## Summary

### *The Engagement Process*

The Government of British Columbia is considering a variety of proposed amendments to the Recycling Regulation of the *Environmental Management Act* and as such has collected the following feedback on the proposed changes from local governments, Indigenous communities, interested stakeholders, and the general public:

- 35,397 responses submitted to an online survey;
- 131 email comments and 15 long-form written submissions from the general public;
- 129 formal submissions from local governments, Indigenous communities and interested stakeholders; and
- Transcripts from the question and answer periods from four webinars attended by 142 people including representatives from local governments, businesses and producers, non-governmental organizations and members of the general public.

### *Plastic Waste as a Priority for Action*

British Columbians, local governments, Indigenous communities and a variety of interested stakeholders such as non-governmental organizations and businesses, all recognize the urgent problem posed by plastic waste. While some groups differed on the appropriate approach to the issue, there was broad consensus through this engagement that plastic waste is a major environmental issue that needs addressing.

### *Bans on Types of Plastic Packaging*

Among the general public, there appears to be strong support for considering bans on types of single-use plastic packaging and polystyrene foam packaging: 93% and 94% of the public supported consideration of such bans, respectively. Comments received through emails from members of the public tended to reflect this sentiment and were supportive of bans on types of single-use plastic packaging.

Local governments and interested stakeholders were more likely to differ on their attitudes towards bans. While most local governments and NGOs were supportive of bans in principle, producers, retailers, and businesses were more likely to identify potential challenges to bans on types of single-use plastic packaging and be in favour of broad exemptions for issues such as food safety in grocery stores and restaurants.

Some major concerns were raised by respondents in this engagement that may be taken into consideration for a potential ban on single-use plastics packaging.

First, accessibility issues may need to be taken into account; it was noted that making certain items like straws available on an as-requested basis is not true accessibility, as it requires an effort and disclosure from a person in need of a straw that able-bodied people do not have to make in the same situation.

Second, many local governments and interested stakeholders raised the issue of the *type* of ban that should be implemented. While producers, retailers, and businesses tended to favour a ban on disposal of these plastics, it was noted by many local governments that disposal bans can be difficult to enforce and place an additional burden on municipalities to monitor and deal with such bans. Other respondents preferred a ban on the sale and distribution of single use plastic packaging and products, as such bans are perceived to be more effective in preventing the creation of plastic waste in the first place.

Third, the issue of what level of government should be responsible for bans was raised in many submissions from local governments and interested stakeholders. Many, including most retailers, producers, and businesses, emphasized that they preferred bans at the highest level of government possible (i.e. provincial or federal) in order to support consistency and competitiveness across jurisdictions. Local governments often supported a ban on the sale and distribution of certain single-use plastic products at the provincial level; some wanted, in addition to such bans, the authority for local governments to ban *additional items* that are problematic for their communities. It was noted in these submissions, though, that local governments' authority to implement such bans is currently uncertain; clarification from the Province, particularly regarding the rights and responsibilities of local governments under the *Community Act*, is desired.

### ***Expanded Recycling Programs***

A majority of participants in the public engagement survey (55%) indicated that confusion over what is recyclable and what is not, is a barrier to recycling for them. Further, three-quarters of participants in the survey reported that making more items recyclable would help them to recycle more. Submissions from members of the general public appear to support this attitude, with most either supporting an expansion to EPR programs or requesting specific materials be added to EPR programs, and very little opposition to this proposal.

The majority of interested stakeholders who spoke to the issue of an expanded EPR program in their submission expressed mixed support, however many were still supportive of expanding the program to include more items, including single-use plastic products. While those who were supportive of the plan endorsed a "polluter pays" principle as fundamentally fair, those with mixed attitudes tended to raise practical considerations for the program and the limitations of recycling programs in reducing the use of targeted materials.

Some of the practical concerns raised regarding expanding the EPR program included recycling facility capacity to handle an influx of additional materials, and worry that the EPR program is already not effective in handling the current programs as there is a perception that stewards do



not always recycle materials collected. These groups emphasized the need to improve the existing EPR regulation in conjunction with the proposal to expand EPR programs to single-use plastic products and packaging-like products.

While the overall sentiment towards inclusion of packaging-like and single-use plastic items in an expanded EPR program was positive, some submissions noted that increasing EPR programs to collect these items is not a complete solution to the issue of plastic waste, as it does not prevent these waste products from being created in the first place. These submissions recommended focus on higher levels of the waste reduction hierarchy, such as reduction, redesign, replacement, and reuse.

The issue of ICI recyclables was raised in a large number of submissions, particularly from local governments and NGOs. These groups noted that the ICI sector is a large contributor to overall waste in B.C., and the incentive to participate in private diversion programs is waning due to the low market prices obtained for recycled plastics. These groups called for the inclusion of ICI sector waste, in particular packaging, in the *Recycling Regulation*.

### ***Expanded Beverage Container Deposit-Refund System***

On the whole, the proposals for change to the beverage container deposit-refund system were the least controversial among all included in the *CleanBC Plastics Action Plan* paper. Among survey participants, 85% supported the creation of a uniform 10 cent deposit on all beverage containers, and 78% supported including milk and milk-substitute containers in the beverage container deposit-refund schedule. Among members of the general public who provided submissions, those that commented on these changes tended to be supportive of a uniform deposit on beverage containers, but several (n=6) suggested that the 10 cent deposit rate was too low and should be increased. Comments on the creation of a deposit on milk and milk-substitute containers, and the offering of non-cash payment options for returns, was not spoken to among submissions from the public.

The vast majority of respondents that commented on the beverage container deposit-refund system were supportive of them. Most agreed that the uniform deposit rate created clarity for consumers, although there were many groups who suggested that a 10 cent deposit may be too low and should be raised to 20 or 25 cents. Support was also strong for the inclusion of milk and milk-substitute containers in the beverage deposit-refund schedule, although some groups did raise the issues of affordability for low-income households and the ability of households in rural and remote regions to return these containers to a depot. Finally, all groups supported the offering of non-cash refund options in principle, although several did emphasize the need to retain a cash refund option at all sites that accept returns.



## ***Reducing Plastics Overall***

A large majority of survey participants (86%) reported that they were interested in seeking out products made with post-consumer recycled content, even if that meant paying a little more for the product. This was slightly less than the proportion of participants who reported that plastic waste was a concern for them (94%), but still high overall.

The majority of respondents that provided formal submissions were supportive of efforts to create nationally harmonized standards for post-consumer recycled content. Businesses, retailers, and producers were supportive of this approach as it would lead to consistency across jurisdictions and avoid a “patchwork” of regulations. A number of benefits to the supply chain for recycled plastic content were also noted as likely outcomes of a national standard for post-consumer recycled content in plastic products, such as incentivizing and increasing return rates for recyclable plastic products and the ability of efforts at the national level to be most impactful and likely to be cost competitive in global plastics markets.

Respondents also identified a number of additional efforts that could be made at the provincial or federal levels to support a reduction in plastic waste. Some of these suggestions included: government support to make plastic-free shopping more accessible to consumers, such as refillable beverage containers and use of reusable containers in bulk shopping; encouraging a market for post-consumer recycled content through requirements in its own procurement initiatives; and, government support for research into plastics recycling and plastics alternatives.

## **Next Steps and Further Information**

The CleanBC website, including the original policy consultation paper can be found here: <https://cleanbc.gov.bc.ca/plastics>

Formal submissions submitted by local governments, Indigenous communities, interested stakeholders can be found here: <https://cleanbc.gov.bc.ca/plastics-formal-submissions>

## **APPENDIX A: SURVEY INSTRUMENT**



The Province is considering a range of options to reduce plastic waste and help people in B.C. to use less plastic overall.

Your input is important, and it will help us understand better how these steps might affect you. For more information visit [cleanbc.gov.bc.ca/plastics](https://cleanbc.gov.bc.ca/plastics).

This feedback form will take approximately 10 minutes to complete and will be open until September 30, 2019 at 4 pm.

1. How concerned are you about the problem of plastic waste?

- ☐ 1 - Not at all concerned
- ☐ 2 - Slightly concerned
- ☐ 3 - Somewhat concerned
- ☐ 4 - Moderately concerned
- ☐ 5 - Very concerned

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The Ministry's proposal would require companies to take responsibility for many more plastic products and packaging. This would make more single-use plastic items like sandwich bags, 'disposable' plastic cups, straws, and cutlery get recycled.

2. What are some barriers you face when it comes to recycling? (select multiple)

- ☐ I don't have curbside recycling
- ☐ It's inconvenient to go to a recycling depot
- ☐ I'm confused about what is recyclable
- ☐ It's too much effort
- ☐ Other \_\_\_\_\_

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3. What would help you to recycle more? (select multiple)

- ☐ Clear information about what is recyclable and what isn't
- ☐ Making more products recyclable
- ☐ Knowing what happens to recycled products
- ☐ If it was more convenient
- ☐ Other \_\_\_\_\_

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Many governments are moving forward with bans on plastic packaging. For example the City of Vancouver has committed to banning plastic straws, foam cups, and foam take-out containers beginning in 2020.

Bans on plastics can impact everyday activities like shopping and eating out. They may require industry to use alternative materials, the costs of which might be passed on to consumers.



4. How important is it to you that the provincial government consider bans -- with appropriate safety, medical, and accessibility exemptions in place – for single-use plastic packaging?

	1 - Not at all important	2 - Slightly unimportant	3 – Neither important nor unimportant	4 - Moderately important	5 - Very Important
<b>Single-use plastic packaging</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Styrofoam packaging such as foam take-out containers</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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We're looking to expand the deposit-refund system to cover all beverage containers, and change the refundable deposit to 10 cents for all containers – keeping more single-use containers out of landfills and our waterways.

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5. When Alberta and Oregon raised their bottle deposits to 10 cents, millions more bottles were recycled every year.

Please rate your support for increasing the beverage container refundable deposit fee to 10 cents:

- ☐ 1 - Not at all supportive
- ☐ 2 - Slightly unsupportive
- ☐ 3 - Neither supportive nor unsupportive
- ☐ 4 - Somewhat supportive
- ☐ 5 - Very supportive

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6. Deposit refund systems have the highest recovery rate of all recycling programs. Some products like milk jugs and similar containers currently do not have a deposit.

Do you think milk jugs and other similar containers should have a refundable deposit, even if it means paying 10 cents more at the check-out?

- ☐ 1 - Strongly disagree
- ☐ 2 - Disagree
- ☐ 3 - Neither agree nor disagree
- ☐ 4 - Agree
- ☐ 5 - Strongly agree



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7. A number of products are currently being made from recycled plastic. Recycled content standards would require a minimum content of recycled plastic in new packaging and products.

If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?

- ☐ 1 - Not at all important
- ☐ 2 - Slightly unimportant
- ☐ 3 - Neither important nor unimportant
- ☐ 4 - Moderately important
- ☐ 5 - Very important

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8. In conclusion, what change would make the biggest difference for you when it comes to reducing plastic waste (for example at home, in the workplace, or in stores or restaurants)?

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### About You

To get a better understanding about who is responding to this survey, please provide a bit of detail about yourself.

(all questions are optional)

#### A) What best describes how you responded to this survey.

I am responding as a:

- ☐ Citizen
- ☐ Producer
- ☐ Retailer
- ☐ Recycler
- ☐ Small business owner
- ☐ Local government
- ☐ Non-governmental Organization (NGO)
- ☐ Other \_\_\_\_\_



**B) In what region of B.C. or area do you live?**

- ☐ Vancouver Island / Sunshine Coast
- ☐ Lower Mainland / Fraser Valley
- ☐ Thompson/Okanagan
- ☐ Kootenay
- ☐ Cariboo
- ☐ Northwest and North Coast
- ☐ Nechako
- ☐ Northeast
- ☐ Outside B.C.

**C) What is your gender?**

- ☐ Male gender
- ☐ Female gender
- ☐ Gender diverse

**D) Which is your age?**

- ☐ Under 18
- ☐ 18 - 39 years
- ☐ 40 - 64 years
- ☐ 65 - 75 years
- ☐ Over 75 years

**E) Do you identify as an Indigenous person, that is, First Nations (status or non-status), Métis or Inuit?**

- ☐ Yes
- ☐ No

**Thank you for your time and input.**

## **APPENDIX B: CODING FRAMEWORKS**

## Coding Frameworks for Plastics Consultation

<i>Q2_other: What are some barriers you face when it comes to recycling?</i>		
Code Number	Code Name	Description of Code
1	I don't have curbside recycling	Respondent reports that they don't have curbside recycling in their municipality / region, and this creates a barrier to recycling for them.
2	It's inconvenient to go to a recycling depot	Respondent reports that going to a recycling depot to recycle some or all of their recyclables is inconvenient and this creates a barrier to recycling for them.
3	I'm confused about what is recyclable	Respondent reports that they do not have a good grasp of what items are recyclable and which are not. Note that this DOES NOT include comments where respondents are aware of recycling rules but frustrated by the different requirements for different materials.
4	It's too much effort	Respondent indicates that recycling takes too much time or effort to do. Note that comments about the <i>need</i> to clean recyclables should go here, but concerns about contamination by other unclear recyclables put in by others belongs under 12, "Item contamination"
10	Certain items are not recyclable in curbside / private recycling programs	Respondent indicates that certain items are not recyclable either through their curbside program or their condo building / apartment building's private recycling program
11	Certain items are not recyclable at depots	Respondent indicates that local recycling depots do not accept certain recyclables, and this creates a barrier to recycling for them.
12	Items not recyclable in any program	Respondent notes challenges from items that are not recyclable anywhere, including mixed materials, non-recyclable plastics, etc.
13	Item / recycling bin contamination and items going to landfill	Respondent indicates that item contamination creates barriers to recycling items. Contamination may be due to dirty recyclables and/or improper use/sorting in shared recycling bins. Also code comments where response simply identifies concerns about recycling being thrown out, even if it does not specifically identify contamination as the cause.
14	Concern about recycling being sent overseas	Respondent indicates that they have concerns about their recycling being shipped overseas to be recycled
15	Concern that recycled materials don't get used by consumers again	Respondent indicates that they believe most recycled materials don't get used by consumers again anyways, so recycling is not helpful.
16	Insufficient municipal support for volume of recycling	Respondent indicates that recycling programs available to them are insufficient to meet their recycling needs, due to infrequent pickup or small volume limits on recycling pickup.
17	Recycling options outside of home scarce	Respondent indicates that it is difficult to properly recycle items when outside the home, due to limited recycling bins compared to garbage bins.
18	Other	Respondent's comment substantively responds to the question, but cannot be coded to any of the above codes
95	No barriers	Respondent reports having no barriers to recycling
96	Call for reducing plastic use	Respondent's answer calls for reduced use of plastics in everyday life, not a response to the question about barriers to recycling
97	Green waste / composting	Respondent's answer addresses issue of green waste and composting (including lack of options for them to compost), not about plastics
98	Complaint about public cost	Respondent's answer brings up the issue of the cost of recycling programs
99	Unclear meaning or off topic	Respondent's answer is not clear in meaning / could be interpreted multiple ways, or is unrelated to the question



<b>Q3_other: What would help you to recycle more?</b>		
<b>Code Number</b>	<b>Code Name</b>	<b>Description of Code</b>
1	Clear information about what is recyclable and what isn't	Respondent reports wanting better information / more public awareness raising about what items can be recycled and which ones can't
2	Making more products recyclable	Respondent reports that making more types of materials, packaging and products recyclable would increase their recycling
3	Knowing what happens to recycled products	Respondent reports that having a clearer idea of what happens to recycled products would encourage them to recycle more
4	If it was more convenient	Respondent reports that making recycling more convenient (specific ways may vary by respondent) would increase their recycling. This includes the following: increasing convenience of depot-based recycling; increasing the number of items accepted in curbside recycling; and increasing access to curbside recycling at all (some areas do not have it)
10	Raising public awareness of importance of cleaning / avoiding contamination	Respondent reports that making the public more aware of what happens to contaminated recycling would encourage more / better recycling behaviour
11	Financial penalties or incentives aimed at producers / businesses	Respondent suggests financial incentives or penalties to encourage reduction of plastic packaging use at the producer / business level
12	Financial penalties or incentives aimed at end users / citizens	Respondent suggests financial incentives or penalties to encourage greater recycling and / or reduce waste
13	Reduce or ban – all plastics	Respondent suggests a reduction of, or ban on, all plastics
14	Reduce or ban – plastic packaging	Respondent suggests a reduction of, or ban on, plastic packaging
15	Reduce or ban – non-recyclable plastics	Respondent suggests a reduction of, or ban on, non-recyclable plastics
16	More recycling options outside the home	Respondent suggests making recycling options more available at businesses and in public spaces
17	Other	Respondent's comment substantively responds to the question, but cannot be coded to any of the above codes
97	Already recycle fully	Respondent reports that they already recycle, though don't offer any suggestions
98	Compost / green waste	Respondent reports a need for composting / green waste collection to improve their recycling habits
99	Unclear meaning or off topic	Respondent's answer is not clear in meaning / could be interpreted multiple ways, or is unrelated to the question

**Q8: What change would make the biggest difference for you when it comes to reducing plastic waste (for example at home, in the workplace, or in stores or restaurants)?**

Code Number	Code Name	Description of Code
1	Recycling available at businesses for customers	Respondent identifies a need for making recycling options available to customers at businesses such as restaurants, hotels, coffee shops, etc. Also code for recommendations to require retailers, restaurants, etc. to have in-store recycling options to take back packaging they provide
2	More reusable packaging accepted at retailers and businesses	Respondent identifies a need for allowing customers to use reusable packaging for a wide variety of purposes at retailers e.g., coffee cups, take-out containers, grocery store packaging, etc.
3	Alternatives to plastic packaging at retailers and businesses	Respondent identifies a preference for alternative disposable / compostable single-use packaging options
4	Make all plastics recyclable	Respondent identifies a need to make all plastics recyclable
5	Financial incentives and/or penalties to consumers to reduce use of plastics	Respondent identifies creating financial penalties for end user plastic consumption, and/or financial incentives for consumers to reduce plastic use, recycle plastics (e.g., deposit on plastic containers), etc.
6	Financial incentives and/or penalties to manufacturers / producers / retailers to reduce use of plastics	Respondent identifies creating financial penalties for companies using plastic packaging / plastic in products, and/or financial incentives for companies using alternatives to plastics
7	Encourage recycling among businesses (non-retail)	Respondent identifies businesses and organizations as areas to focus recycling efforts, e.g., regulations on what type of recycling they must use on-site. Note that this code should apply to NON-RETAIL businesses (e.g., offices). If commenting on recycling or plastics use by retailers, restaurants, etc., code elsewhere as 6, 8, 9 etc. as appropriate
8	More recycling options in public spaces	Respondent recommends adding more recycling stations to public spaces to support more recycling. Note that this should be coded only when respondent refers to public spaces like parks and sidewalks. If commenting about recycling options at restaurants, cafes, businesses, etc., code as 1, 7, 8 as appropriate
9	Reduce unnecessary plastic packaging	Respondent identifies needing to reduce unnecessary / excessive packaging as an area for action. NOTE that if the comment identifies pairing excessive packaging with fines or taxes, that should be coded as a 6
10	Ban – select plastics	Respondent suggests banning select plastics (narrower than all single-use plastics)
11	Ban – all single-use plastics	Respondent suggests banning all single-use plastics
12	Ban – all plastic	Respondent suggests banning all plastics entirely
13	Improved curbside recycling	Respondent suggests improving access to curbside recycling and/or making more items recyclable through curbside recycling programs to reduce plastic waste
14	Reduce burden on citizens to recycle	Respondent suggests making recycling easier for individual citizens by doing things like sorting and cleaning at facilities rather than making individuals do it, making recycling depots or drop-offs more available / convenient, etc.
15	Require more post-consumer recycled content in packaging	Respondent suggests regulations or incentives to require packaging to make greater use of recycled materials

**Q8: What change would make the biggest difference for you when it comes to reducing plastic waste (for example at home, in the workplace, or in stores or restaurants)?**

Code Number	Code Name	Description of Code
16	Clearer information about what is recyclable	Respondent recommends making information more available, easier to find, easier to understand, etc., regarding what can and cannot be recycled
97	Against government intervention / changes	Respondent uses text box to argue against government intervention or changes to support recycling, does not suggest any ways to reduce plastic waste NOTE: if respondent is against government involvement but suggests business- or citizen-led ways to reduce plastic waste, code 1 through 16 as appropriate. This code only applies if respondent ONLY complains about government intervention and does not offer alternatives
98	Already recycle	Respondent says they already recycle, does not actually respond to the question of how to help them reduce plastic consumption
99	Unclear meaning or off topic	Response could be interpreted multiple ways, cannot be made sense of, or is incomplete or not an answer at all

## **APPENDIX C: SURVEY DATA TABLES**

## Participant Characteristics and Demographics

**Table C1: Participant Type**

In what capacity did you respond to this survey?	Frequency	Valid Percent
Public and recyclers <sup>26</sup>	33700	96.6%
Business and industry	1019	2.9%
Local government	94	0.3%
Non-governmental organization	72	0.2%
<b>Valid Total</b>	<b>34885</b>	<b>100.0%</b>
Missing	512	-
Total	35397	-

**Table C2: Participant Region**

In what region of B.C. do you live?	Frequency	Valid Percent
Vancouver Island / Sunshine Coast	13648	39.1%
Lower Mainland / Fraser Valley	13686	39.2%
Thompson / Okanagan	4500	12.9%
Kootenay	1526	4.4%
Cariboo	530	1.5%
Northwest and North Coast	400	1.1%
Nechako	358	1.0%
Northeast	238	.7%
<b>Valid Total</b>	<b>34886</b>	<b>100.0%</b>
Missing	511	-
Total	35397	-

**Table C3: Participant Gender**

What is your gender?	Frequency	Valid Percent
Male gender	9362	27.0%
Female gender	24721	71.2%
Gender diverse	624	1.8%
<b>Valid Total</b>	<b>34707</b>	<b>100.0%</b>
Missing	690	-
Total	35,397	-

<sup>26</sup> Due to apparent confusion among participants regarding the definition of “recycler”, the categories of “general public” and “recycler” were collapsed. Based on review of the data, it appears that some members of the general public identified themselves as recyclers as they participate in their local recycling programs, whereas the intended definition was organizations and businesses that undertake the work of recycling products, such as bottle depots.

**Table C4: Participant Age Groups**

What is your age?	Frequency	Valid Percent
Under 18	863	2.5%
18 - 39 years	16690	48.0%
40 - 64 years	12536	36.1%
65 - 75 years	3886	11.2%
Over 75 years	781	2.2%
<b>Valid Total</b>	<b>34756</b>	<b>100.0%</b>
Missing	641	-
Total	35397	-

**Table C5: Participant Indigenous Identity**

Do you identify as Indigenous?	Frequency	Valid Percent
No	33335	96.1%
Yes	1352	3.9%
<b>Valid Total</b>	<b>34687</b>	<b>100.0%</b>
Missing	710	-
Total	35397	-

## Overall Survey Responses

**Table C6: Concern about Plastic Waste**

How concerned are you about the problem of plastic waste?	Frequency	Valid Percent
Not at all concerned	446	1.3%
Slightly concerned	632	1.8%
Somewhat concerned	989	2.8%
Moderately concerned	3527	10.1%
Very concerned	29438	84.0%
<b>Valid Total</b>	<b>35032</b>	<b>100.0%</b>
Missing	365	-
Total	35397	-

**Table C7: Barriers to Recycling (Closed-Ended Responses)**

What barriers do you face when it comes to recycling?	Frequency	Valid Percent (n=35,397)*
I'm confused about what is recyclable	19,370	54.7%
It's inconvenient to go to a recycling depot	11,873	33.5%
I don't have curbside recycling	3,773	10.7%
It's too much effort	2,629	7.4%

\* Respondents were able to select as many responses as they felt were applicable, therefore percentages may add up to more than 100%.

**Table C8: Barriers to Recycling (Open-Ended Responses)**

What barriers do you face when it comes to recycling?	Frequency	Valid Percent (n=1,952)*
Items not recyclable in any program	452	23.2%
Certain items are not recyclable in curbside / private recycling programs	389	19.9%
Item / recycling bin contamination and items going to landfill	264	13.5%
Other	260	13.3%
Recycling options outside of home scarce	135	6.9%
Certain items are not recyclable at depots	62	3.2%
Insufficient municipal support for volume of recycling	59	3.0%
Concern about recycling being sent overseas	39	2.0%
Concern that recycled materials don't get used by consumers again	10	0.5%
Off-topic: No barriers to recycling <sup>†</sup>	284	-
Off-topic: Call for reducing plastic waste <sup>†</sup>	153	-
Off-topic: Comment about green waste / composting <sup>†</sup>	9	-
Off-topic: Complaint about public cost <sup>†</sup>	23	-
Off-topic: Unclear meaning or does not respond to question <sup>†</sup>	44	-

\* Due to the high volume of responses to this question, a random 20% sample of all comments was selected for coding and summary in this table. These counts are not representative of all open-ended comments received in response to this question.

<sup>†</sup> Off-topic comments were not included in the calculation of valid percentages.

**Table C9: Needed Support for Recycling (Closed-Ended Responses)**

What would help you to recycle more?	Frequency	Valid Percent (n=35,397)*
Making more products recyclable	27,718	78.3%
Clear information about what is recyclable and what isn't	21,005	59.3%
Knowing what happens to recycled products	18,747	53.0%
If it was more convenient	12,837	36.3%

\*Participants were able to select as many responses as they felt were applicable, therefore percentages may add up to more than 100%.

**Table C10: Needed Support for Recycling (Open-Ended Responses)**

What would help you to recycle more?	Frequency	Valid Percent (n=855)*
Other	109	12.7%
Reduce or ban - plastic packaging	87	10.2%
Financial penalties or incentives aimed at producers / businesses	77	9.0%
Reduce or ban - all plastics	68	8.0%
More recycling options outside the home	60	7.0%
Financial penalties or incentives aimed at end users / citizens	45	5.3%
Reduce or ban - non-recyclable plastics	37	4.3%
Raising public awareness of importance of cleaning / avoiding contamination	12	1.4%
Off-topic: Already recycle fully†	68	-
Off-topic: Comment about compost / green waste†	17	-
Off-topic: Unclear meaning or does not respond to question†	30	-

\* Due to the high volume of responses to this question, a random 20% sample of all comments was selected for coding and summary in this table. These counts are not representative of all open-ended comments received in response to this question.

† Off-topic comments were not included in the calculation of valid percentages.

**Table C11: Support for Considering Bans on Single-Use Plastics**

How important is it to you that the provincial government consider bans for: Single-use plastic packaging	Frequency	Valid Percent
Not at all important	1258	3.6%
Slightly unimportant	508	1.4%
Neither important nor unimportant	831	2.4%
Moderately important	3996	11.3%
Very important	28623	81.3%
<b>Valid Total</b>	<b>35216</b>	<b>100.0%</b>
Missing	181	-
Total	35397	-

**Table C12: Support for Considering Bans on Styrofoam Packaging**

How important is it to you that the provincial government consider bans for: Styrofoam packaging	Frequency	Valid Percent
Not at all important	1023	3.0%
Slightly unimportant	376	1.1%
Neither important nor unimportant	616	1.8%
Moderately important	2756	8.0%
Very important	29776	86.2%
<b>Valid Total</b>	<b>34547</b>	<b>100.0%</b>
Missing	850	-
Total	35397	-

**Table C13: Support for Increasing Beverage Deposit Amount to Ten Cents**

Please rate your support for increasing the beverage container refundable deposit fee to 10 cents	Frequency	Valid Percent
Not at all supportive	1580	4.5%
Slightly unsupportive	692	2.0%
Neither supportive nor unsupportive	3086	8.8%
Somewhat supportive	4922	14.0%
Very supportive	24713	70.9%
<b>Valid Total</b>	<b>34993</b>	<b>100.0%</b>
Missing	404	-
Total	35397	-



**Table C14: Support for Including Milk and Milk-Substitute Containers in the Deposit-Refund Schedule**

Do you think milk jugs and other similar containers should have a refundable deposit, even if it means paying 10 cents more at the check-out?	Frequency	Valid Percent
Strongly disagree	1869	5.3%
Disagree	1775	5.0%
Neither agree nor disagree	4037	11.5%
Agree	7054	20.0%
Strongly agree	20263	58.2%
<b>Valid Total</b>	<b>34998</b>	<b>100.0%</b>
Missing	399	-
Total	35397	-

**Table C15: Interest in Purchasing Goods with Recycled Content**

If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?	Frequency	Valid Percent
Not at all important	1161	3.3%
Slightly unimportant	706	2.0%
Neither important nor unimportant	2956	8.4%
Moderately important	10607	30.1%
Very important	19573	56.2%
<b>Valid Total</b>	<b>35003</b>	<b>100.0%</b>
Missing	394	-
Total	35397	-

**Table C16: Changes Needed to Reduce Plastic Waste**

What change would make the biggest difference to you when it comes to reducing plastic waste?	Frequency	Valid Percent
Reduce unnecessary plastic packaging	4,208	23.8%
Alternatives to plastic packaging at retailers and businesses	2,435	13.8%
Ban - select plastics	1,604	9.1%
Ban - all single-use plastics	1,502	8.5%
More reusable packaging accepted at retailers and businesses	1,302	7.4%
Improved curbside recycling	1,201	6.8%
Financial incentives and/or penalties to manufacturers / producers / retailers to reduce use of plastics	1,176	6.6%
Financial incentives and/or penalties to consumers to reduce use of plastics	814	4.6%
Reduce burden on citizens to recycle	756	4.3%
Clearer information about what is recyclable	732	4.1%
Ban - all plastic	551	3.1%
Make all plastics recyclable	372	2.1%
More recycling options in public spaces	303	1.7%
Recycling available at businesses for customers	292	1.7%
Encourage more recycling among businesses (non-retail)	276	1.6%
Require more post-consumer recycled content in packaging	166	.9%
<b>Valid Total*</b>	<b>17,690</b>	<b>100.0%</b>
Off-topic: Against government intervention / changes	19	-
Off-topic: Already recycle	127	-
Off-topic: Unclear meaning or unresponsive to question	827	-

\* Due to the high volume of responses to this question, a random 60% sample of all comments was selected for coding and summary in this table. These counts are not representative of all open-ended comments received in response to this question.

## Cross-Tabulations: Select Demographic Factors by Select Survey Items

Table C17: Age Group Comparisons

Survey Item	Response Option	What is your age?											
		Under 18		18 - 39 years		40 - 64 years		65 - 75 years		Over 75 years		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %
How concerned are you about the problem of plastic waste?	Not at all concerned	10 <sub>a,c,d</sub>	1.3%	155 <sub>a,b</sub>	1.0%	190 <sub>c</sub>	1.7%	35 <sub>b,d</sub>	1.0%	8 <sub>a,c,d</sub>	1.2%	398	1.3%
	Slightly concerned	12 <sub>a,b</sub>	1.5%	227 <sub>a</sub>	1.5%	247 <sub>b</sub>	2.2%	77 <sub>b,c</sub>	2.2%	11 <sub>a,b</sub>	1.7%	574	1.8%
	Somewhat concerned	47 <sub>a</sub>	5.9%	395 <sub>b</sub>	2.6%	376 <sub>c</sub>	3.3%	85 <sub>b,c</sub>	2.4%	10 <sub>b,c</sub>	1.5%	913	2.9%
	Moderately concerned	158 <sub>a</sub>	19.8%	1804 <sub>b</sub>	11.9%	978 <sub>c</sub>	8.7%	205 <sub>d</sub>	5.9%	46 <sub>c,d</sub>	7.0%	3191	10.2%
	Very concerned	572 <sub>a</sub>	71.6%	12537 <sub>b</sub>	82.9%	9486 <sub>b</sub>	84.1%	3071 <sub>c</sub>	88.4%	586 <sub>c</sub>	88.7%	26252	83.8%
	Total	799	100.0%	15118	100.0%	11277	100.0%	3473	100.0%	661	100.0%	31328	100.0%
How important is it to you that the provincial government consider bans for: Single-use plastic packaging	Not at all important	35 <sub>a,c,d</sub>	4.3%	469 <sub>a,b</sub>	3.1%	488 <sub>c</sub>	4.3%	113 <sub>b,d</sub>	3.2%	21 <sub>a,c,d</sub>	3.1%	1126	3.6%
	Slightly unimportant	20 <sub>a</sub>	2.5%	178 <sub>b</sub>	1.2%	210 <sub>a,c</sub>	1.9%	50 <sub>a,b</sub>	1.4%	4 <sub>b,c</sub>	0.6%	462	1.5%
	Neither important nor unimportant	49 <sub>a</sub>	6.1%	309 <sub>b</sub>	2.0%	302 <sub>c</sub>	2.7%	79 <sub>b,c</sub>	2.3%	13 <sub>b,c</sub>	1.9%	752	2.4%
	Moderately important	133 <sub>a</sub>	16.5%	1896 <sub>b</sub>	12.5%	1237 <sub>c</sub>	10.9%	295 <sub>d</sub>	8.4%	60 <sub>c,d</sub>	8.8%	3621	11.5%
	Very important	568 <sub>a</sub>	70.6%	12313 <sub>b</sub>	81.2%	9104 <sub>b</sub>	80.3%	2966 <sub>c</sub>	84.7%	580 <sub>c</sub>	85.5%	25531	81.1%
	Total	805	100.0%	15165	100.0%	11341	100.0%	3503	100.0%	678	100.0%	31492	100.0%
How important is it to you that the provincial government consider bans for: Styrofoam packaging	Not at all important	55 <sub>a</sub>	6.9%	433 <sub>b</sub>	2.9%	332 <sub>b</sub>	3.0%	72 <sub>b</sub>	2.2%	13 <sub>b</sub>	2.1%	905	2.9%
	Slightly unimportant	28 <sub>a</sub>	3.5%	148 <sub>b</sub>	1.0%	123 <sub>b</sub>	1.1%	43 <sub>b</sub>	1.3%	5 <sub>b</sub>	0.8%	347	1.1%
	Neither important nor unimportant	61 <sub>a</sub>	7.7%	242 <sub>b</sub>	1.6%	206 <sub>b</sub>	1.9%	54 <sub>b</sub>	1.6%	7 <sub>b</sub>	1.1%	570	1.8%
	Moderately important	128 <sub>a</sub>	16.1%	1192 <sub>b</sub>	7.9%	883 <sub>b</sub>	8.0%	238 <sub>b</sub>	7.2%	59 <sub>b</sub>	9.5%	2500	8.1%
	Very important	525 <sub>a</sub>	65.9%	13111 <sub>b</sub>	86.7%	9530 <sub>b</sub>	86.1%	2879 <sub>b</sub>	87.6%	538 <sub>b</sub>	86.5%	26583	86.0%
	Total	797	100.0%	15126	100.0%	11074	100.0%	3286	100.0%	622	100.0%	30905	100.0%
Please rate your support for increasing the beverage container refundable deposit fee to 10 cents	Not at all supportive	11 <sub>a</sub>	1.4%	580 <sub>b</sub>	3.8%	627 <sub>c</sub>	5.6%	154 <sub>b,c</sub>	4.4%	23 <sub>a,b,c</sub>	3.5%	1395	4.5%
	Slightly unsupportive	12 <sub>a,b</sub>	1.5%	331 <sub>a</sub>	2.2%	222 <sub>a</sub>	2.0%	42 <sub>b</sub>	1.2%	6 <sub>a,b</sub>	0.9%	613	2.0%
	Neither supportive nor unsupportive	87 <sub>a</sub>	10.9%	1538 <sub>a</sub>	10.2%	899 <sub>b</sub>	8.0%	210 <sub>c</sub>	6.1%	43 <sub>b,c</sub>	6.5%	2777	8.9%
	Somewhat supportive	200 <sub>a</sub>	25.0%	2378 <sub>b</sub>	15.7%	1448 <sub>c</sub>	12.9%	353 <sub>d</sub>	10.2%	72 <sub>c,d</sub>	10.9%	4451	14.2%
	Very supportive	491 <sub>a</sub>	61.3%	10309 <sub>b</sub>	68.1%	8062 <sub>c</sub>	71.6%	2705 <sub>d</sub>	78.1%	515 <sub>d</sub>	78.1%	22082	70.5%
	Total	801	100.0%	15136	100.0%	11258	100.0%	3464	100.0%	659	100.0%	31318	100.0%
Do you think milk jugs and other similar containers should have a refundable deposit, even if it means paying 10 cents more at the check-out?	Strongly disagree	15 <sub>a</sub>	2.1%	624 <sub>b</sub>	4.2%	767 <sub>c</sub>	6.9%	200 <sub>c,d</sub>	5.8%	23 <sub>a,b,d</sub>	3.5%	1629	5.3%
	Disagree	23 <sub>a</sub>	3.1%	743 <sub>a,b</sub>	5.0%	626 <sub>b</sub>	5.6%	162 <sub>a,b</sub>	4.7%	42 <sub>b,c</sub>	6.5%	1596	5.2%
	Neither agree nor disagree	119 <sub>a</sub>	16.3%	2026 <sub>a</sub>	13.5%	1106 <sub>b</sub>	9.9%	255 <sub>c</sub>	7.4%	59 <sub>b,c</sub>	9.1%	3565	11.5%
	Agree	234 <sub>a</sub>	32.0%	3274 <sub>b</sub>	21.9%	2027 <sub>c</sub>	18.1%	592 <sub>c</sub>	17.2%	139 <sub>b,c</sub>	21.5%	6266	20.2%
	Strongly agree	340 <sub>a</sub>	46.5%	8309 <sub>b</sub>	55.5%	6669 <sub>c</sub>	59.6%	2231 <sub>d</sub>	64.9%	385 <sub>b,c,d</sub>	59.4%	17934	57.9%
	Total	731	100.0%	14976	100.0%	11195	100.0%	3440	100.0%	648	100.0%	30990	100.0%

Survey Item	Response Option	What is your age?											
		Under 18		18 - 39 years		40 - 64 years		65 - 75 years		Over 75 years		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %
If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?	Not at all important	21 <sub>a,b</sub>	2.6%	392 <sub>a</sub>	2.6%	479 <sub>b</sub>	4.3%	136 <sub>b,c</sub>	3.9%	17 <sub>a,b</sub>	2.6%	1045	3.3%
	Slightly unimportant	27 <sub>a</sub>	3.4%	338 <sub>a</sub>	2.2%	226 <sub>a,b</sub>	2.0%	45 <sub>b</sub>	1.3%	10 <sub>a,b</sub>	1.5%	646	2.1%
	Neither important nor unimportant	118 <sub>a</sub>	14.7%	1296 <sub>b,d</sub>	8.6%	993 <sub>b</sub>	8.8%	235 <sub>c</sub>	6.8%	37 <sub>c,d</sub>	5.6%	2679	8.6%
	Moderately important	283 <sub>a</sub>	35.3%	4950 <sub>a</sub>	32.7%	3250 <sub>b</sub>	28.8%	909 <sub>c</sub>	26.2%	206 <sub>a,b,c</sub>	31.3%	9598	30.6%
	Very important	352 <sub>a</sub>	43.9%	8152 <sub>b</sub>	53.9%	6320 <sub>c</sub>	56.1%	2139 <sub>d</sub>	61.7%	389 <sub>b,c,d</sub>	59.0%	17352	55.4%
	Total	801	100.0%	15128	100.0%	11268	100.0%	3464	100.0%	659	100.0%	31320	100.0%

Note: Values in the same row and sub-table not sharing the same subscript are significantly different at  $p < 0.05$  in the two-sided test of equality for column proportions. Cells with no subscript are not included in the test. Tests assume equal variances.<sup>1</sup>

1. Tests are adjusted for all pairwise comparisons within a row of each innermost sub-table using the Bonferroni correction.

**Table C18: Region Comparisons**

Survey Item	Response Option	In what region of B.C. do you live?										Cont'd...
		Vancouver Island / Sunshine Coast		Lower Mainland / Fraser Valley		Thompson / Okanagan		Kootenay		Cariboo		
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %	
How concerned are you about the problem of plastic waste?	Not at all concerned	167 <sub>a,b</sub>	1.4%	120 <sub>a</sub>	1.0%	82 <sub>b</sub>	2.0%	18 <sub>a,b</sub>	1.3%	7 <sub>a,b</sub>	1.5%	
	Slightly concerned	241 <sub>a</sub>	2.0%	150 <sub>b</sub>	1.2%	125 <sub>c,d</sub>	3.1%	22 <sub>a,b,c</sub>	1.6%	14 <sub>a,c,d</sub>	3.0%	
	Somewhat concerned	362 <sub>a</sub>	3.0%	310 <sub>a</sub>	2.5%	163 <sub>b</sub>	4.1%	28 <sub>a</sub>	2.1%	21 <sub>a,b,c</sub>	4.5%	
	Moderately concerned	1201 <sub>a</sub>	9.8%	1253 <sub>a</sub>	10.0%	450 <sub>a,b</sub>	11.2%	130 <sub>a</sub>	9.7%	61 <sub>a,b</sub>	13.0%	
	Very concerned	10276 <sub>a</sub>	83.9%	10673 <sub>b</sub>	85.3%	3191 <sub>c</sub>	79.6%	1142 <sub>a,b</sub>	85.2%	365 <sub>c</sub>	78.0%	
	Total	12247	100.0%	12506	100.0%	4011	100.0%	1340	100.0%	468	100.0%	
How important is it to you that the provincial government consider bans for: Single-use plastic packaging	Not at all important	472 <sub>a</sub>	3.8%	346 <sub>b</sub>	2.8%	205 <sub>c</sub>	5.1%	48 <sub>a,b,c</sub>	3.6%	26 <sub>a,c,d</sub>	5.6%	
	Slightly unimportant	185 <sub>a</sub>	1.5%	160 <sub>a</sub>	1.3%	73 <sub>a,b</sub>	1.8%	17 <sub>a</sub>	1.3%	12 <sub>a,b</sub>	2.6%	
	Neither important nor unimportant	296 <sub>a</sub>	2.4%	247 <sub>a</sub>	2.0%	137 <sub>b,c</sub>	3.4%	31 <sub>a,b</sub>	2.3%	17 <sub>a,b,c</sub>	3.6%	
	Moderately important	1379 <sub>a,c</sub>	11.2%	1419 <sub>a,c</sub>	11.3%	531 <sub>b,d,e</sub>	13.2%	134 <sub>a,b</sub>	9.9%	73 <sub>c,d,e</sub>	15.7%	
	Very important	9995 <sub>a</sub>	81.1%	10383 <sub>b</sub>	82.7%	3089 <sub>c</sub>	76.6%	1118 <sub>a,b</sub>	82.9%	338 <sub>c</sub>	72.5%	
	Total	12327	100.0%	12555	100.0%	4035	100.0%	1348	100.0%	466	100.0%	
How important is it to you that the provincial government consider bans for: Styrofoam packaging	Not at all important	364 <sub>a,b</sub>	3.0%	309 <sub>a</sub>	2.5%	152 <sub>b,d</sub>	3.9%	38 <sub>a,b</sub>	2.9%	23 <sub>b,c,d</sub>	5.1%	
	Slightly unimportant	142 <sub>a,b</sub>	1.2%	99 <sub>a</sub>	0.8%	70 <sub>b</sub>	1.8%	11 <sub>a,b</sub>	0.8%	6 <sub>a,b,c</sub>	1.3%	
	Neither important nor unimportant	202 <sub>a</sub>	1.7%	213 <sub>a</sub>	1.7%	104 <sub>b,c</sub>	2.6%	20 <sub>a,b</sub>	1.5%	14 <sub>a,b,c</sub>	3.1%	
	Moderately important	964 <sub>a</sub>	8.0%	920 <sub>a</sub>	7.4%	402 <sub>b</sub>	10.2%	94 <sub>a</sub>	7.2%	41 <sub>a,b</sub>	9.1%	
	Very important	10413 <sub>a,d</sub>	86.2%	10847 <sub>b</sub>	87.6%	3199 <sub>c</sub>	81.5%	1151 <sub>a,b</sub>	87.6%	366 <sub>c,d</sub>	81.3%	
	Total	12085	100.0%	12388	100.0%	3927	100.0%	1314	100.0%	450	100.0%	
Please rate your support for increasing the beverage container refundable deposit fee to 10 cents	Not at all supportive	541 <sub>a</sub>	4.4%	529 <sub>a</sub>	4.2%	216 <sub>a,b</sub>	5.4%	53 <sub>a</sub>	4.0%	32 <sub>a,b</sub>	6.9%	
	Slightly unsupportive	241 <sub>a</sub>	2.0%	260 <sub>a</sub>	2.1%	74 <sub>a</sub>	1.8%	14 <sub>a</sub>	1.0%	6 <sub>a</sub>	1.3%	
	Neither supportive nor unsupportive	1072 <sub>a</sub>	8.7%	1120 <sub>a</sub>	9.0%	382 <sub>a</sub>	9.5%	102 <sub>a</sub>	7.6%	44 <sub>a</sub>	9.5%	
	Somewhat supportive	1661 <sub>a</sub>	13.6%	1875 <sub>b</sub>	15.0%	576 <sub>a,b</sub>	14.4%	163 <sub>a,b</sub>	12.2%	57 <sub>a,b</sub>	12.3%	
	Very supportive	8738 <sub>a,b</sub>	71.3%	8711 <sub>a</sub>	69.7%	2763 <sub>a</sub>	68.9%	1007 <sub>b</sub>	75.2%	325 <sub>a,b,c</sub>	70.0%	
	Total	12253	100.0%	12495	100.0%	4011	100.0%	1339	100.0%	464	100.0%	

Survey Item	Response Option	In what region of B.C. do you live?										Cont'd...
		Vancouver Island / Sunshine Coast		Lower Mainland / Fraser Valley		Thompson / Okanagan		Kootenay		Cariboo		
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %	
Do you think milk jugs and other similar containers should have a refundable deposit, even if it means paying 10 cents more at the check-out?	Strongly disagree	625 <sub>a</sub>	5.1%	647 <sub>a</sub>	5.2%	272 <sub>b,c</sub>	6.8%	53 <sub>a</sub>	3.9%	34 <sub>a,b,c</sub>	7.4%	
	Disagree	605 <sub>a,c,d</sub>	4.9%	643 <sub>a,c,d</sub>	5.1%	243 <sub>a,b</sub>	6.1%	45 <sub>c</sub>	3.3%	27 <sub>a,c,d</sub>	5.9%	
	Neither agree nor disagree	1408 <sub>a</sub>	11.5%	1533 <sub>a</sub>	12.3%	458 <sub>a,b</sub>	11.4%	117 <sub>b</sub>	8.7%	43 <sub>a,b</sub>	9.3%	
	Agree	2451 <sub>a</sub>	20.0%	2542 <sub>a</sub>	20.4%	861 <sub>a</sub>	21.4%	240 <sub>a</sub>	17.8%	88 <sub>a</sub>	19.1%	
	Strongly agree	7155 <sub>a</sub>	58.4%	7124 <sub>a,b,d</sub>	57.0%	2182 <sub>b,d</sub>	54.3%	895 <sub>c</sub>	66.3%	269 <sub>a,b,c,d</sub>	58.4%	
	Total	12244	100.0%	12489	100.0%	4016	100.0%	1350	100.0%	461	100.0%	
If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?	Not at all important	412 <sub>a</sub>	3.4%	333 <sub>b</sub>	2.7%	206 <sub>c,d</sub>	5.1%	46 <sub>a,b,c</sub>	3.4%	25 <sub>a,c,d</sub>	5.4%	
	Slightly unimportant	259 <sub>a</sub>	2.1%	238 <sub>a</sub>	1.9%	101 <sub>a</sub>	2.5%	19 <sub>a</sub>	1.4%	15 <sub>a</sub>	3.2%	
	Neither important nor unimportant	970 <sub>a</sub>	7.9%	1041 <sub>a</sub>	8.3%	426 <sub>b</sub>	10.6%	102 <sub>a</sub>	7.6%	54 <sub>a,b,c</sub>	11.6%	
	Moderately important	3656 <sub>a,b</sub>	29.8%	3864 <sub>a,b</sub>	30.9%	1281 <sub>a,b</sub>	31.9%	383 <sub>a</sub>	28.5%	149 <sub>a,b</sub>	32.0%	
	Very important	6954 <sub>a</sub>	56.8%	7023 <sub>a</sub>	56.2%	2001 <sub>b</sub>	49.8%	794 <sub>a</sub>	59.1%	223 <sub>b,c</sub>	47.9%	
	Total	12251	100.0%	12499	100.0%	4015	100.0%	1344	100.0%	466	100.0%	

Survey Item	Response Option	In what region of B.C. do you live?							
		Northwest and North Coast		Nechako		Northeast		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
How concerned are you about the problem of plastic waste?	Not at all concerned	3 <sub>a,b</sub>	0.9%	4 <sub>a,b</sub>	1.3%	5 <sub>a,b</sub>	2.4%	406	1.3%
	Slightly concerned	5 <sub>a,b,c</sub>	1.4%	5 <sub>a,b,c,d</sub>	1.6%	13 <sub>d</sub>	6.3%	575	1.8%
	Somewhat concerned	11 <sub>a,b,c</sub>	3.1%	6 <sub>a,b</sub>	1.9%	18 <sub>c</sub>	8.8%	919	2.9%
	Moderately concerned	36 <sub>a,b</sub>	10.2%	41 <sub>a,b</sub>	13.0%	37 <sub>b</sub>	18.0%	3209	10.2%
	Very concerned	297 <sub>a,b,c</sub>	84.4%	260 <sub>a,b,c</sub>	82.3%	132 <sub>d</sub>	64.4%	26336	83.8%
	Total	352	100.0%	316	100.0%	205	100.0%	31445	100.0%

Survey Item	Response Option	In what region of B.C. do you live?							
		Northwest and North Coast		Nechako		Northeast		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
How important is it to you that the provincial government consider bans for: Single-use plastic packaging	Not at all important	11 <sub>a,b,c</sub>	3.1%	11 <sub>a,b,c</sub>	3.5%	21 <sub>d</sub>	10.2%	1140	3.6%
	Slightly unimportant	3 <sub>a,b</sub>	0.8%	7 <sub>a,b</sub>	2.2%	9 <sub>b</sub>	4.4%	466	1.5%
	Neither important nor unimportant	7 <sub>a,b,c</sub>	2.0%	10 <sub>a,b,c</sub>	3.2%	13 <sub>c</sub>	6.3%	758	2.4%
	Moderately important	33 <sub>a,b,d</sub>	9.3%	38 <sub>a,b,d,e</sub>	12.0%	41 <sub>e</sub>	19.9%	3648	11.5%
	Very important	301 <sub>a,b</sub>	84.8%	251 <sub>a,b,c</sub>	79.2%	122 <sub>d</sub>	59.2%	25597	81.0%
	Total	355	100.0%	317	100.0%	206	100.0%	31609	100.0%
How important is it to you that the provincial government consider bans for: Styrofoam packaging	Not at all important	5 <sub>a,b</sub>	1.4%	8 <sub>a,b,d</sub>	2.6%	15 <sub>d</sub>	7.3%	914	2.9%
	Slightly unimportant	3 <sub>a,b,c</sub>	0.9%	5 <sub>a,b,c</sub>	1.6%	10 <sub>c</sub>	4.9%	346	1.1%
	Neither important nor unimportant	5 <sub>a,b,c</sub>	1.4%	7 <sub>a,b,c</sub>	2.3%	12 <sub>c</sub>	5.9%	577	1.9%
	Moderately important	34 <sub>a,b</sub>	9.8%	29 <sub>a,b</sub>	9.5%	29 <sub>b</sub>	14.1%	2513	8.1%
	Very important	299 <sub>a,b,c</sub>	86.4%	257 <sub>a,b,c</sub>	84.0%	139 <sub>e</sub>	67.8%	26671	86.0%
	Total	346	100.0%	306	100.0%	205	100.0%	31021	100.0%
Please rate your support for increasing the beverage container refundable deposit fee to 10 cents	Not at all supportive	13 <sub>a,b</sub>	3.7%	9 <sub>a</sub>	2.9%	20 <sub>b</sub>	9.8%	1413	4.5%
	Slightly unsupportive	9 <sub>a,b</sub>	2.5%	3 <sub>a</sub>	1.0%	12 <sub>b</sub>	5.9%	619	2.0%
	Neither supportive nor unsupportive	24 <sub>a</sub>	6.8%	30 <sub>a</sub>	9.6%	18 <sub>a</sub>	8.8%	2792	8.9%
	Somewhat supportive	49 <sub>a,b</sub>	13.9%	47 <sub>a,b</sub>	15.0%	35 <sub>a,b</sub>	17.2%	4463	14.2%
	Very supportive	258 <sub>a,b</sub>	73.1%	225 <sub>a,b</sub>	71.7%	119 <sub>c</sub>	58.3%	22146	70.5%
	Total	353	100.0%	314	100.0%	204	100.0%	31433	100.0%
Do you think milk jugs and other similar containers should have a refundable deposit, even if it means paying 10 cents more at the check-out?	Strongly disagree	10 <sub>a,b</sub>	2.8%	15 <sub>a,b,c</sub>	4.7%	21 <sub>c</sub>	10.2%	1677	5.3%
	Disagree	22 <sub>a,c,d</sub>	6.2%	23 <sub>b,d</sub>	7.3%	14 <sub>a,c,d</sub>	6.8%	1622	5.2%
	Neither agree nor disagree	40 <sub>a,b</sub>	11.3%	31 <sub>a,b</sub>	9.8%	33 <sub>a</sub>	16.1%	3663	11.7%
	Agree	67 <sub>a</sub>	18.9%	65 <sub>a</sub>	20.5%	42 <sub>a</sub>	20.5%	6356	20.2%
	Strongly agree	215 <sub>a,b,c</sub>	60.7%	183 <sub>a,b,c,d</sub>	57.7%	95 <sub>d</sub>	46.3%	18118	57.6%
	Total	354	100.0%	317	100.0%	205	100.0%	31436	100.0%

Survey Item	Response Option	In what region of B.C. do you live?							
		Northwest and North Coast		Nechako		Northeast		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %
If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?	Not at all important	10 <sub>a,b,c,d</sub>	2.8%	11 <sub>a,b,c,d</sub>	3.5%	17 <sub>d</sub>	8.3%	1060	3.4%
	Slightly unimportant	5 <sub>a</sub>	1.4%	4 <sub>a</sub>	1.3%	9 <sub>a</sub>	4.4%	650	2.1%
	Neither important nor unimportant	32 <sub>a,b</sub>	9.0%	32 <sub>a,b,c</sub>	10.3%	38 <sub>c</sub>	18.5%	2695	8.6%
	Moderately important	116 <sub>a,b</sub>	32.8%	117 <sub>b</sub>	37.6%	68 <sub>a,b</sub>	33.2%	9634	30.6%
	Very important	191 <sub>a,b</sub>	54.0%	147 <sub>b,c</sub>	47.3%	73 <sub>c</sub>	35.6%	17406	55.4%
	Total	354	100.0%	311	100.0%	205	100.0%	31445	100.0%

Note: Values in the same row and sub-table not sharing the same subscript are significantly different at  $p < 0.05$  in the two-sided test of equality for column proportions. Cells with no subscript are not included in the test. Tests assume equal variances.<sup>1</sup>

1. Tests are adjusted for all pairwise comparisons within a row of each innermost sub-table using the Bonferroni correction.

**Table C19: Participant Type Comparisons**

Survey Item	Response Option	In what capacity are you responding to this survey?									
		Public and recyclers		Business and industry		Local government		Non-governmental organization		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %
How concerned are you about the problem of plastic waste?	Not at all concerned	416 <sub>a</sub>	1.2%	13 <sub>a</sub>	1.3%	1 <sub>a</sub>	1.1%	1 <sub>a</sub>	1.4%	431	1.2%
	Slightly concerned	596 <sub>a</sub>	1.8%	24 <sub>a</sub>	2.4%	0 <sup>1</sup>	0.0%	0 <sup>1</sup>	0.0%	620	1.8%
	Somewhat concerned	955 <sub>a</sub>	2.9%	14 <sub>b</sub>	1.4%	3 <sub>a,b</sub>	3.3%	1 <sub>a,b</sub>	1.4%	973	2.8%
	Moderately concerned	3377 <sub>a</sub>	10.1%	84 <sub>a</sub>	8.3%	10 <sub>a</sub>	10.9%	9 <sub>a</sub>	12.7%	3480	10.1%
	Very concerned	28085 <sub>a</sub>	84.0%	876 <sub>a</sub>	86.6%	78 <sub>a</sub>	84.8%	60 <sub>a</sub>	84.5%	29099	84.1%
	Total	33429	100.0%	1011	100.0%	92	100.0%	71	100.0%	34603	100.0%
How important is it to you that the provincial government consider bans for: Single-use plastic packaging	Not at all important	1185 <sub>a</sub>	3.5%	41 <sub>a</sub>	4.0%	2 <sub>a</sub>	2.1%	2 <sub>a</sub>	2.8%	1230	3.5%
	Slightly unimportant	490 <sub>a</sub>	1.5%	12 <sub>a</sub>	1.2%	2 <sub>a</sub>	2.1%	0 <sup>1</sup>	0.0%	504	1.4%
	Neither important nor unimportant	796 <sub>a</sub>	2.4%	16 <sub>a</sub>	1.6%	4 <sub>a</sub>	4.3%	1 <sub>a</sub>	1.4%	817	2.3%
	Moderately important	3835 <sub>a,b</sub>	11.4%	90 <sub>a</sub>	8.9%	11 <sub>a,b</sub>	11.7%	14 <sub>b</sub>	19.4%	3950	11.4%
	Very important	27306 <sub>a</sub>	81.2%	856 <sub>a</sub>	84.3%	75 <sub>a</sub>	79.8%	55 <sub>a</sub>	76.4%	28292	81.3%
	Total	33612	100.0%	1015	100.0%	94	100.0%	72	100.0%	34793	100.0%
How important is it to you that the provincial government consider bans for: Styrofoam packaging	Not at all important	960 <sub>a</sub>	2.9%	34 <sub>a</sub>	3.4%	2 <sub>a</sub>	2.2%	3 <sub>a</sub>	4.3%	999	2.9%
	Slightly unimportant	362 <sub>a</sub>	1.1%	6 <sub>a</sub>	0.6%	1 <sub>a</sub>	1.1%	0 <sup>1</sup>	0.0%	369	1.1%
	Neither important nor unimportant	599 <sub>a</sub>	1.8%	10 <sub>a</sub>	1.0%	2 <sub>a</sub>	2.2%	0 <sup>1</sup>	0.0%	611	1.8%
	Moderately important	2651 <sub>a</sub>	8.0%	58 <sub>a</sub>	5.8%	5 <sub>a</sub>	5.5%	8 <sub>a</sub>	11.4%	2722	8.0%
	Very important	28403 <sub>a</sub>	86.1%	889 <sub>b</sub>	89.2%	81 <sub>a,b</sub>	89.0%	59 <sub>a,b</sub>	84.3%	29432	86.2%
	Total	32975	100.0%	997	100.0%	91	100.0%	70	100.0%	34133	100.0%
Please rate your support for increasing the beverage container refundable deposit fee to 10 cents	Not at all supportive	1484 <sub>a</sub>	4.4%	61 <sub>a</sub>	6.1%	3 <sub>a</sub>	3.2%	1 <sub>a</sub>	1.4%	1549	4.5%
	Slightly unsupportive	654 <sub>a</sub>	2.0%	26 <sub>a</sub>	2.6%	3 <sub>a</sub>	3.2%	2 <sub>a</sub>	2.9%	685	2.0%
	Neither supportive nor unsupportive	2951 <sub>a</sub>	8.8%	90 <sub>a</sub>	8.9%	7 <sub>a</sub>	7.4%	3 <sub>a</sub>	4.3%	3051	8.8%
	Somewhat supportive	4738 <sub>a</sub>	14.2%	102 <sub>b</sub>	10.1%	10 <sub>a,b</sub>	10.6%	10 <sub>a,b</sub>	14.3%	4860	14.1%
	Very supportive	23584 <sub>a</sub>	70.6%	728 <sub>a</sub>	72.3%	71 <sub>a</sub>	75.5%	54 <sub>a</sub>	77.1%	24437	70.7%
	Total	33411	100.0%	1007	100.0%	94	100.0%	70	100.0%	34582	100.0%



Survey Item	Response Option	In what capacity are you responding to this survey?									
		Public and recyclers		Business and industry		Local government		Non-governmental organization		Total	
		Count	Column %	Count	Column %	Count	Column %	Count	Column %	Count	Column %
Do you think milk jugs and other similar containers should have a refundable deposit, even if it means paying 10 cents more at the check-out?	Strongly disagree	1771 <sub>a</sub>	5.3%	58 <sub>a</sub>	5.8%	2 <sub>a</sub>	2.2%	2 <sub>a</sub>	2.8%	1833	5.3%
	Disagree	1717 <sub>a</sub>	5.1%	37 <sub>a</sub>	3.7%	3 <sub>a</sub>	3.2%	1 <sub>a</sub>	1.4%	1758	5.1%
	Neither agree nor disagree	3887 <sub>a</sub>	11.6%	92 <sub>a</sub>	9.1%	13 <sub>a</sub>	14.0%	4 <sub>a</sub>	5.6%	3996	11.6%
	Agree	6780 <sub>a</sub>	20.3%	152 <sub>b</sub>	15.1%	19 <sub>a,b</sub>	20.4%	16 <sub>a,b</sub>	22.5%	6967	20.1%
	Strongly agree	19260 <sub>a</sub>	57.6%	669 <sub>b</sub>	66.4%	56 <sub>a,b</sub>	60.2%	48 <sub>a,b</sub>	67.6%	20033	57.9%
	Total	33415	100.0%	1008	100.0%	93	100.0%	71	100.0%	34587	100.0%
If you had the choice, how important for you is it to purchase products made with recycled content, even if they might cost you more?	Not at all important	1097 <sub>a</sub>	3.3%	37 <sub>a</sub>	3.7%	2 <sub>a</sub>	2.2%	2 <sub>a</sub>	2.8%	1138	3.3%
	Slightly unimportant	675 <sub>a</sub>	2.0%	17 <sub>a</sub>	1.7%	3 <sub>a</sub>	3.2%	0 <sup>1</sup>	0.0%	695	2.0%
	Neither important nor unimportant	2824 <sub>a</sub>	8.4%	81 <sub>a</sub>	8.0%	9 <sub>a</sub>	9.7%	4 <sub>a</sub>	5.6%	2918	8.4%
	Moderately important	10226 <sub>a</sub>	30.6%	215 <sub>b</sub>	21.3%	27 <sub>a,b</sub>	29.0%	17 <sub>a,b</sub>	23.6%	10485	30.3%
	Very important	18601 <sub>a</sub>	55.7%	659 <sub>b</sub>	65.3%	52 <sub>a,b</sub>	55.9%	49 <sub>a,b</sub>	68.1%	19361	56.0%
	Total	33423	100.0%	1009	100.0%	93	100.0%	72	100.0%	34597	100.0%

Note: Values in the same row and sub-table not sharing the same subscript are significantly different at  $p < 0.05$  in the two-sided test of equality for column proportions. Cells with no subscript are not included in the test. Tests assume equal variances.<sup>1</sup>

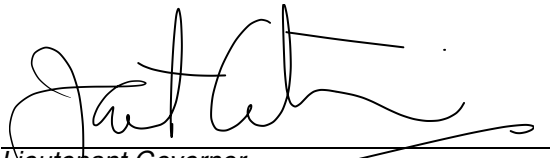
1. Tests are adjusted for all pairwise comparisons within a row of each innermost sub-table using the Bonferroni correction.

## ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 370

, Approved and Ordered

June 29, 2020

  
Lieutenant Governor

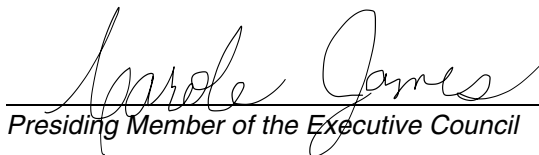
## Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that

- (a) the Recycling Regulation, B.C. Reg. 449/2004, is amended as set out in the attached Appendix 1,
- (b) section 13 (2) of the Administrative Penalties (*Environmental Management Act*) Regulation, B.C. Reg. 133/2014, is amended by striking out “27 (1) (b) to (d), (2) or (3)” and substituting “27 (1) (b) to (d) or (2) to (4)”,
- (c) effective February 1, 2022, section 1 of Schedule 1 of the Recycling Regulation, B.C. Reg. 449/2004, is amended in the definition of “beverage” by striking out “but does not include milk, milk substitutes, rice milk, soya milk, flavoured milk, infant formulas, meal replacements or dietary supplements”, and
- (d) effective January 1, 2023, the Recycling Regulation is amended as set out in the attached Appendix 2.



Minister of Environment and Climate Change Strategy



Presiding Member of the Executive Council

(This part is for administrative purposes only and is not part of the Order.)

## Authority under which Order is made:

Act and section: *Environmental Management Act*, S.B.C. 2003, c. 53, ss. 21 and 139

Other: OIC 995/2004, OIC 426/2014

R20358703

## **APPENDIX 1**

- 1 Section 5 (1) (c) (ii) of the Recycling Regulation, B.C. Reg. 449/2004, is repealed.**
- 2 Section 5 of Schedule 1 is amended**
  - (a) by repealing subsection (1) and substituting the following:**
    - (1) A seller must collect from the purchaser, at the time of sale of a beverage in a container, a deposit in an amount not less than \$0.10. , **and**
  - (b) in subsection (3) by striking out “set out in Table 1” and substituting “required by subsection (1)”.**
- 3 Section 6 of Schedule 1 is amended**
  - (a) by repealing subsection (1) and substituting the following:**
    - (1) A container redemption facility or, subject to subsection (2), a retailer whose premises are not identified in an approved plan, must accept containers for return and pay to the person returning the containers a refund in an amount, per container, not less than
      - (a) \$0.10, or
      - (b) the amount of the deposit collected for those types of containers under section 5 (1), if that amount is more than \$0.10. ,
  - (b) in subsection (5) by striking out “cash refund” and substituting “refund”, and**
  - (c) by adding the following subsection:**
    - (6) A refund owing under subsection (1) is payable as follows:
      - (a) the refund must be paid in cash if
        - (i) requested by the person returning the containers, and
        - (ii) the person accepting the containers is a container redemption facility or a retailer whose premises are not identified in an approved plan, and has staff to collect and redeem containers;
      - (b) if paragraph (a) does not apply, the refund may be paid by another method.
- 4 Section 2 of Schedule 2 is amended**
  - (a) by striking out “and” at the end of paragraph (a) (x),**
  - (b) by adding “and” at the end of paragraph (b), and**
  - (c) by adding the following paragraph:**
    - (c) empty containers for the products described in paragraphs (a) and (b).
- 5 Section 3 (1) of Schedule 2 is amended by adding “, and includes empty containers for those products,” after “(Canada)”.**

6 *Section 4 of Schedule 2 is amended by adding “, and includes empty containers for this gasoline” after “container”.*

7 *Section 5 of Schedule 2 is repealed and the following substituted:*

**Pharmaceutical product category**

5 (1) In this section, “**drug**” has the same meaning as in the *Food and Drugs Act* (Canada), except without reference to animals or paragraph (c) of that definition.

(2) The pharmaceutical product category consists of

(a) all unused or expired drugs except

(i) unused or expired drugs from a hospital, as defined in section 1 of the *Hospital Act*, or the office of a medical practitioner,

(ii) contact lens disinfectants,

(iii) antidandruff shampoo or products,

(iv) antiperspirants,

(v) antiseptic or medicated skin care products,

(vi) sunburn protectants,

(vii) mouthwashes, and

(viii) fluoridated toothpastes, and

(b) empty containers for the drugs to which paragraph (a) applies.

8 *Section 1 (2) (b) of Schedule 5 is repealed and the following substituted:*

(b) bound reference books, literary books and text books.

## **APPENDIX 2**

1 *Schedule 5 of the Recycling Regulation, B.C. Reg. 449/2004, is repealed and the following substituted:*

## **SCHEDULE 5**

### **PACKAGING AND PAPER PRODUCT CATEGORY**

**Packaging and paper product category**

1 The packaging and paper product category consists of all of the following:

(a) packaging;

(b) packaging-like products as described in section 2;

(c) paper as described in section 3;

(d) single-use products as described in section 4.

### **Packaging-like products**

- 2** (1) For the purposes of this Schedule, the following are packaging-like products, unless excluded under subsection (2), if ordinarily disposed of after a single use or short-term use, whether or not it could be reused:
- (a) food containers;
  - (b) foil and wraps;
  - (c) bags;
  - (d) boxes;
  - (e) objects purchased by or supplied to consumers expressly for the purpose of protecting, containing or transporting commodities or products.
- (2) Health, hygiene or safety products that, by virtue of their anticipated use, could become unsafe or unsanitary to recycle are excluded.
- (3) For greater certainty, nothing in this section is intended to limit the scope of the definition of “packaging” in the Act.

### **Paper**

- 3** (1) For the purposes of this Schedule, the following are paper unless excluded under subsection (2):
- (a) flyers;
  - (b) brochures;
  - (c) booklets;
  - (d) catalogues;
  - (e) telephone directories;
  - (f) newspapers;
  - (g) magazines;
  - (h) paper fibre;
  - (i) paper used for copying, writing or any other general use;
  - (j) paper of any other description.
- (2) The following are excluded:
- (a) paper products that, by virtue of their anticipated use, could become unsafe or unsanitary to recycle;
  - (b) bound reference books, literary books and text books.

### **Single-use products**

- 4** (1) For the purposes of this Schedule the following are single-use products unless excluded under subsection (2):
- (a) a product that is ordinarily disposed of after a single use or short-term use, whether or not it could be reused;
  - (b) without limiting paragraph (a), the following products, if the product is ordinarily disposed of after a single use or short-term use, whether or not it could be reused:
    - (i) straws and items used to stir beverages;

- (ii) utensils, plates, bowls and cups;
  - (iii) party supplies.
- (2) Health, hygiene or safety products that, by virtue of their anticipated use, could become unsafe or unsanitary to recycle are excluded.

## 1 INTRODUCTION

Historically, local and Indigenous governments and taxpayers have carried the burden of waste management costs with little incentive for producers to either provide consumers with convenient recycling options or produce more durable and easily recyclable packaging and products.

Since 2004, B.C. has regulated many products through Extended Producer Responsibility (EPR) under the [Recycling Regulation](#)<sup>1</sup> (the regulation). EPR requires producers (manufacturers, distributors and retailers) of designated products to take responsibility for the life cycle of their products, including collection and recycling. This shifts the responsibility from local and Indigenous governments and taxpayers to the producers and consumers of products.

By making regulated producers accountable, EPR programs reduce waste by incentivizing producers to design products that are durable and more recyclable in order that material and components can be recovered for future use instead of going to disposal. EPR is one of the key pillars that supports a circular economy approach to waste management where resources are continually conserved and reused as raw materials. Although B.C. is the North American leader with over 20 EPR programs already in place, more can be done to support B.C. communities and protect the environment.

### *Expanding Recycling and Recovery*

By regulating even more products, EPR can further reduce local and Indigenous governments' waste management costs, make recycling more accessible for consumers with province-wide collection networks, grow B.C. recycling businesses, incent innovation, and create job opportunities.

The ministry is asking for feedback on adding more products to the Recycling Regulation to be recovered and recycled by producers, including:

- Mattresses
- Moderately hazardous products
- Electronic and electrical products and batteries
- Packaging and paper products beyond residential sources

The [CleanBC Plastics Action Plan](#)<sup>2</sup>, released in 2019, received significant feedback from local governments, Indigenous groups and a range of stakeholders expressing a desire to expand EPR. To find out more, see the [Plastics Action Plan What We Heard Report](#)<sup>3</sup>.

While many products are already covered by EPR, given B.C.'s successful experience, we are now ready to do more and will develop a multi-year strategy, including further outreach, on proposed priorities. Through the release of this Intentions Paper, B.C. is engaging on expanding EPR by including more products under the regulation and other waste reduction policy approaches to ensure that these items are managed responsibly.

**Instructions on how to provide comments are provided on the last page of this Intentions Paper and should be submitted by November 20, 2020.**

<sup>1</sup> Recycling Regulation - [http://www.bclaws.ca/civix/document/id/complete/statreg/449\\_2004](http://www.bclaws.ca/civix/document/id/complete/statreg/449_2004)

<sup>2</sup> CleanBC Plastics Action Plan - [https://cleanbc.gov.bc.ca/app/uploads/sites/436/2019/08/CleanBC\\_PlasticsActionPlan\\_ConsultationPaper\\_07252019\\_B.pdf](https://cleanbc.gov.bc.ca/app/uploads/sites/436/2019/08/CleanBC_PlasticsActionPlan_ConsultationPaper_07252019_B.pdf)

<sup>3</sup> Plastics Action Plan What We Heard Report - <https://cleanbc.gov.bc.ca/plastics>

## 2 RECYCLING REGULATION

The regulation sets out the requirements for EPR in B.C., giving producers the flexibility to find efficient and innovative ways to meet regulated outcomes that prevent waste disposal, improve recycling, and support reuse and resource recovery. Producers often come together to form agencies that operate recycling programs on their behalf.

Producers are also responsible for managing and funding their recycling programs, leading to cost-effective business decisions and market-driven solutions. These costs can be covered directly by producers or passed along to consumers through product pricing or applying an additional charge, such as an “eco-fee”.

Reuse, recycling, and remanufacturing creates more jobs than traditional waste disposal and supports a resource-efficient economy<sup>4</sup>. Regulating the management of post-consumer products leads to increased material recovery rates from waste streams, creating economies of scale to better support B.C.’s growing recycling sector and secondary markets. There are substantial economic and environmental benefits from EPR programs operating in B.C. A report commissioned by the ministry in 2016<sup>5</sup>, found that EPR in B.C. created over 900 jobs, and in one year: the value of recovered materials was over \$46 million; 160,000 tonnes of material was diverted from landfill; and greenhouse gas emissions were reduced by over 200,000 tonnes (CO<sub>2</sub>e).

## 3 EXPANDING RECYCLING AND RECOVERY

New products and packaging are added to the regulation through the addition of new or amended Schedules and associated Product Categories. The ministry is currently evaluating the opportunity to add more products through changes to regulation. These products could include:

- Adding mattresses and foundations as a new product category.
- Expanding the residual product category to include more moderately hazardous products, such as single-use propane canisters.
- Expanding the electronic and electrical product category to include more items, such as electric vehicle batteries.
- Expanding the packaging and paper product category beyond residential sources.

### 3.1 New Schedule for Mattresses

Every year in B.C., approximately 200,000 used mattresses and box springs are recycled by local and Indigenous governments, recycling businesses, and retailers, with inconsistent levels of material recovery depending on how and where they are processed. Though highly recyclable, the large size of mattresses makes them challenging and expensive to manage, costing up to \$40 per unit to recycle. In more remote and rural regions of B.C. where the cost of recycling is too high and in certain urban areas

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<sup>4/5</sup> Assessment of Economic and Environmental Impacts of Extended Producer Responsibility Programs Operating in B.C. - [https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/rel-res/2014\\_assessment\\_of\\_economic\\_environmental\\_impacts\\_of\\_extd\\_producer\\_responsibility\\_programs\\_bc.pdf](https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/rel-res/2014_assessment_of_economic_environmental_impacts_of_extd_producer_responsibility_programs_bc.pdf)



where storage space is limited, mattresses are still being landfilled. Mattresses in landfills damage machinery and take up landfill space costing local governments up to \$340,000 annually in landfill costs alone. Having producers take responsibility for mattresses would provide convenient, free collection services to residents and businesses, replacing the patchwork of recycling options with province-wide coverage.

Jurisdictions in the United States have seen success by regulating producer responsibility for mattresses, which is credited for helping to grow their mattress recycling sector. The recycling infrastructure to manage mattresses is already in place in B.C. with capacity to process more. Adding a new Schedule within the regulation would ensure more consistent standards for recycling all the materials found in mattresses (and foundations or box springs). Most are made of steel, wood, fabric, and foam, while other types such as air mattresses, and camping pads are comprised of plastics. Although regulating other furniture is not part of this consultation, producer responsibility or alternative policy approaches for these items may be considered in the future.

#### ***Supporting local and Indigenous governments and British Columbians with more recycling***

- Disposal fees and transportation challenges are major reasons why residents illegally dump their used mattresses in alleyways and wilderness areas.
- In Metro Vancouver alone, approximately 10,000 mattresses are abandoned each year, costing municipalities up to \$1.5 million to manage.

#### **Questions:**

- Do you have comments or suggestions on the intention to add mattresses and foundations to the regulation?
- Are there exemptions to this new product category that you believe should be considered?

## **3.2 Update Existing Schedules and Product Categories**

### **3.2.1 Schedule 2 - Residual Product Category**

Most products in the Residual Product Category are intended to be used or consumed; however, when households and businesses have residual amounts of product, safe recycling and disposal options are needed. Although many products are already regulated and responsibly managed by producers, including paint, solvents, gasoline, pesticides, pharmaceuticals, and other products, there are gaps in the regulation. Safe management is needed for a broad range of other problematic products, as well as the containers that may be contaminated. These products may include:

- Compressed gas in canisters - fuel and helium
- Fire extinguishers
- Pool and spa chemicals
- More pest control and rodenticides
- Fertilizer and weed control
- Automotive additives and touch-up paint
- More paint, sealers and adhesives
- Bear spray and flares
- Veterinary medicine for pets
- Medical syringes

Unregulated products have resulted in high waste management costs to local and Indigenous governments, and unsafe disposal, such as pool chemicals causing landfill fires and fuel canisters being illegally dumped in curbside recycling, parks, and at marinas. One B.C. regional district reported that the

safe collection and recycling of unregulated materials, such as these, costs approximately \$400,000 each year. Capturing more materials will ensure producers safely manage these products and reduce costs for local and Indigenous governments.

Developing clearly defined product categories in the regulation that capture a broad range of product types will be complicated. Other jurisdictions have also faced challenges when classifying residual products in a manner that allows consumers, retailers and collection facility staff to easily understand what is regulated. For this reason, this consultation provides the opportunity to make suggestions on defining product categories that are comprehensive but remain user-friendly.

#### ***Supporting B.C. Businesses***

Product Care Recycling, an EPR agency representing obligated producers that safely recycles and manages paint and other regulated wastes (pesticides, gasoline) invested approximately \$9 million to build and operate a modern facility in Delta with 34 employees.

One option to identify products intended for regulation is to use existing warning symbols required on product labels – flammable, corrosive, toxic (poison), and explosive. However, within the residual product category we will also need to capture additional products that are not labelled with these warning symbols on the packaging, but consumers generally consider hazardous and require proper disposal. For example, mineral spirits and furniture strippers may be formulated with different chemicals resulting in different labeling requirements.

#### **Questions:**

- Do you have comments or suggestions on the intention to regulate more product types?
- What product types should be prioritized for regulation?
- Do you have comments or suggestions on how to clearly define/classify product categories in the regulation that are user friendly?
- Are there product types you believe should be exempt from the regulation, beyond products such as cleaners that are intended for use down the drain?

### **3.2.2 Schedule 3 – Electronic and Electrical Product Category**

From flashlights to fridges, most consumer electronic and electrical products, along with batteries and lightbulbs, are already regulated in B.C. and managed responsibly by producers. However, the rapid adoption of new trends and emerging technology has led to gaps in product coverage, such as e-cigarettes, vapes, motorized yard decorations, large drones, photovoltaic (solar) panels, and electric vehicle batteries.

#### **Modernizing to keep up with trends**

The growing inconsistency between regulated and unregulated products causes confusion for consumers and retailers, adds waste management costs for local and Indigenous governments, and creates inequitable requirements for the producers of similar products. Streamlining the regulation will help eliminate regulatory gaps and provide for better oversight.

B.C.'s experience has demonstrated that legally obligating producers drives proper management and responsible recycling. For example, regulated producers use recycling facilities in B.C. that adhere to leading safety and environmental standards for processing electronic and electrical products. This level

of oversight and diligence is also needed for managing batteries used in new products/applications, including everything from singing balloons and light-up shoes to golf carts and cars. Comprehensive battery management is needed to safeguard workers from fire risks associated with improper disposal in the garbage, residential curbside recycling, or the scrap metal industry.

The intention is to regulate additional electronic and electrical products as well as items that are used with these products, including electrical cords and printer cartridges. Consideration will also be given to exempting products, such as escalators or elevators and other large-scale fixed installations, that may be better managed through alternative policy approaches. Regulated producers in B.C. currently operate nine programs for electronic and electrical products under Schedule 3, covering thousands of products. For more information please visit the B.C. [Electronics and Electrical Recycling](#)<sup>6</sup> website.

### Supporting CleanBC - Electric vehicle batteries, charging equipment, and solar panels

The CleanBC plan and initiatives are supporting the use of electric vehicles, charging equipment, and solar (photovoltaic) systems, which will also necessitate safe reuse and recycling systems for when they are no longer functional.

#### *Electric Vehicle Batteries*

Many hybrid and electric vehicles on the road are nearing end-of-life and require safe disposal. However, unlike other vehicle components that are already regulated and responsibly managed by producers, including lead-acid batteries, tires, oil, and antifreeze, a reliable province-wide electric vehicle battery recycling system is not yet developed to meet current demand and anticipated growth. Approximately 50,000 electric vehicles are already on the road in B.C. and by 2040 all new light-duty cars and trucks sold in B.C. will be [Zero Emission Vehicles](#)<sup>7</sup>.

Electric vehicles use specialized batteries that range in weight and chemistry, making them challenging to safely handle and manage – a B.C. recycling company reports that these batteries are labour intensive and costly to process, with over 100 different configurations to date. Vehicle producers are continually redesigning batteries for better performance. Under producer responsibility, recycling costs are reflected in the vehicle producers' design and manufacturing choices, providing an incentive to make batteries that are easier to disassemble for recycling and reuse in applications such as residential and commercial energy storage in communities that may need back-up power. With emerging technologies being developed globally, this opportunity may further support reuse of electrical vehicle batteries in B.C.

#### **Supporting B.C. Businesses**

B.C.'s recycling companies have become leaders in processing waste electronics and batteries for recycling. These companies improve safety, protect our environment, and create jobs in B.C. Currently, producer responsibility programs support four facilities located in Delta, Chilliwack and two in Trail.

This has resulted in:

- Over \$13.2 million invested in technology, equipment and infrastructure.
- Over 150 jobs, with many entry level workers gaining valuable skills and training.

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<sup>6</sup> B.C. Electronic and Electrical Recycling - <https://www2.gov.bc.ca/gov/content/environment/waste-management/recycling/extended-producer-responsibility/electronics-and-electrical>

<sup>7</sup> B.C. Zero-Emission Vehicles Act - <https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/clean-transportation-policies-programs/zero-emission-vehicles-act>

Producers need to safely manage their batteries and ensure that the responsibility and costs do not default to local and Indigenous governments and vehicle dismantlers. Over time, there will also be a greater need to help B.C.'s residents and businesses properly manage charging stations at their end of life. For more information on electric vehicles and charging stations refer to the [CleanBC - Go Electric Program](#)<sup>8</sup>.

#### *Solar Technology*

Solar technology has a broad range of uses from camping equipment and household rooftop panels to freestanding off-grid power generation systems. Although solar panels are recyclable, producers need to establish collection and recycling programs for homeowners and communities, particularly rural and remote, that otherwise will have limited options to divert from disposal. The recycling industry may benefit from our proximity to Washington State, where producers will be launching their reuse and recycling programs next year.

#### **Questions:**

- Do you have comments or suggestions on the intention to regulate more electronic and electrical products, including batteries?
- What product types should be prioritized for regulation?
- Are there product types you believe should be exempt from the regulation and may be better managed through alternative policy approaches?

### **3.2.3 Schedule 5 - Packaging and Paper Product Category**

#### *Residential packaging and paper products*

In 2014, B.C. led the nation by being the first province to make producers fully responsible for managing residential packaging and paper products. Being first required a lot of work, with extensive consultation and collaboration taking place with numerous stakeholders. Today, producers successfully operate an efficient province-wide recycling system that collects and manages over 186,000 tonnes of material each year. Most materials are collected through curbside programs, from multi-family residence, or a network of more than 200 recycling depots across B.C. Most beverage containers are managed under the deposit-refund system with different regulatory requirements.

#### ***Supporting B.C. Businesses***

[Recycle BC](#)<sup>9</sup>, a producer-funded agency, collects 41% of all plastic packaging from the residential stream, while nationally the collection rate of all plastic packaging is estimated to be 23%<sup>10</sup>. Additionally, more than 98% of plastics collected by the Recycle BC program, remain in B.C., with a local end-market in Metro Vancouver.

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<sup>8</sup> CleanBC - Go Electric Program - <https://www2.gov.bc.ca/gov/content/industry/electricity-alternative-energy/transportation-energies/clean-transportation-policies-programs/clean-energy-vehicle-program>

<sup>9</sup> Recycle BC - <https://recyclebc.ca/about-recyclebc/>

<sup>10</sup> Economic Study of the Canadian Plastic Industry, Markets and Waste - [http://publications.gc.ca/collections/collection\\_2019/eccc/En4-366-1-2019-eng.pdf](http://publications.gc.ca/collections/collection_2019/eccc/En4-366-1-2019-eng.pdf)

Transitioning from the patch work of local and Indigenous government funded programs to a standardized system has improved the supply of clean recycled plastics for re-manufacturing. As a result, B.C. businesses have invested in infrastructure and processing capacity, with more materials continuing to be recycled here, while recycling programs across the rest of North America have been heavily impacted by diminishing export markets.

#### *Packaging and paper products beyond residential sources*

Currently, packaging and paper products beyond the residential stream are independently managed and not obligated under the regulation. There are a number of different sectors where these products are found, such as office buildings, warehouses, stadiums, grocery stores and food services, institutions, and agricultural applications. To inform any future decision making, we need to better understand how these products are diverted from landfills for urban and rural areas, and the recycling rates for the broad range of different material types generated from these sectors - collectively referred to as the Industrial, Commercial and Institutional (ICI) sector.

Through the CleanBC Plastics Action Plan engagement process, local governments, Indigenous Nations and a range of stakeholders expressed a desire to expand EPR to include ICI generated waste and recyclables. These groups noted that the ICI sector is a large contributor to overall waste in B.C.

While packaging and paper products from the ICI sector is not regulated under EPR legislation in North America, the European Union has developed a Packaging and Packaging Waste Directive mandating members meet targets for recovery and recycling of all packaging waste. To date, Austria, Netherlands, Belgium and Germany, have passed laws requiring producers, predominantly of industrial and commercial packaging, to fund collection, sorting and recycling. In Germany, for example, producers are responsible for collecting and managing materials at restaurants, hotels, hospitals, educational facilities, sports stadiums, cinemas, and museums.

The ICI sector is complex and may require a measured, phased approach that considers the diversity of the sector. For example, waste diversion from the backend of a grocery store in the greater Vancouver area is very different than waste diversion from a remote mining site. When policy tools, such as extended producer responsibility, are evaluated, it will be important to consider what this may look like for the sub-sectors involved and the different management needs and economic impacts. Through this initial consultation, the ministry is soliciting feedback on approaches to ensure greater waste diversion from landfills and better recycling outcomes, along with more information to fully understand the related waste management challenges in B.C. for the ICI sector.

#### ***Supporting B.C. Businesses***

- B.C. has seen significant investments by recycling businesses, particularly around the residential packaging and paper program.
- In 2014, this induced \$20 million in capital investment, including a new plant to process plastic containers, with a further \$25 million investment in 2020 for enhanced sorting of packaging, cardboard and paper allowing for greater access to local markets.
- The province-wide collection system for packaging and paper has also helped reduce contamination rates, which helps retain the value of materials and allows access to downstream markets.

#### Questions:

- While EPR for ICI packaging and paper has been suggested by some stakeholders, there are also other approaches that have been advanced for commercial business waste management. Do you have comments or suggestions on EPR or alternative policy approaches that address the need for greater diversion from landfills and to better manage ICI materials?
- Are there sources of ICI waste that should be the primary focus for better management, such as food services, office buildings, or sports stadiums?

## 4 MARINE DEBRIS IN B.C – END-OF-LIFE MANAGEMENT OF LOST FISHING GEAR

Lost or abandoned fishing gear in the marine environment from commercial fisheries, aquaculture, and recreational fisheries, such as long lines, nets, traps, and floats, is a significant source of marine pollution in B.C. These items harm our marine environment and impact the fishing and tourism industry, threatening the health and economies of coastal communities throughout the province.

Local governments, Indigenous Nations and environmental organizations have long-raised concerns about the need to more effectively manage lost fishing gear found in our coastal waters and shorelines, and as a result, Premier Horgan asked Sheila Malcolmson, Member of the Legislative Assembly of British Columbia for Nanaimo, Special Advisor for Marine Debris Protection and Parliamentary Secretary for Environment to find solutions to the issues of abandoned vessels, marine debris, and marine-sourced plastics. Parliamentary Secretary Malcolmson met with interested parties affected by marine debris including coastal local governments, Indigenous Nations, industry, and environmental organizations, to understand the issue and discuss potential solutions. Based on this ongoing initiative, an initial [What We Heard on Marine Debris in B.C.](#)<sup>12</sup> report was released in February 2020.

### *Supporting B.C. Communities*

While we continue to develop a long-term approach to manage lost fishing gear, B.C. has launched the [Clean Coast, Clean Waters Initiative Fund](#)<sup>11</sup>.

This helps small ship tour operators, Indigenous Nations, local communities and others participating in a multi-million dollar clean-up of the shores of the central coast, creating jobs and supporting coastal communities as they recover from the COVID-19 economic downturn impacting tourism.

Parliamentary Secretary Malcolmson's work to date shows that abandoned or lost fishing gear presents a unique set of problems not generally encountered when managing recovery and recycling programs for used fishing gear and other more consumer-facing products. As a result, solving these challenges may require different solutions for the different types of fishing gear and marine debris including multiple and complementary policy approaches. Given the complex and unique challenges associated with managing lost fishing gear, this Intentions Paper builds upon Parliamentary Secretary Malcolmson's initial engagement work by providing further opportunity for a broad range of interested stakeholders to provide feedback on approaches to improve fishing gear collection and management.

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<sup>11</sup> Clean Coast, Clean Waters Initiative Fund - <https://news.gov.bc.ca/releases/2020ENV0045-001613>.

<sup>12</sup> What We Heard on Marine Debris in B.C. - [https://www2.gov.bc.ca/assets/gov/environment/waste-management/zero-waste/marine-debris-protection/marine\\_debris\\_what\\_we\\_heard\\_report\\_final\\_web.pdf](https://www2.gov.bc.ca/assets/gov/environment/waste-management/zero-waste/marine-debris-protection/marine_debris_what_we_heard_report_final_web.pdf)



**Question:**

- Do you have comments or suggestions on policy approaches to better manage fishing gear?

## 5 ASSURING COMPLIANCE

The ministry promotes compliance among regulated producers by ensuring they are aware of their regulatory requirements resulting from any changes to the regulation. Compliance promotion will be consistent with past outreach efforts, which included developing and sharing information and educational materials with regulated parties and industry associations.

The ministry's approach to assuring compliance includes a range of tools and actions from written advisories to administrative monetary penalties. Compliance and enforcement is informed by the [Compliance Management Framework](#)<sup>13</sup> and [Compliance and Enforcement Policy and Procedure](#)<sup>14</sup>, which considers the compliance history for the regulated party and the significance of the impact from the non-compliance occurrence.

## 6 IMPLEMENTATION

The Ministry of Environment and Climate Change Strategy welcomes your input regarding potential products for inclusion in the Recycling Regulation, or other policy initiatives to minimize waste. The ministry will review all consultation comments and feedback to inform the development of a multi-year strategy, including further outreach on proposed priorities, see below.

**Question:**

- To help inform the development of the multi-year strategy, do you have comments or suggestions on what product categories outlined in this Intentions Paper should be prioritized for regulation?

All comments received through webinars, meetings, mail or email by November 20, 2020 will be compiled for review by ministry staff.

Please visit the [B.C. Extended Producer Responsibility](#)<sup>15</sup> website for more information and the online [Intentions Paper Feedback Form](#)<sup>16</sup>. Any future updates will also be posted to this website.

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<sup>13</sup> Compliance Management Framework - [https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/reporting/reporting-documents/environmental-enforcement-docs/compliance\\_mgmt\\_framework.pdf](https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/reporting/reporting-documents/environmental-enforcement-docs/compliance_mgmt_framework.pdf)

<sup>14</sup> Compliance and Enforcement Policy and Procedure - [https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/reporting/reporting-documents/environmental-enforcement-docs/ce\\_policy\\_and\\_procedure\\_2018.pdf](https://www2.gov.bc.ca/assets/gov/environment/research-monitoring-and-reporting/reporting/reporting-documents/environmental-enforcement-docs/ce_policy_and_procedure_2018.pdf)

<sup>15</sup> B.C. Extended Producer Responsibility - <https://www2.gov.bc.ca/gov/content/environment/waste-management/recycling/extended-producer-responsibility/recycling-regulation>

<sup>16</sup> Intentions Paper Feedback Form - <https://feedback.engage.gov.bc.ca/574734?lang=en>

## 7 PROVIDING FEEDBACK

Please submit comments to the ministry by November 20, 2020.

The ministry welcomes comments on the information and proposals outlined in this Intentions Paper, and has provided the following opportunities for feedback:

- By completing the online [feedback form](#)
- Email your comments to: [ExtendedProducerResponsibility@gov.bc.ca](mailto:ExtendedProducerResponsibility@gov.bc.ca)
- Mail your comments to:  
Ministry of Environment and Climate Change Strategy –  
Recycling Regulation Amendments  
PO Box 9341 Stn Prov Govt  
Victoria, BC V8W 9M1

The ministry will conduct a series of webinars in October, 2020. The webinars will review the information contained in this Intentions Paper and provide an opportunity to ask questions and provide comments. If you are interested in participating in a webinar, please contact the email: [ExtendedProducerResponsibility@gov.bc.ca](mailto:ExtendedProducerResponsibility@gov.bc.ca)

All comments received through webinars, mail or email by November 20, 2020 will be reviewed before developing an outreach strategy, amending the regulation, or pursuing other policy approaches.

All submissions will be treated with confidentiality by ministry staff and contractors when preparing consultation reports. Please note, however, that all submission with opinions and identifiers could be made public if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

**Thank you for your time and comments.**



**REPORT TO GOVERNANCE AND FINANCE COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT     Capital Regional District External Grants Update**

**ISSUE SUMMARY**

This report provides an update on external grants activity since September 14, 2020, through the submission deadline for this report of October 12, 2020.

**BACKGROUND**

The CRD External Grants Dashboard (Appendix A) summarizes grant applications and calls in progress, awards, and the status of projects still in progress. The report summarizes activities and outcomes since the External Grants Update was presented to the Board on October 14, 2020.

**IMPLICATIONS**

*Financial Implications*

**Grants / Contributions Awarded**

1. Reaching Home: COVID-19 Response Funding, approved for an additional \$1,918,197.

Two grants remain under news embargo.

**Applications Submitted**

1. Investing in Canada Infrastructure Program – Community, Culture, and Recreation Stream: Regional: Elk/Beaver Lake Oxygenation System Project, for \$700,000.
2. Investing in Canada Infrastructure Program – Community, Culture, and Recreation Stream: SSI: Fernwood Elementary School Athletic Field Upgrades Project, for \$646,587.
3. Building BC – Community Housing Fund: 2780 Spencer Rd project in partnership with the Capital Regional Housing Corporation.

**Core Area Wastewater Treatment Project Update**

The CAWTP project is partially funded by the Federal Government and the Province of BC. During the month of September, the CRD did not receive any grant payments for this project. Cumulatively, we have received \$339M of the estimated \$459M. The remaining (up to) \$120M is expected to be received throughout 2020 and into 2021 based on timing of eligible expenditures and achievement of target milestones.

*Service Delivery Implications*

**New Grant Opportunities**

Nine new grant calls were issued during the reporting period. Grant Calls in Progress for which the CRD is eligible to apply are featured in Appendix A (see page 7–8), and in the table below:

Grant	Deadline	Information
Provincial Urban Deer Cost Share Program	16-Oct-20	Provides funding to projects that address the challenges of urban deer management.
New Horizons for Seniors Program – Employment and Social Development Canada	20-Oct-20	Funding supports senior-led and volunteer-based eligible projects.
Dementia Community Investment	22-Oct-20	Funding supports community-based projects that focus on people living with dementia and caregivers in the current COVID-19 context.
Promoting Health Equity: Mental Health of Black Canadians Fund	22-Oct-20	Funding supports Black Canadians to develop culturally responsive knowledge, capacity, and programs that address mental health and its determinants.
Community Economic Recovery Infrastructure Program	29-Oct-20	Provides funding for public infrastructure projects through four streams: 1) Community Economic Resilience, 2) Destination Development, 3) Unique Heritage Infrastructure, and 4) Rural Economic Recovery.
Community Emergency Preparedness Fund: Structural Flood Mitigation Program	20-Nov-20 (Extended deadline)	Funding supports structural flood mitigation projects for the prevention/elimination/reduction of hazards.
Community Emergency Preparedness Fund: Emergency Support Services	29-Jan-21 April 2020 intake was postponed	Provides funding to enhance resiliency in responding to emergencies for local governments and other eligible applicants.
Community Emergency Preparedness Fund: Flood Risk Assessment, Flood Mapping & Flood Mitigation Planning	26-Feb-21	Provides funding to local governments and other eligible applicants to ensure knowledge of flood hazards, develop strategies, and prepare for risks.
Community Emergency Preparedness Fund: Emergency Operations Centres & Training	26-Mar-21	Provides funding for supplies, equipment, and capacity for Emergency Operations Centres.

**Forthcoming Funding Initiatives**

Canada-BC Safe Restart Plan: Details to be released after Provincial Election.

1. \$540M in funding for local governments:
  - a. \$425M for local government operations – Funding for COVID-19 impacts.

- b. \$100M Strengthening communities – Funding for vulnerable populations/homelessness.
  - c. \$15M for development services (Development Approvals Process Review).
- 2. Additional \$418M for community infrastructure – i.e., Community Economic Recovery Infrastructure Program (\$100M), tourism infrastructure, active transportation, connectivity, etc.
- 3. \$1.038B for Public Transit:
  - a. BC Ferries, BC Transit and TransLink will receive a one-time operating funding relief.

### **CONCLUSION**

The CRD recognizes grants are a supplementary funding source to address the needs of services provided to the region. The External Grants Update outlines how the CRD continues to integrate and consider these grant opportunities relative to service needs, as well as informing local partners of these opportunities through the grants dashboard. The CRD will continue to provide a summary of activities and outcomes in the External Grants Update on a monthly basis.

### **RECOMMENDATION**

The Governance and Finance Committee recommends to the Capital Regional District Board: That the CRD External Grants Update be received for information.

Submitted by:	Carlo Vijandre, PMP, FMP, ASCT Manager, Asset Management
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer























### **ATTACHMENT(S)**

Appendix A: External Grants Dashboard













Grants Administration Dashboard ➡ Externally Sourced Grant Funding

STATUS LEGEND:  Intent to apply    Work in Progress (  =delay)    Application Done - Outcome pending    Project Done (  =payment pending)    Application Declined    Links to information								
Grant Program Links		Application Deadline	Project	Status	Board Resolution	Comments	Grant Ask	% of Total Project Cost
GRANT APPLICATIONS IN PROGRESS	Disaster Mitigation and Adaptation Program	17-Jul-20	Construction of Regional and Sub-Regional Seismically Resilient Water Supply		N/A	IWS - Infrastructure Operations is the lead	\$ 36,900,000	42%
	CleanBC - BC Hydro Commercial Custom Program	N/A	Panorama Energy Recovery Project		N/A	PES - Panorama is the lead	\$ 200,000	7%
	Swim to Survive - Lifesaving Society	07-Jun-19	Swim to Survive Day Community Grant for SEAPARC		N/A	PES - SEAPARC is the lead	TBD	TBD
	FCM - Green Municipal Fund - Water Capital Projects	01-Mar-19	Core Area Wastewater Treatment Project		N/A	Ask for a \$3M grant in combination with a \$20M loan	\$ 3,000,000	0.4%
	Canada Nature Fund	15-Aug-18	Acquisition of land for preservation/park use		N/A	EOI submitted; details remain undisclosed	TBA	TBA
	Jumpstart Community Development Program	01-Feb-20	Swim Program for Indigenous Children and Youth		N/A	PES - Panorama is the lead. Postponed due to COVID-19.	\$ 2,692	TBC
	Island Health Community Wellness Grant	26-Feb-20	Lifeguard Academy for Indigenous Youth		N/A	PES - Panorama is the lead. Postponed due to COVID-19.	\$ 13,264	TBC
	Investing in Canada Infrastructure Program – Green Infrastructure – Environmental Quality Program	26-Feb-20	Juan de Fuca Water Distribution Service for Anderson Cove		12-Feb-20	IWS - Infrastructure Operations is the lead	\$ 1,460,000	71%
	Investing in Canada Infrastructure Program – Green Infrastructure – Environmental Quality Program	26-Feb-20	Magic Lake Estates Wastewater System Renewal		12-Feb-20	IWS - Infrastructure Operations is the lead	\$ 5,390,000	44%
	Connecting British Columbia (Network BC and Northern Development Initiative Trust)	15-Feb-20	TELUS applied to extend fibre optic connectivity in JDF		12-Feb-20	TELUS-CRD provided a letter of support/resolution	TBC	TBC
	Broadband Fund-Canadian Radio Television and Telecommunications Commission	30-Apr-20	TELUS applied to extend fibre optic connectivity in JDF		12-Feb-20	TELUS-CRD provided a letter of support/resolution	TBC	TBC
	BC Hydro Sustainable Communities Implementation Fund	12-Feb-20	Capital Region Electric Vehicle Infrastructure Road Map		N/A	PES - Environmental Protection - Climate Action	\$ 50,000.00	TBC
	2020 Emergency Operations Centres and Training Program-Community Emergency Preparedness Fund	13-Mar-20	Electoral Areas (JDF, SSI, SGI) EOC Supplies Procurement Project		8-Jul-20	Protective Services is the lead. Approved for \$25,000	\$ 25,000.00	100%
	Canada Summer Jobs	24-Feb-20	Summer student funding		N/A	Human Resources is the lead	\$ 110,376.00	TBC
























Grants Administration Dashboard ➡ Externally Sourced Grant Funding

STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information									
GRANTS APPLICATIONS IN PROGRESS	Municipal Asset Management Program-FCM	Continuous	Asset Life-Cycle Assessment Policy and Procedures		Required	Asset Management is the lead	\$	50,000.00	80%
	Government of Canada - Reaching Home Program	22-May-20	Additional Reaching Home COVID-19 Economic Response Plan Funding for Designated Communities and Indigenous Homelessness funding streams		Required	Regional Housing is the lead. Denied (Received \$1.9M in a new allocation)	\$	710,000.00	TBC
	Enabling Accessibility Fund-Small Projects	13-Jul-20	Improving Accessibility - Panorama Recreation & SEAPARC		N/A	Panorama and SEAPARC	\$	100,000.00	87%
	PlanH Healthy Communities Grant Program	15-Jul-20	Elevating the Conversation around Climate Change and Health in		N/A	Community Health Network and Planning	\$	15,000.00	85%
	PlanH Healthy Communities Grant Program	15-Jul-20	Panorama Strategic Planning Process 2021-2025		N/A	PES - Panorama is the lead	\$	15,000.00	61%
	Community Energy Financing - FCM	13-Aug-20	EOI: Regional Accessible Energy Retrofit Financing Study		Required	PES - Environmetal Protection - Climate Action is the lead. Application now in process.		TBC	TBC
	Investing in Canada Infrastructure Program-Community, Culture, and Recreation Stream	01-Oct-20	Elk/Beaver Lake Oxygenation System		9-Sep-20	Regional Parks is the lead	\$	700,000.00	42%
	Investing in Canada Infrastructure Program-Community, Culture, and Recreation Stream	01-Oct-20	Fernwood Elementary School Athletic Field Upgrades		9-Sep-20	SSI Administration is the lead	\$	646,587.00	73%
	Investing in Canada Infrastructure Program-Rural and Northern Communities Stream	22-Oct-20	Port Renfrew (\$1.6M), Maliview WWTP Upgrading (\$2M), and Lyall Harbour Boot Cove Water System Upgrades (\$600,000).		9-Sep-20	IWS and SSI Administration	\$	4,200,000.00	TBC
	Investing in Canada Infrastructure Program-CleanBC Communities Fund	12-Nov-20	Panorama Recreation Energy Recovery project		Required	PES - Panorama is the lead	\$	2,071,573.00	73%
	Active Transportation Planning Program	30-Oct-20	SGI Active Transportation Mapping Initiative		Required	SGI Administration is the lead	\$	10,000.00	100%
	New Horizons for Seniors Program	20-Oct-20	Community Garden Improvements at Greenglade Community Centre		N/A	PES - Panorama is the lead	\$	25,000.00	100%
	Building BC - Community Housing Fund	04-Sep-20	2780 Spencer Rd project in partnership with the Capital Regional Housing Corporation.		N/A	Regional Housing is the lead		TBC	TBC
	Community Economoic Recovery Infrastructure Program	29-Oct-20	Replace Roof - Historic Building in GVWSA (\$75,000), Emma & Felix Jack Park Cultural Heritage Project (\$5,000), and Revitalization of Greenglade Community Centre Outdoor Space (\$275,000)		N/A	Regional Water Supply, Mayne Island Parks and Recreation Commission, and Panorama Recreation.	\$	355,000.00	TBC
TOTAL GRANT ASKS IN PROGRESS (EXCLUDING CORE AREA LIQUID WASTE MANAGEMENT)							\$	90,190,096	




























Grants Administration Dashboard ➡ Externally Sourced Grant Funding

STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information									
CORE AREA LIQUID WASTE MANAGEMENT - GRANT FUNDING STATUS									
Grant Program Links		Contribution Terms and Purpose	Status	Board Resolution	Comments	Grant Award Maximum		Redeemed to Date	
CORE AREA GRANTS	Infrastructure Canada - 3P Funding Agreement (Federal funding)	Lesser of 25% of eligible costs or \$83.4M for a bio-solids energy centre treatment facility for wastewater sludge.				\$	41,000,000	\$	-
	Infrastructure Canada - Building Canada Fund (Federal funding)	Up to 50% of eligible costs to a maximum of \$120M for construction of the McLoughlin Point Wastewater Treatment Plant, marine outfall pipe, and completion of the Victoria Harbour crossing.			Funding agreements executed. Construction to start in April 2017 as per March 16, 2017 joint media release (Canada, BC, CRD)	\$	120,000,000	\$	108,000,001
	Infrastructure Canada - Green Infrastructure Fund (Federal funding)	Up to 50% of eligible costs to a maximum of \$50 M to upgrade Clover Point and Macaulay Point pump stations, implement attenuation tanks, and upgrade existing pump stations and piping systems.				\$	50,000,000	\$	45,000,001
	Provincial Funding	The lesser of 1/3 total cost (excluding land acquisition cost) or \$248M for construction of the wastewater treatment plant, the energy centre for sludge treatment, and conveyance system upgrades - all serving the Core Area.		08-Mar-17	CRD Board approved execution of the Provincial Agreement	\$	248,000,000	\$	186,000,000
	TOTALS					\$	459,000,000	\$	339,000,002

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STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information									
Grant Program Links		Dept.	Project Deadline	Project	Status	Lead	Project Cost (Estimate)		Grant Award
PROJECTS IN PROGRESS	<a href="#">Bike BC Cycling Infrastructure Program</a>	PES	30-Jun-21	E&N Rail Trail Phase 3: Atkins Ave. to Savory School		PES: Infrastructure Engineering and Facility Management	\$	4,157,536	\$ 1,000,000
	<a href="#">Community Resilience Through Arts and Culture Program</a>	CS	31-Jul-20	WASANEC Community Resilience Project		First Nations Relations	\$	15,000	\$ 12,000
	<a href="#">Building BC - Community Housing Fund</a>	PPS	2023	Caledonia Housing Project		CRD Housing is the lead. Application is also seeking mortgage subsidy of \$666,500 per year. Supported by CRHC resolution 24-Jul-2018.	\$	50,225,725	\$ 15,500,000
	<a href="#">Clean Water Wastewater Fund</a>	IWS	31-Mar-18	Port Renfrew Water Main Replacement Project		IWS - Infrastructure Engineering	\$	628,634	\$ 488,103
	<a href="#">Urban Deer Cost-Share Program</a>	PPS	15-Mar-19	Mayne Island Fallow Deer Management		PPS - Regional and Strategic Planning is the Lead	\$	52,930	\$ 18,500
	<a href="#">Abandoned Boats Program (Assessment)</a>	PES	31-May-20	Abandoned Boats Assessment: Sooke Harbour		Environmental Protection Division	\$	16,175	\$ 16,175
	<a href="#">Abandoned Boats Program (Assessment)</a>	PES	31-Mar-20	Capital Region Abandoned Boats Stewardship		Environmental Protection Division	\$	10,400	\$ 10,400
	<a href="#">UBCM Community to Community Forum</a>	CS	31-Mar-19	WSANEC Leadership Committee		First Nations Relations-project not completed.	\$	5,750	\$ 2,760
	<a href="#">UBCM Community to Community Forum</a>	CS	31-Mar-19	CAO - Band Administrators Forum		First Nations Relations-project not completed.	\$	2,167	\$ 520
	<a href="#">Strategic Wildfire Prevention Initiative - FireSmart</a>	PPS	31-May-19	Saturna - FireSmart Planning & Activities Grant		Protective Services	\$	10,000	\$ 10,000
	<a href="#">SSI Community Foundation</a>	SSI	01-Jun-19	For play equipment at Rainbow Pool		SSI Administration	\$	24,425	\$ 18,563
	<a href="#">Climate Action Revenue Incentive Program (CARIP)</a>	PES	01-Jun-20	Conditional grant report		PES - Climate Action	\$	69,928	\$ 69,928
	<a href="#">Regional District Grant 2019</a>	F&T	15-Jul-19	Regional District Grant - Unconditional		The Province announced the unconditional grants on 2019-06-26	\$	60,000	\$ 60,000
	<a href="#">National Disaster Mitigation Program (NDMP)</a>	PES	28-Oct-19	Gardom Pond Decommissioning		Facilities Management and Engineering Services	\$	490,850	\$ 460,000
	<a href="#">Island Pathways (SSI) grant from SSI Foundation</a>	PES	31-Dec-19	Development of the Booth to Baker Pathway		SSI Administration. Island Pathways obtained this grant from SSI Foundation to support CRD's work. Total cost to be confirmed.	\$	140,000	\$ 100,000

Grants Administration Dashboard ➡ Externally Sourced Grant Funding












STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information										
PROJECTS IN PROGRESS (con't)	Investment in Housing Innovation	PPS	<a href="#">31-May-20</a>	3816 Carey Road Affordable Housing Project		Regional Housing	\$	15,249,662	\$	7,156,662
	BC Hydro - Business Energy Saving Incentives Program	PES	31-Mar-20	Panorama LED lighting upgrade		PES - Panorama is the Lead	\$	60,000	\$	21,600
	Community Emergency Preparedness Fund	PPS	27-Mar-20	Evacuation Route Planning for Electoral Areas		Protective Services	\$	25,000	\$	25,000
	FCM Green Municipal Fund - Brownfield Renewal	WWTP	31-Mar-20	McLoughlin Point: Delineation of Groundwater, Bedrock and Soil Contamination		Core Area WWTP	\$	379,200	\$	175,000
	FCM Green Municipal Fund - Brownfield Renewal	WWTP	31-Mar-20	McLoughlin Point: Remediation and Risk Assessment		Core Area WWTP	\$	343,800	\$	171,200
	Infrastructure Planning Grant (2017)	PES	31-Mar-20	Bowker Creek Daylighting Feasibility Study		Stormwater-Harbours & Watershed: 10k each for CRD, Oak Bay, Saanich, Victoria)	\$	80,000	\$	40,000
	Victoria Foundation Community Grants	PPS	1-Apr-20	Connect & Prepare- Housing Tenant Support		PPS - Regional Housing is the Lead	\$	167,669	\$	20,000
	Community Resiliency Investment	PPS	30-Apr-20	FireSmart training in the Electoral Areas: Saturna, Pender, Juan de Fuca, SSI FireSmart Cross-Training		Protective Services	\$	100,000	\$	100,000
	SSI Community Foundation	SSI	1-Jun-20	SSI Portlock Park Soccer Goals		SSI Administration	\$	7,147	\$	6,146
	UBCM Federal Gas Tax - Strategic Priorities Fund	PES	30-Jun-20	SEAPARC Leisure Complex Expansion		SEAPARC	\$	3,410,406	\$	1,240,000
	FCM Green Municipal Fund - Pilot Project	F&T	31-Oct-21	Zero Emissions Fleet Initiative		Risk Management - Climate Action	\$	1,087,000	\$	350,000
	BC Rural Dividend	PES	22-Mar-21	Engineering Design for SGI Regional Trails		Regional Parks	\$	200,000	\$	100,000
	BC Rural Dividend	SSI	22-Mar-21	Shared Service Business Model		SSI Administration	\$	100,000	\$	90,750
	Invasive Plant Management	PES	31-Mar-21	Invasive Plant Management Project		Environmental Protection Division	\$	32,000	\$	32,000
	Abandoned Boats Program (Education and Awareness)	PES	31-Mar-20	Capital Region Abandoned Boats Stewardship		Environmental Protection Division. Received \$36,700.	\$	66,700	\$	50,000
	Infrastructure Planning Grant	SSI	31-Mar-21	North Salt Spring Waterworks Infrastructure Assessment		SSI Administration	\$	10,000	\$	10,000
	Child Care Space Creation Program	SSI	15-Apr-21	SSI PARC Licensed Preschool Child Care Space		SSI Administration	\$	296,460	\$	214,600
	Affordable Rental Innovation - CMHC	PPS	31-Dec-21	Regional Housing First Program		Regional Housing: Partners include CRD, BC Housing, CMHC at \$40M each.	\$	120,000,000	\$	120,000,000
	Reaching Home-Designated Communities	PPS	31-Mar-24	For community homelessness service projects		PPS: Regional Housing	\$	4,772,699	\$	4,772,699








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STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information									
PROJECTS IN PROGRESS (con't)	Reaching Home-Indigenous Homelessness	PPS	31-Mar-21	For community homelessness service projects		PPS: Regional Housing	TBC	\$	674,512
	Reaching Home-COVID-19 Response	PPS	31-Mar-21	For community homelessness service projects		PPS: Regional Housing	TBC	\$	3,231,049
	National Disaster Mitigation Program	PES	30-Jun-20	Capital Region Coastal Flood Inundation Mapping		PES - Environmetal Protection -Climate Action is the lead.	\$	750,000	\$ 705,000
	Island Health Community Wellness	PPS	1-Mar-20	Monitoring the Determinants of Health and Wellness in the Capital Regional		Community Social Planning Council	\$	50,000	\$ 50,000
	BC Hydro Sustainable Communities Program	PES	30-Sep-21	BC Hydro Community Energy Manager staff support		PES - Environmental Protection - Climate Action is the lead	TBC	\$	100,000
	City of Victoria Housing Reserve Fund	PPS	2023	Michigan Housing Project		PPS-Regional Housing-CRHC	\$	1,395,000	\$ 1,020,000
	Rick Hansen Foundation BC Accessibility Grants	PES	30-Sep-20	Panorama Accessibility Improvements		PES - Panorama is the Lead	TBC	\$	20,000
	Provincial Urban Deer Cost - Sharing Program	SGI	Summer 2020	Program to reduce fallow deer populations on Mayne Island		SGI Administration	TBC		TBC
	Pacific Institute for Climate Solutions Internship Program	PES	31-Dec-20	Climate action student intern		PES - Environmental Protection - Climate Action is the lead	TBC	\$	12,000
	UBCM-Community Emergency Preparedness Fund-Volunteer & Composite Fire Departments Equipment & Training	PPS	TBD	Joint CRD Volunteer Fire Department Equiptment and Training Project		PPS	\$	128,372	\$ 117,966
	UBCM-Community Resiliency Investment Program-FireSmart Community Funding & Supports	PPS	TBD	CRD Firesmart Project 2020		Parks and PPS	\$	50,900	\$ 49,900
	Community to Community Forum	PES	31-Mar-20	Watershed Management Engagement: Elk/ Beaver Lake		PES-Environmental Protection	TBC	\$	4,125
	UBCM Housing Needs Reports Program Grant	PPS	2021	Regional Housing Needs Report-Capital Region		CRD Development and Planning Advisory Committee	\$	150,000	\$ 150,000
	Community Child Care Space Creation Program	SSI	TBD	Multipurpose room for licensed child care and recreation programs		SSI Administration	TBC	\$	832,725
	Community Emergency Preparedness Fund - Emergency Support Services	PPS	2021	Electoral Area Equipment and Training for Emergency Support Services Modernization		Protective Services	TBC	\$	24,983
	BC Rural Dividend - Rural Community Development Grants	SGI	TBD	SGI Broadband Connectivity - Planning Project		SGI Administration	TBC	\$	50,000
GRANTS AWARDED as of October 12, 2020									
							\$	218,814,805	\$ 170,990,024









Grants Administration Dashboard ➡ Externally Sourced Grant Funding

STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information						
Grant Program Links		Launch Date	Application Deadline	Resolution Needed	Departments Alerted	Status
GRANT CALLS IN PROGRESS	Community Gaming Grant	Ongoing		Not applicable; CRD's role can be to support a not-for-profit in pursuing these grants.	All	 Grant alert sent. Featured in CRD Grants Weekly 2019-06-24
	Public Safety Programs		31-Aug-20			
	Human and Social Programs		30-Nov-20			
	Green Municipal Fund - Plans, Feasibility Studies, Pilot Projects Capital Projects	Ongoing	Ongoing	Depends on \$ value	Standing Item	
	Address Improvement Grant	Ongoing	Ongoing	Not Specified	IT	 Grant alert sent. Featured in CRD Grants Weekly 2019-07-12
	BC Hydro Sustainable Communities Program	Ongoing	Ongoing	N/A	Standing Item	
	Efficiency BC - Online hub of energy efficiency initiatives	Ongoing	Ongoing	N/A	Standing Item	
	Federal Gas Tax - Community Works Fund Update	Ongoing	Ongoing	N/A	Standing Item	Comprehensive CRD process in place for assignment of funds to Electoral Area Projects. Featured in CRD Grants Weekly 2019-04-05
	Ship-source Oil Pollution Fund	Ongoing	Ongoing	TBD	Standing Item	Grant alert sent; featured in CRD Grants Weekly 2019-05-03
	Ecological Gifts Program	N/A	Ongoing	Not Specified	All	Grant alert sent
	Family Violence Initiative	N/A	Ongoing	Not Specified	All	Grant alert sent
	Multi-sectoral Partnerships to Promote Healthy living and Prevent Chronic Disease – Canada’s Tobacco Strategy	N/A	Ongoing	Not Specified	All	Grant alert sent
	Federal Lands Initiative	N/A	Ongoing	Not Specified	All	Grant alert sent
	National Housing Co-Investment Fund (New Construction, Housing Repair and Renewal, and Rental Construction Financing)	N/A	Ongoing	Not Specified	All	Grant alert sent
	Sustainable Affordable Housing-Green Municipal Fund-FCM	N/A	Continuous	Required	All	Grant alert sent

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STATUS LEGEND:  Intent to apply  Work in Progress (  =delay)  Application Done - Outcome pending  Project Done (  =payment pending)  Application Declined  Links to information						
GRANT CALLS IN PROGRESS	Connecting British Columbia Program (Phase 3)	N/A	15-Sep-20	Not Specified	All	Grant alert sent
	AgriCompetitiveness Program	01-Jul-20	15-Sep-20	No	All	Grant alert sent
	Municipal Asset Management Program - FCM	N/A	22-Sep-20	Required	All	Grant alert sent
	Community Anniversaries-Building Communities Through Arts and Heritage	N/A	30-Sep-20	Not Specified	All	Grant alert sent
	Investing in Canada Infrastructure Program-Community, Culture and Recreation	25-Jun-20	01-Oct-20	Required	All	Grant alert sent
	Natural Resources Canada ISO 50001 Program	N/A	07-Oct-20	Not Specified	All	Grant alert sent
	Community Resiliency Investment Program	N/A	09-Oct-20	Required	All	Grant alert sent
	Urban Deer Management Cost-Share Program	N/A	16-Oct-20	Required	All	Grant alert sent
	UBCM-Housing Needs Report Program	N/A	16-Oct-20	Required	All	Grant alert sent
	Participatory Action Research Grants	Ongoing	16-Oct-20	No	Standing Item	Convene Grants and Investigate Grants upcoming deadlines of October 16, 2020
	Project Assistance: Arts Infrastructure Program-BC Arts Council	N/A	19-Oct-20	Not Specified	All	Grant alert sent
	New Horizons for Seniors Program	N/A	20-Oct-20	Not Specified	All	Grant alert sent
	Dementia Communtiy Investment	N/A	22-Oct-20	Not Specified	All	Grant alert sent
	Promoting Health Equity: Mental Health of Black Canadians Fund	N/A	22-Oct-20	Not Specified	All	Grant alert sent
	Investing in Canada Infrastructure Program-Rural and Northern Communities	25-Jun-20	22-Oct-20	Required	All	Grant alert sent

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GRANT CALLS IN PROGRESS	Community Economic Recovery Infrastructure Program	N/A	29-Oct-20	Required	All	Grant alert sent
	Green Municipal Fund - Community Energy Financing Program - Home Energy upgrades	30-Jun-20	30-Oct-20	Required	All	Grant alert sent
	Active Transportation Planning Program	N/A	30-Oct-20	Required	All	Grant alert sent
	Childcare BC New Spaces Fund	02-Jul-20	01-Nov-20	Required	All	Grant alert sent
	Museums Assistance Program-Canadian Heritage	Ongoing	02-Nov-20	No	All	Grant alert sent
	Community Emergency Preparedness Fund - Evacuation Route Planning-UBCM	N/A	06-Nov-20	Required	All	Grant alert sent
	Investing in Canada Infrastructure Program-CleanBC Communities Fund	12-Aug-20	12-Nov-20	Required	All	Grant alert sent
	Community Emergency Preparedness Fund - Structural Flood Mitigation Program-UBCM	N/A	20-Nov-20	Required	All	Grant alert sent
	Infrastructure Planning Grant Program	25-Jun-20	13-Jan-21	Required	All	Grant alert sent
	Community Emergency Preparedness Fund - Emergency Support Services	N/A	28-Jan-21	Required	All	Grant alert sent
	Community Emergency Preparedness Fund: Flood Risk Assessment, Flood Mapping & Flood Mitigation Planning-UBCM	N/A	26-Feb-21	Required	All	Grant alert sent
	Community Emergency Preparedness Fund: Emergency Operations Centres & Training	N/A	26-Mar-21	Required	All	Grant alert sent
	Local Food Infrastructure Fund	N/A	31-Dec-23	Required	All	Grant alert sent
	Municipal Natural Assets Initiative-Expressions of Interest	08-Oct-19	TBD	Not Specified	All	Grant alert sent

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STATUS LEGEND:  Intent to apply    Work in Progress (  =delay)    Application Done - Outcome pending    Project Done (  =payment pending)    Application Declined    Links to information

Funding Sources / Plans	Description	Possible Timing	Links
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FUNDING INITIATIVES: ONGOING SCAN	UBCM Funding and Resource updates 2020	List of Local Government Programs and Services	
	<div>GRANTS FORECAST</div> <p>See website links (<i>if available</i>) in the right-most column for program information available to date. Note that typically, infrastructure grants will require SHOVEL READY projects (e.g: Asset plan is current; design drawings and environmental assessments are complete; matching funding - usually 50%- is assigned.)</p> <div>UBCM Grants: Age-Friendly Communities, anticipated 2021 Community Energy Leadership Program (CELP) 2019 launched; Next round unknown Investing in Canada Infrastructure Program: COVID-19 Resilience Stream BC'S Restart Plan</div>		

**REPORT TO GOVERNANCE AND FINANCE COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

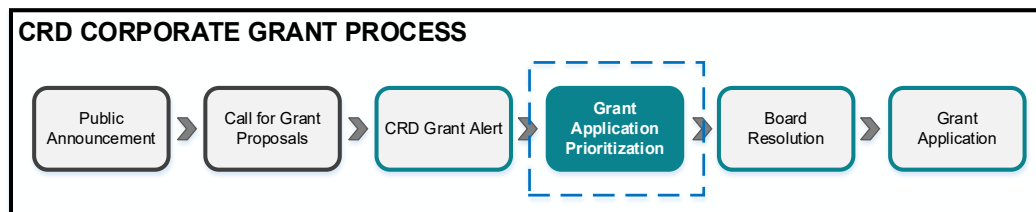
**SUBJECT**     **Grant Adjudication Process**

**ISSUE SUMMARY**

To provide an overview of the Capital Regional District (CRD) internal grant adjudication process.

**BACKGROUND**

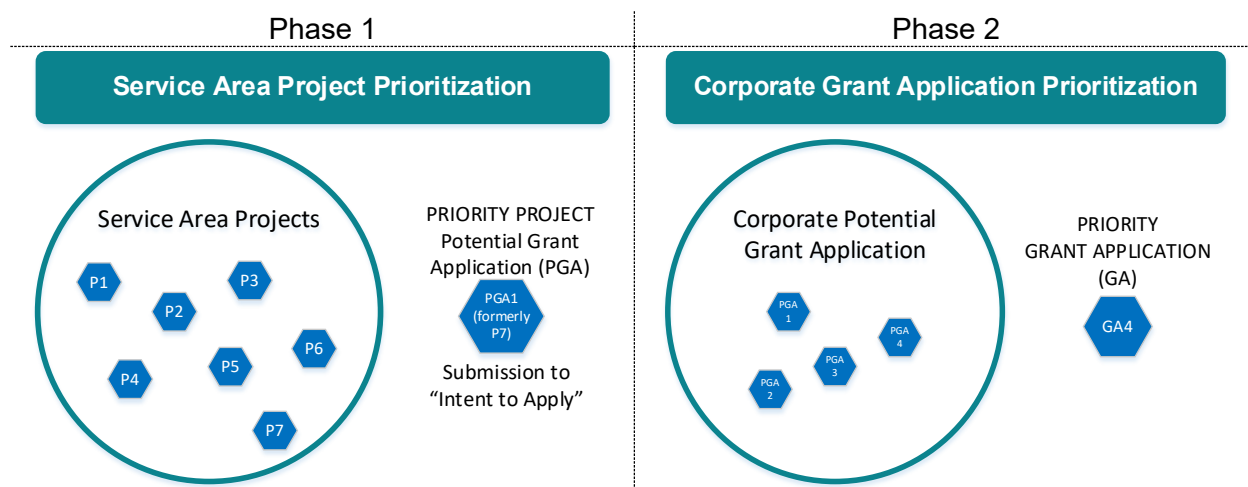
At the September 9, 2020, CRD Board meeting, staff was directed to report back on how the CRD evaluates grant applications for submission to funding programs. In a broad overview of a grant program's lifecycle, providers (i.e., federal & provincial government) first release public announcements regarding their upcoming funding opportunities. In response, grant alerts are prepared to inform CRD service areas of these opportunities. On a case-by-case basis, grant applications may need to be prioritized if there are multiple potential projects that can be submitted due to the complexities of how the CRD is structured. Once prioritization is complete, a request for a Board Resolution is made and endorsed, and development of the grant application proceeds.



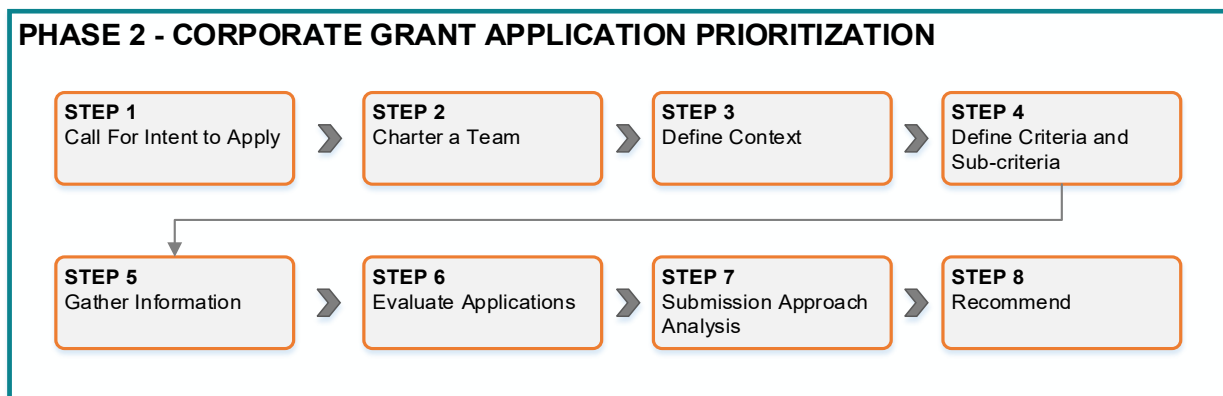
As grant programs vary in their funding type and scope, the structure, timing, and requirements, the grant application prioritization processes can also vary depending on these variables.

Within the context of the CRD, the grant application prioritization process is based on two phases:

1. Phase 1 Service Area Project Prioritization: Interested Services may have multiple projects within each service that are eligible for the grant and the Service will prioritize which project(s) to be put forward for a potential grant application.
2. Phase 2 Corporate Grant Application Prioritization: Once Services submit their potential grant application project(s) by registering their intent to apply with the completion of a Grant Proposal Review form, the potential grant application is then assessed to see which one(s) will be put forward for the grant opportunity.



The adjudication process undertaken in Phase 2 follows an eight-step model to decision-making as per the diagram below. For further details on the activities that occur at each step, please refer to Appendix A: Eight-Step Decision Model.



In principle, decisions need to be evidence/risk-based, transparent, holistic, and equally applied across each alternative. The decision-making model that is used in the grant application prioritization is the weighted-criteria based system, which is based on an ASTM standard E1765-16 Standard Practice for Applying Analytical Hierarchy Process to Multi-Attribute Decision Analysis. This approach provides the Board with structured, informed, and transparent recommendations.

In the case of the Investing in Canada Infrastructure Program (ICIP), seven projects met the funding program's criteria: three for Community, Culture and Recreation Stream (CCR) and four for Rural and Northern Communities Stream (RNC). In an effort to prioritize projects, keeping in mind grant history, program requirements, and project prioritization, the recommended alternative was to submit one grant application to each stream.

The information presented based on the decision-making process enabled good dialogue at the CRD Board level regarding the best approach in grant submission. As a result, and to ensure fair and equitable opportunities are granted in the Electoral Areas (EA), the Board made a decision

to submit one grant application from each EA; with each EA prioritizing a single application to put forth.

Decision-making as a whole is a complex and interactive process that is constantly updated and improved as lessons are learned. Using a decision-making model in the grant adjudication process can be helpful in making informed decisions that balance community needs through investing in projects that are a high priority while maintaining the level of service to the community.

### **IMPLICATIONS**

#### *Service Delivery*

Grant programs are historically oversubscribed. Staff follows a decision-making framework (Appendix A) to assess approaches and project proposals to ensure that the CRD is maximizing grant funding opportunities and maintaining the level of service. The goal is to be strategic in a grant submission approach to increase the likelihood on being awarded on CRD's best project. Equitable distribution in the province and recipient type make the possibility of multiple grant awards remote. To that end, staff examines proposals within the context of grant requirements, sustainable service delivery, and grant history in addition to ongoing consultations with Ministry.

### **CONCLUSION**

Grant programs in general are historically oversubscribed. The CRD aims to take a strategic and evidence-based approach in the grant application prioritization processes, in the event where multiple projects proposals are put forth for consideration. Factors that impact successful grant applications include availability of funds and their equitable distribution across the province as well as program alignment. Following a decision-making model allows for good dialogue and leads to evidence-based recommendations for the projects and applications that are being put forth to grant programs.

### **RECOMMENDATION**

The Governance and Finance Committee recommends to the Capital Regional District Board:  
That the Grant Adjudication Process report be received for information.

Submitted by:	Carlo Vijandre, PMP, FMP, ASCT Manager, Asset Management
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT(S)**

Appendix A: Eight-Step Decision-Making Model





Making a difference...together

## Appendix A: Eight-Step Decision-Making Model

### STEP 1

Call For Intent to Apply

#### STEP 1 Details

- A call for Grant Proposal Form is emailed out to CRD services to complete if the service is intending to apply for the grant.
- If only one grant proposal is received, there is no formal evaluation that occurs at a corporate level.
- If more than one grant proposal form is submitted, proceed to step 2.

### STEP 2

Charter a Team

#### STEP 2 Details

- Put together a team of 3-4 members to help create a decision model.

### STEP 3

Define Context

#### STEP 3 Details

- Staff proceeds in developing the decision model, by first defining the context to aid in defining the criteria used in Step 3.

### STEP 4

Define Criteria and Sub-criteria

#### STEP 4 Details

- Review the criteria registry and identify which ones would be relevant in informing the decision.
- Five to seven criterions is a good set to use, but if there is more than seven during the selection process, a pairwise comparison is performed to highlight which ones are the most relevant.
- Once a set of criteria is established, proceed to weighting the criteria by performing a pairwise comparison.
- Identify a sub-criteria under each criteria and perform a pairwise comparison under each criteria.
- Develop an evaluation scale for each sub-criteria.

### STEP 5

Gather Information

#### STEP 5 Details

- Consult with the Grant Program Advisors.
- Request information from services that is required to evaluate the grant applications.
- Sample information collected : Criticality, lifecycle cost, alignment with strategic plan, resource impact, climate impacts, etc.

### STEP 6

Evaluate Applications

#### STEP 6 Details

- Run the grant application through the decision model.
- Evaluate the results.
- Perform a sensitivity analysis by applying different weights to the criteria.
- Develop alternatives.

### STEP 7

Submission Approach Analysis

#### STEP 7 Details

- Team evaluates grant submission allowance.
- Team determines alternatives for submission approaches. For example, do we submit all applications or do we submit one strong application or do we submit one application per service.

### STEP 8

Recommend

#### STEP 8 Details

- Team agrees upon the recommended alternative regarding projects and submission approach.
- Team presents to Executive Leadership Team.

**REPORT TO GOVERNANCE AND FINANCE COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**     Youth Engagement in the Capital Regional District

**ISSUE SUMMARY**

To receive an overview of the Capital Regional District's (CRD) current engagement strategies with youth and outline potential future opportunities for increased engagement with youth.

**BACKGROUND**

At its September 9, 2020 meeting, the CRD Board directed staff to explore new youth engagement opportunities within the CRD, including consideration of collaboration with secondary and post-secondary educational institutions and municipalities.

Through a number of CRD programs and services, the CRD currently engages and collaborates with youth at both the operational and governance level, as set out in Appendix A. Other regional and local governments also have a range of programs directed at engaging and educating youth on civic issues, as identified in Appendix B.

With the roll-out of new provincial curriculum in the past two years for secondary students, there will be greater opportunities for youth to learn about local governance within their school environment. This will increase options for youth to learn more about the decision-making and important work that shapes their community.

**ALTERNATIVES**

*Alternative 1*

The Governance & Finance Committee recommends to the Capital Regional District Board:

That staff be directed to expand and enhance the CRD's youth engagement approaches as part of the organizational Diversity & Inclusion strategy, currently under development.

*Alternative 2*

The Governance & Finance Committee recommends to the Capital Regional District Board:

That staff be directed to bring forward an Initiative Business Case as part of 2022 service planning under the Community Need of Accountability related to increased collaboration and engagement with secondary and post-secondary educational institutions and municipalities.

*Alternative 3*

That this report be referred back to staff for additional information.

## **IMPLICATIONS**

### *Service Delivery Implications*

The CRD's mandate is developed through the Board's strategic planning and the organization's Corporate Plan and formalized where provincial authority requires, through service establishment bylaws with participating municipalities and electoral areas. As outlined in Appendix A, a number of services include educational programs with staff and resources undertaking programs particularly aimed at youth, as part of their existing mandate. There is no existing program or resources included within the General and Legislative functions of the CRD directly focused on general youth engagement. If the Board would like to make this a priority area, this could be brought forward as part of the annual check-in on the Board Strategic Plan with specific initiatives developed for consideration as part of the 2022 service planning process.

### *Education Implications*

In 2015, the provincial government introduced the [New BC Curriculum](#). In 2017/2018, the new curriculum for grades 10, 11 and 12 was implemented and included new local government learning areas of focus, covered in Social Studies 10 (core course) and Political Studies (elective course). Although the inclusion of local government is minimal in BC curriculum, it has increased in recent years.

At a post-secondary institution level, youth can be engaged through departmental programs and courses, as well as through student groups and events. The courses offered through post-secondary institutions vary, with the majority of courses related to civic literacy and local governance offered through the political science and public administration departments.

One example of specific youth engagement and education initiatives is the CRD's Environmental Education program. In 2010, the CRD established this program after it was identified as a strategic priority in 2009. With a commitment for a two-year term position, the program coordinated between internal departments, formed partnerships, and designed and delivered programs, resources and initiatives to assist educators, engage students and support local school-based events. The materials created and work developed through this program has transitioned to regular program staff who are responsible for ongoing revisions and program updates.

As we continue delivery of CRD environmental education programs, we develop and foster environmental stewardship and climate action among youth. With increased awareness of issues and acquired knowledge and skills, learners are empowered to take responsibility and action to reduce environmental impact. In addition, local school groups participate in programs and activities offered by a variety of CRD services.

### *Alignment with Board & Corporate Priorities*

Advocacy, Governance and Accountability is one of four Board Priorities; however the expansion of specific programs or the instruction of a broader based educational mandate aiming at increasing youth engagement is not identified as a related area of focus, other than within the context of current work underway on a Diversity and Inclusion Strategy.

Development of the Diversity and Inclusion Strategy is a corporate priority with work currently

underway. Recognition of the organization's commitment to diversity and inclusion was recently the focus of a resolution of the Board with the implementation of the diversity and inclusion statement on August 12, 2020. The organization-wide strategy will be developed to best ensure a broad array of groups, including youth, are included in engagement and participation opportunities.

### *Alignment with Existing Plans & Strategies*

Effective public participation is an integral part of a strong governance structure. The CRD currently works within the Board-approved public participation framework, which outlines levels of engagement based on objectives.

<b>Public Participation Spectrum</b>	<b>Inform and Educate</b>	<b>Gather Information</b>	<b>Discuss</b>	<b>Engage</b>	<b>Partner</b>
<b>Objective</b>	Information giving	Information receiving	Information sharing	Collaboration	Delegate power
<b>Level of Engagement</b>	Very low	Low	Medium	High	Very high

Engaging and consulting with youth in projects and initiatives, as well as increasing their participation in the decision-making process, could be expanded to involve additional strategies and tactics, including:

- Establishing formal roles for ongoing discussion and input, such as youth advisor, youth advisory committee, youth council, etc.
- Identifying youth as key stakeholders in consultations related to strategy development and priority setting.
- Developing partnerships with youth groups, agencies and education institutions.
- Engaging on social media platforms more common among youth, such as Instagram and TikTok, to build awareness of opportunities to participate.

Each of these strategies and tactics requires resourcing and time to build relationships. There are several local governments with dedicated resources supporting youth engagement and prioritizing youth participation. If a specific focus on youth engagement and education is confirmed as being part of the Community Need of Accountability provided for in Alternative 2, or is identified as a strategic priority of the Board at the annual check-in 2021, proposed strategies and initiatives could be developed as an Initiative Business Case as part of 2022 service planning.

## **CONCLUSION**

The CRD actively engages youth in environmental education programs, including waste and recycling, active transportation and parks programming. These programs are well used and constantly adapted to meet both student and educator needs.

If the Board wishes to increase youth engagement related to local governance education and civic literacy as a corporate priority under the Community Need of Accountability, service planning considerations can be made for increased and new service levels. From a corporate

priority perspective, enhancements to existing youth engagement will be considered as part of the Diversity and Inclusion strategy, which is currently under development.

### **RECOMMENDATION**

The Governance & Finance Committee recommends to the Capital Regional District Board:

That staff be directed to expand and enhance the CRD's youth engagement approaches as part of the organizational Diversity & Inclusion strategy, currently under development.

Submitted by:	Andy Orr, Corporate Communications Senior Manager
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENTS**

Appendix A: Youth Engagement Within the CRD Summary

Appendix B: Youth Engagement Outside the CRD Summary

## **APPENDIX A: YOUTH ENGAGEMENT WITHIN THE CRD SUMMARY**

**November 2020**

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The Capital Regional District (CRD) offers many educational programs and outreach events with the public that involve children, families and youth. Below are some examples of various service and program areas within the CRD that engage with youth on an annual and ongoing basis.

### **Arts & Culture**

The suite of [Arts & Culture](#) funding programs benefits the community by supporting the regional arts sector as an ecology. A points-based adjudication process results in the support of organizations producing a broad range of programming that may be aimed at general as well as at niche demographics. The CRD supports 15 organizations that are funded specifically for their youth programming.

### **Environmental Protection**

The CRD offers [registerable education programs](#) such as the [3Rs](#) (K-12), in-class presentations on [water conservation](#) and [harbours & watersheds](#) (K-6), water supply area tours (grade 4 and 5) and [regional parks](#) programs (pre-school to grade 5). Programs are also offered through our partnership with the Compost Education Centre.

Post-secondary programs include conferences such as Ready, Set, Solve. Online resources include videos on sustainability, as well as pollution prevention for automotive shops and the food industry.

### **Climate Action**

For the past number of years, the CRD and other local governments have funded the delivery of [school climate action programming](#) via BCSEA's [Cool It! Climate Leadership program](#), targeting grade 4-5 classes across the region.

Since 2016, the CRD has implemented [Walk and Wheel to School Week](#). This program, supported by Island Health and the CRD Traffic Safety Commission, encourages students to kick-off the school year with active, healthy, safe and low emission travel habits.

[Climate Action to Go kits](#) are available through local libraries and have been promoted to school districts and schools directly for use. Staff are aware of new high school focused climate action programming being led/facilitated by non-profits and will consider opportunities to support and/or embed local knowledge to these in 2021 and beyond.

### **Regional Parks**

In 2019, CRD Regional Parks held 160 [school programs](#) for students from pre-school to grade 5. Over 135 [family-oriented programs](#) were available publicly for all ages, plus 18 special events and 8 outreach community events.

### **First Nations Relations**

The CRD works with Living Lab, a group out of UVic that connects Indigenous youth to science-related curriculum. This partnership educates youth about work in the CRD's water quality lab to enhance understanding of careers in this area of study. Presentations on Harbours & Watersheds at the Songhees Academic Youth Leadership also share the CRD's work with youth.

## **Governance and Finance Committee – November 4, 2020**

### **Youth Engagement in the Capital Regional District**

CRD Regional Parks is developing Indigenous-based curriculum for school groups, and youth groups often visit regional parks to meet with staff and to learn what they're up to in the parks.

Some of the Nations the CRD works with have their own youth groups, or youth advisories that they support, which is a common theme heard from Nations about including youth in decision-making processes. The Victoria Urban Reconciliation Dialogue has spaces on its steering committee for youth, which is consistent with First Nations worldviews to increase collaboration with youth.

#### **Human Resources**

Over the past three years, the CRD has filled a total of 63 summer student positions as part of a Federal grant, mostly in parks and recreation roles. Recruitment strategies have been implemented at the CRD's three recreation centres, all with a focus on youth employment.

The CRD's Human Resources advisors participate in 4-5 career fairs annually with local universities, colleges, First Nations, and intercultural associations, all of which target youth and provide informal two-way engagement opportunities for students to learn more about what we do. The CRD also works with university and college co-op programs and has created a total of 26 opportunities since 2017.

#### **Regional Planning**

The CRD coordinates the [Ready Step Roll](#) program, an 18-month active school travel planning program that works to enhance student ability to walk, bike, bus, or roll to and from school. Ready Step Roll partners annually with five selected schools and their respective local government with jurisdictional authority for roads. Through the program, the CRD also partners with community stakeholders, such as Island Health, police forces, ICBC, local business and non-profits to deliver road safety and bike skill education to elementary and middle-school students.

The CRD also participates in an established youth advisory role (under 30) with the [Good Food Network Leadership Group](#).

#### **Recreation Centres**

The CRD operates three recreation centres: Panorama Recreation in North Saanich, the SEAPARC Leisure Complex in Sooke and the Rainbow Road Aquatic Centre on Salt Spring Island. Each facility offers a variety of recreation and sport programs geared towards youth. These include, but are not limited to, youth fitness classes, teen weight room orientations, junior golf lessons, advanced aquatic programs, home alone and babysitter courses, summer volunteer training, first aid training and more. Work placements are offered for high school students, as well as a Youth Commission Member position at Panorama, and support for local youth engagement initiatives.

## **APPENDIX B: YOUTH ENGAGEMENT OUTSIDE THE CRD SUMMARY**

**November 2020**

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The Capital Regional District (CRD) staff reached out to several local governments to inquire about their youth programs and engagement. Below is an overview of responses that were received.

### **City of Victoria**

Victoria city council approved the establishment of the [City of Victoria Youth Council](#) (CVYC) in April 2005. Youth Council offers opportunities for young people to get involved and act as young leaders in their community. They are a passionate group that takes action and raises awareness about important issues in the community and share youth perspectives and experiences with Victoria city council, city staff and citizens. Youth Council also meets annually with Victoria city Council and works with the City's Youth Strategy Coordinator to organize a specific youth-focused budget engagement event that ties in with the Budget e-Town Hall.

In 2017, the City of Victoria adopted a three-year [Youth Strategy](#) designed to get more youth involved in local government, give young people a voice in local government and be part of planning the future of their community. Written by a team of 10 youth between the ages of 12 and 25, it includes practical and creative initiatives that will help the City strengthen its relationship with youth and involve them in City activities.

The strategy includes more than a dozen ways for the City to involve youth in their municipal government, such as: developing a learning tool in partnership with the school district so children and youth are learning about the City in classrooms; opening a youth hub as a safe space for youth to hang out and find out about programs and services; creating a channel for direct two-way dialogue between City Council and youth; and getting more youth working at the City through mentorship and co-op programs.

### **District of Saanich**

Although there isn't a formal youth engagement strategy, Saanich incorporates youth engagement as part of their regular public engagement. Saanich has partnered with local schools as part of its Parks & Recreation [Youth Development Strategy](#) to build a multi-functional team to help develop the strategy and provide input. This included a series of surveys, appreciative inquiry activities and discussions to gather input. Saanich is also looking at ways to change its advertising and communications to target the youth market through targeted social media ads and language.

### **City of Vancouver**

The [Children, Youth and Families Advisory Committee](#) advises Vancouver city council and staff on matters that relate to children youth, and families. Its membership includes representatives from the Vancouver Public Library and the Vancouver Park Board.

### **Metro Vancouver**

There is currently not a formal Youth Advisory Committee in place; however, input from youth is valued and received in various ways, including through ongoing public consultation processes. A formal youth consultation event was held in 2018, seeking input from youth aged 15-30 years on regional climate and sustainability targets, which was well received. Youth are also engaged



**Governance and Finance Committee – November 4, 2020**  
**Youth Engagement in the Capital Regional District**

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though ongoing school and youth leadership programs and through [Youth4Action](#) to develop programs targeting youth. Metro Vancouver continues to consider more opportunities to involve and seek input from youth.

**Regional District of Nanaimo**

Currently does not have a designated youth engagement or a governance role for youth in the region; however, they are always welcome and encouraged to participate.

**REPORT TO HOSPITALS AND HOUSING COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**     Reaching Home Additional COVID Funding

**ISSUE SUMMARY**

An information report is being provided to update the Capital Regional District (CRD) Board on the allocations of the \$1,918,197 in additional COVID-19 emergency response funding from Reaching Home – Canada's Homelessness Strategy, to support the region's COVID-19 response capacity for those experiencing or at risk of homelessness.

**BACKGROUND**

The CRD is designated by the Government of Canada as the Community Entity to administer this funding, and provides financial contributions through sub-project agreements to non-profit organizations based on a Community Plan, which is approved by a Community Advisory Board (CAB). Through an Agreement with the Government of Canada, the CRD is currently administering \$870,753 in the Designated Communities funding stream and \$337,256 in the Indigenous Homelessness funding stream in 2020-2021.

On March 18, 2020, the Prime Minister announced the Government of Canada would be providing Reaching Home with an additional \$157.5 million (M) under Canada's Economic Response Plan to Support People Experiencing and at Risk of Homelessness during the COVID-19 outbreak. The initial 2020-2021 incremental COVID-19 funding allocation in the Victoria Census Metropolitan Area was \$1,312,852 (\$917,880 Designated Communities and \$394,972 Indigenous Homelessness funding). Approximately 98% of this funding has been allocated to projects providing urgent services to people experiencing or at risk of homelessness.

On October 10, 2020, the CRD was notified that the Government of Canada had allocated an additional \$236.7M of COVID-19 emergency response funding and that the CRD would be receiving an additional \$1,918,197 to support efforts to respond to the pandemic's impact on vulnerable populations in the region. The breakdown of funding is as follows:

- \$1,341,107 allocated under the Reaching Home Designated Communities funding stream.
- \$577,090 allocated under the Reaching Home Indigenous Homelessness funding stream.

This funding will be added to the statutory agreement that the CRD already has with the Government of Canada. The funding can be used for a range of needs such as purchasing beds and physical barriers for social distancing, providing services to people forced to shelter outdoors and securing accommodation to reduce overcrowding in shelters. Communities have flexibility to use the new funding to meet local needs and priorities. This funding is focused on three priorities:

1. Extend COVID-19 measures for those experiencing homelessness;
2. Find permanent housing for those temporarily housed; and
3. Help communities to reduce the inflow into homelessness, including homelessness prevention and shelter diversion activities.

On April 28, 2020, the CAB approved the Reaching Home Program COVID-19 Funding Strategy (Appendix A) which addressed three key priority areas for action.

1. Short-term sheltering and support programs for people currently without shelter and at risk of infection from the COVID-19 virus;
2. Keeping individuals stably housed and/or sheltered during the emergency response period; and
3. Ensuring individuals and households in Reaching Home Program funded programs have short-term access to goods and/or services to meet basic needs to which access may have been disrupted due to the emergency response to protect against COVID-19 contagion.

In order to allocate the funding in a timely manner, the Strategy supports a contracting approach to distributing the funding and CRD staff have been working with local coordinating bodies to identify programs and or projects requiring funding to address these priorities. The CRD has recommended to the CAB that this approach be sustained to support use of the new funding.

CRD staff have been engaged with Reaching Home funded programs as well as organizations and groups in four geographic areas (Victoria, Sooke, Sidney and Salt Spring Island) and local First Nations to identify needs and has subsequently received and has allocated funding to a number of community based initiatives (see Appendix B).

CRD Regional Housing, through the CRD's Regional Emergency Operations Centre (EOC), is facilitating a Regional EOC Vulnerable Populations Working Group to support a coordinated response with local government, other levels of government and community agencies.

## **ALTERNATIVES**

### *Alternative 1*

The Hospitals and Housing Committee recommends to the Capital Regional District Board: That the COVID-19 Additional Reaching Home Funding report be received for information.

### *Alternative 2*

That the COVID-19 Additional Reaching Home Funding report be referred back to staff for further information based on Hospitals and Housing Committee direction.

## **IMPLICATIONS**

### *Intergovernmental Implications*

#### Provincial Government

Staff is working closely with BC Housing, Social Development and Poverty Reduction (SDPR), and Island Health to coordinate the use of the Reaching Home COVID-19 funds in accordance with the *COVID-19: Joint Provincial Program Framework for Emergency Response Centres*.<sup>1</sup>

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<sup>1</sup> <https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/covid-19/covid-19-pho-guidance-joint-povincial-program-framework-for-ercs.pdf>

#### First Nations

The CRD has reached out to the nine First Nations within the CRD boundaries and CRD staff are working with a number of these communities to look at possibilities for supporting initiatives that are not covered by other Government of Canada funding available to First Nations during the emergency.

#### *Social Implications*

Engagement within various coordinating bodies has helped identify opportunities to address the social needs of people in four key areas within the region.

#### *Financial Implications*

The CRD, in its role as Community Entity for the Reaching Home Program, has the capacity to effectively manage these funds.

#### *Alignment with Board & Corporate Priorities*

This work aligns with Board priorities related to community wellbeing and corporate priorities related to housing and homelessness.

#### *Alignment with Existing Plans & Strategies*

This work aligns with the goals and objectives of the Regional Housing Affordability Strategy.

### **CONCLUSION**

The CRD is receiving \$1,918,197 in additional funding from Reaching Home – the Government of Canada's Homelessness Strategy, to support the region's COVID-19 response capacity for those experiencing or at risk of experiencing homelessness. CRD staff have worked effectively with the CRD EOC, CAB and community and government partners to implement a Strategy for equitable distribution of this funding where people have been identified as experiencing or at risk of homelessness. This funding will help extend these efforts into next year and will facilitate the funding of new responses needed as the COVID-19 pandemic evolves.

### **RECOMMENDATION**

The Hospitals and Housing Committee recommends to the Capital Regional District Board:  
That the COVID-19 Additional Reaching Home Funding report be received for information.

Submitted by:	John Reilly, MSW, RSW, Manager, Housing Initiatives and Programs
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENTS**

Appendix A: Reaching Home Program COVID-19 Funding Strategy  
Appendix B: 2020-21 Reaching Home Covid-19 Contracts



**Reaching Home Program  
COVID-19 Funding Strategy  
April 28, 2020**

## **Introduction**

The COVID-19 pandemic has created significant disruption in the social and economic systems and presents a real threat to the health and lives of people around the world. People who are homeless share common vulnerabilities to contagion and are likely to suffer more acute impacts if they contract the virus due to pre-existing health conditions. In order to support efforts to address the needs of people who are homeless during this crisis, the Government of Canada is providing \$1.312 million in funding to the capital region through a special Reaching Home Program (RHP) COVID-19 Response.

To support this initiative, the CRD has signed an agreement with the Government of Canada and, as Community Entity (CE), has been asked to work with the Greater Victoria Community Advisory Board and other stakeholders to identify ways to enhance the Reaching Home investment strategy and Community Plan to incorporate measures that address the emergent needs of people experiencing or at risk of homelessness during the COVID-19 pandemic.

## **Goal**

Provide clarity and direction in the leveraging of RHP COVID-19 funding into coordinated actions with government agencies, health and social services, housing providers and community initiatives that support the strategy's priorities.

## **Objectives**

1. Provide guidance and support to the Reaching Home Community Advisory Board (CAB) in recommending processes for allocating RHP COVID-19 funding.
2. Provide a strategic framework that allows flexibility and responsiveness in assessing and allocating funding requests for services and goods eligible under the RHP COVID-19 Directives.
3. Support an equitable distribution of funding geographically to meet differential levels of need throughout the region.
4. Provide for transparency and accountability to organizations seeking RHP COVID-19 funding.
5. Ensure that a proportional level of funding is allocated to initiatives to address the needs of Indigenous people, who are overrepresented among homeless populations.
6. Meet Government of Canada requirements related to the RHP COVID-19 funding being allocated according to the RHP COVID-19 Emergency Response Plan.

## **Priority Areas**

1. Support the establishment of short-term sheltering, support services and provision of goods that ensure people who are unsheltered in the region can meet their basic needs and are adequately protected against contracting and the spread of COVID-19 during the provincial and national emergency.
2. Protect against increasing the number of people who are unsheltered in the region by providing short-term supports that ensure stable and continuous access to housing and shelter for individuals and households who are determined to be in need during the period of the provincial and national COVID-19 emergency.
3. For the period of the COVID-19 emergency, provide people who are at risk of losing access to housing or shelter due to financial hardship with short-term access to goods and/or services that

address basic and/or personal needs and for which access has been disrupted or threatened due to job/financial losses or emergency measures related to the COVID-19 crisis.

## Strategy

### *Jurisdictional Approach*

The \$1.312 million in funding is provided in two envelopes, Designated Communities and Indigenous Homelessness. After removing the \$48,000 required to administer the funding agreement, there is \$1.264 million available to support the community response to COVID-19. According to new Government of Canada policy, by First Nations can access Designated Communities funding to support programs delivered on-reserve and Indigenous Homelessness funding to support programs delivered off-reserve.

According to the 2018 Point in Time Count, approximately 30% of the current population of homeless people in the region identify as Indigenous. The proportion of RHP funding allocated to the CRD under the Indigenous Homelessness stream is approximately \$380,000, which aligns with the proportion of Indigenous people experiencing homelessness in the region.

The Strategy also aims to allocate the \$884,000 Designated Communities funding equitably on a geographic basis, taking into consideration the proportion of people identified as unsheltered in four key areas throughout the region. A summary of the needs and estimated proportion of RHP COVID-19 funding available to address needs in each of these geographic areas is summarized in Appendix 1. These total allocations may fluctuate on the basis of identified need and capacity to leverage other funding within the different jurisdictions. It should also be noted that funding allocations may fluctuate with changing needs due to the economic and social impacts of a potentially prolonged emergency time period.

### *Coordinating Funding*

The Reaching Home Funding will be allocated in ways that align with other funding and resources available to individuals and organizations under a variety of provincial and federal initiatives. CE staff will collaborate with provincial and federal partners as well as non-profits to ensure individuals are able to access the supports they need and will work to align RHP investments with other programs, including:

#### Province

- [COVID-19: Joint Provincial Program Framework for Emergency Response Centres](#)
- [BC Emergency Benefit for Workers](#)
- [COVID-19 Support for Income & Disability Assistance](#)
- [Temporary Rental Supports](#)

#### Government of Canada

- [Canada's COVID-19 Economic Response Plan](#)
- [Indigenous Community Support Fund](#)
- [Supporting women's shelters and sexual assault centres during COVID-19](#)
- [Canada Emergency Response Benefit](#)
- Temporary Emergency Wage Subsidy

The estimated costs presented in Appendix 2 to address Priority 1 needs are based on preliminary engagement and discussions with other government agencies, most notably, BC Housing and Island Health. Every effort will be made to ensure the Reaching Home funds are used to complement funding available from other government agencies and to fill resource gaps and not to replace funding that should be delivered through other provincial or federal programs.

CE staff are also working closely with Victoria Foundation and the United Way of Greater Victoria staff to identify ways that charitable contributions can help augment and leverage the Reaching Home funds to most effectively and efficiently meet community need.

#### *Indigenous Homelessness*

The CRD has worked with the Homelessness Service Providers Network that was assembled by the Aboriginal Coalition to End Homelessness to provide information on the services and goods that could be funded through this initiative and to identify possible areas for funding. A draft of this Strategy as well as the requests for Indigenous Homelessness funding were reviewed by the CE's Indigenous Review Panel.

The CRD has reached out to First Nations located within the region informing them of the opportunity to access funding through Reaching Home. At this early point, the CRD has already received interest from three of nine First Nations expressing an interest in supporting both on and off reserve initiatives. The CRD will be following up with all interested Nations to explore their needs and determine potential allocations to help address their populations during the emergency period.

#### *Current RHP Funded Programs*

In early March, Employment and Social Development Canada (ESDC) indicated that CEs were able to work with their existing funded programs to repurpose Designated Communities and Indigenous Homelessness funding in 2020-2021 to help address issues facing individuals due to the COVID-19 crisis. Shortly after, ESDC announced the additional COVID-19 funding stream and have since provided Directives to support the delivery of this funding to organizations supporting people who may face threats to their housing stability due to the impact of the COVID-19 pandemic.

In early April, the CE asked RHP funded agencies to submit requests for support. The CRD received three requests which will be assessed and considered for funding. These requests predominantly focus on Priority 2 and 3 areas of this Strategy and will be considered once the needs within the Priority 1 area are assessed and funding allocated accordingly.

#### *Contingency Measures in a Prolonged Emergency*

Preliminary estimates suggest that there is likely sufficient funding to effectively respond to Priority 1 needs for a three month period and support some Priority 2 and 3 needs that have been identified by currently funded agencies. However, First Nations needs have yet to be fully determined, which could will likely increase the draw on both Designated and Indigenous funding streams. Should this emergency situation be prolonged, there is not likely enough capacity to sustain the current estimated level of support required to meet all three priority areas beyond an additional 30-45 days.

#### *Administration*



Considering the substantial level of mobilization underway in the four geographic areas and within First Nation communities, the CRD, as CE, is working with local EOCs, BC Housing, Greater Victoria Coalition to End Homelessness (GVCEH), First Nations and non-profits to assess need. The Government of Canada does not require a RFP process, hence the CRD is taking a contracting approach in order to expedite funding to already identified needs. This aligns with CRD procurement policies and provides appropriate cost control and accountability measures in disbursement of the funding. An Administrative Coordinator will be hired for a six month period to manage, track and report on the use of the RHP COVID-19 funding and a small amount will be used to support program expenses and a required audit of the file. Total administration costs will be approximately \$48,196, requiring only 3.7% of the overall funding available.

## **Conclusion**

The provision of additional funding by the Government of Canada through Reaching Home to assist people experiencing or at risk of homelessness during the COVID-19 pandemic is greatly needed and will augment funding commitments from other levels of government as well as funding available through local charitable institutions. A great deal of information on need and the resources required to assist this population has already been gathered and has informed the development of this Strategy. At the same time, conditions and circumstances are changing rapidly in the community, and a flexible, time-sensitive processes is required to leverage this funding into the community.

This Strategy provides a foundation for transparency and accountability in the disbursement of this funding, and provides clarity to other funders in understanding the priorities and targets for the use of Reaching Home funds. Changing needs will be monitored over time and the CAB will be provided with regular reports on the ongoing allocation of funding, capacity of the fund to meet emerging future needs as well as progress made toward protecting this vulnerable population as the COVID-19 pandemic evolves.

**Appendix 1 – Potential Allocation by Jurisdiction – Designated Communities\* (Based on Proportion of Estimated Number of People Unsheltered in each Jurisdiction)**

<b>Jurisdiction</b>	<b>Summary of Needs</b>	<b>People Unsheltered</b>	<b>Proportion of Need</b>
<b>City of Victoria</b>	<ul style="list-style-type: none"> <li>Approximately 300 people are sheltering outdoors in several locations with supports being provided by various providers. GVCEH is managing outdoor sheltering space at Topaz Park.</li> <li>BC Housing and the City of Victoria have secured 200 hotel rooms of which 120 have been allocated. The remainder are being held for potential health needs in the case of contagion.</li> <li>Island Health is establishing a triage station to support testing of individuals.</li> <li>Island Health and BC Housing are coordinating staffing through their own organizations and contracting to provide supervision, support and harm reduction.</li> <li>A search for an indoor sheltering site by BC Housing continues, however no viable opportunity has materialized as of yet.</li> </ul>	420	81%
<b>District of Sooke/ Juan de Fuca EA</b>	<ul style="list-style-type: none"> <li>Approximately 45 individuals have been identified as being in need in the area.</li> <li>SEAPARC has been approved by Emergency Management BC (EMBC) as an indoor shelter and the CRD has established a licensing agreement with BC Housing to use the site.</li> <li>BC Housing is entering into an agreement with Sooke Region Communities Health Network to operate the shelter.</li> <li>Aids Vancouver Island has been approached to provide harm reduction services.</li> </ul>	45	9%
<b>Town of Sidney</b>	<ul style="list-style-type: none"> <li>The Town has opened an EOC and a shower facility has been opened in Iroquois Park and public washrooms are open and being cleaned daily and approximately 6-10 people are using the showers on a daily basis.</li> <li>Tenting has started to take place near Iroquois and Tulista Parks.</li> <li>RCMP estimate up to 20 individuals in need in the peninsula area.</li> <li>BC Housing and Social Development and Poverty Reduction staff attended to the cohort on Friday, April 20.</li> </ul>	20	4%
<b>Salt Spring Island</b>	<ul style="list-style-type: none"> <li>The seasonal shelter operated by SSI Community Services (SSICS) had to reduce capacity to meet COVID-19 distancing requirements and has allowed outdoor tent sheltering on the property they own on Drake Road.</li> <li>BC Housing is working with local authorities to look at different options for sheltering.</li> <li>SSICS has asked CRD to consider outdoor tent sheltering on its Drake Road property.</li> <li>Regional Housing staff have recently joined the EOC meetings and was recently asked to facilitate a task force that would report to the SSI EOC group on progress toward achieving indoor shelter on the Island.</li> </ul>	30	6%*
<b>Total</b>		<b>515</b>	<b>100%**</b>

\* According to ESDC policy, this amount is only available after opportunities to access Reaching Home funding have been exhausted through the Rural and Remote program.

\*\* According to recently announced changes to ESDC policy, First Nations can also access Designated Communities funding for on-reserve programs. As requests are received, they will need to be evaluated.

## **Appendix 2 – Estimated Needs by Strategy Priority Area**

The CRD has been working with GVCEH partners, government agencies, health providers, non-profits and other stakeholders to identify key services and goods needed to support people experiencing and at risk of homelessness during the COVID-19 crisis. Some of the types of services and goods for which contracts may be entered into are listed below.

### **Priority 1 - Unsheltered:**

- **Staffing – outreach, shelter personnel**
- **Contracted services**
  - **Food service prep and delivery**
  - **Site cleaning and maintenance**
  - **Laundry**
  - **Harm reduction (supervised and managed substance use)**
- **Food**
- **Supplies and equipment – bedding, tents, linens, personal protective equipment**
- **Safety and security**

### **Priorities 2 and 3 – Remain Sheltered and Basic Needs:**

- **Outreach staffing**
- **Shelter cost supplements**
- **Moving expenses**
- **Food, supplies and delivery**
- **Administration**

2020-21 Reaching Home COVID-19 Contracts							
Organization	Funding Stream	Description	Start Date	End Date	Designated Funding (\$)	Indigenous Funding (\$)	Total Contract Funding (\$)
Threshold	Designated	Place youth in temporary, transitional accommodations for self-isolation purposes when needed; provide time-limited financial assistance for rent arrears, utilities, food cards, and other related expenses caused by lay-off or work shortage; provide emergency funds for grocery, hamper and delivery transportation; procure additional cleaning supplies, hygiene products, and PPE equipment; provide weekend remote counselling sessions for youth; and provide staff training to existing staff to reduce risk of Covid-19.	April 1, 2020	March 31, 2021	\$41,446	\$0	\$41,446
Peers	Designated & Indigenous	<b>Designated:</b> Mobile outreach worker (0.6 FTE) to unsheltered individuals and residents of motels to address gap in support to homeless individuals offered space in non-symptomatic motels who require more intensive support to reduce time in the community and be comfortable in their units. Anticipate supporting 10-15 individuals. Some funding will go to basic supplies and eviction prevention supports for current Reaching Home clients. <b>Indigenous:</b> Indigenous housing support worker (0.8 FTE) to support homeless or unsheltered Indigenous women and two spirit individuals to successfully transition into motel environments and other temporary housing while also participating in cultural initiatives led by the Aboriginal Coalition to End Homelessness including the care package delivery program, shelter and Spa’Qun House. It is anticipated that Indigenous housing support worker will provide intensive caseload support to 15-20 persons in six months, and should the need be higher, the existing Reaching Home staff will also provide support. Provided a letter of support from ACEH.	June 1, 2020	November 27, 2020	\$51,246	\$21,962	\$73,208
Dandelion Society	Designated	Reimbursement of costs of services to people sheltering in Topaz Park in the early days of the COVID19 response.	April 1, 2020	April 30,2020	\$23,223	\$0	\$23,223
SRCHN	Designated	Contribute to daytime staffing at SeaParc Leisure Complex to temporarily shelter up to 45 individuals.	April 1, 2020	June 30, 2020	\$51,900	\$0	\$51,900
Jones BBQ	Designated	Funding for 3,410 meals for the Boxes of Hope food distribution program to homeless persons sheltering at Topaz Park during the Covid-19 pandemic, along with 3 days of meals for unsheltered persons.	May 10, 2020	May 24, 2020	\$34,086	\$0	\$34,086
AVI Victoria	Designated & Indigenous	For people who are unsheltered, coordinate and facilitate ongoing access to drinking water, food, hygiene and health supplies, sheltering supplies, clothing, bathrooms, showers, handwashing, laundry, health and harm reduction services, fire safety supplies and plans, or waste management. A combination of on-site resident facilitators, IHRT outreach staff, PK outreach staff, a PK volunteer coordinator and an IHRT/PK project coordinator will be funded. In addition to materials and supplies, an alcohol program and a laundry program will be organized and delivered.	July 1, 2020	March 31, 2021	\$325,466	\$139,486	\$464,952
AVI Sooke	Designated	Westshore AVI Health Centre will provide nursing care, liaise for optimum medical care, provide social work services, provide expertise and consultations to shelter staff, provide harm reduction resources, and facilitate opportunities for personal growth/wellness activities.	April 1, 2020	March 31, 2021	\$136,805	\$0	\$136,805
Sooke Shelter Society	Designated	Funding will supplement rental costs for people exiting the SeaParc shelter, for a period of 3-6 months for 5-10 individuals. Supports up to \$275/month for 3 months, with reassessment for another 3 month term based on extenuating circumstances.	June 1, 2020	March 31, 2021	\$9,060	\$0	\$9,060
Connections Place	Designated	Connections Place will purchase assets such as laptops and cellphones to increase communication potential and connectivity with clients/members and the community as well as Personal Protective Equipment in order to provide in-building service delivery, address a greater need for outreach-related activity to help members/clients maintain health and wellness and to promote physical distancing and safe operating practices	April 1, 2020	July 31, 2020	\$9,430	\$0	\$9,430
Burley Cleaning	Designated	Cleaning washrooms at Topaz Park for April-May 2020, supporting people sheltering in Topaz Park.	April 1, 2020	May 21, 2020	\$37,263	\$0	\$37,263
Woosah Cleaning*	Designated	Cleaning showers at Topaz Park for May 1-10, 2020, supporting people sheltering in Topaz Park.	May 1, 2020	May 20, 2020	\$22,526	\$0	\$22,526
Red Cedar Cafe*	Designated & Indigenous	Red Cedar Cafe non-profit meal program, in partnership with volunteers from LLEOHN grassroots network of people with lived experience of homelessness will provide 120 meals made by RCC and delivered by LLEOHN once per day to outdoor sheltering sites selected by LLEOHN. Site selection will be based on camper feedback about access to other food options and input from other groups working with people living outside. Meals will be hot and nutritionally dense, and will be delivered in FoodSafe manner. \$7/meal budget includes all costs.	October 1, 2020	March 31, 2021	\$107,016	\$45,864	\$152,880
VNFC	Indigenous	Provide food baskets to 47 households in Siem Lelum and Fernwood House (supportive housing), taxi transport from grocery stores, cultural supplies for acitvities families can do in their units, rent coverage for 3 months for unemployed, prepaid cell cards, shaw wifi hotspot, security system installation and cameras.	April 1, 2020	March 31, 2021	\$0	\$82,489	\$82,489
ACEH	Indigenous	The ACEH will provide Indigenous Outreach services, a Managed Alcohol Program for 10 people at a shelter, and support indigenous peoples living rough or precariously housed to transition into housing, while also providing basic care kits with water, sanitizer, fruit, and cultural supplies.	April 1, 2020	March 31, 2021	\$0	\$64,468	\$64,468
Total Funding Allocated:					\$849,467	\$354,269	\$1,203,736
Total Funding Available:					\$863,317	\$371,588	\$1,234,905
Remaining Funding Unallocated					\$13,850	\$17,319	\$31,169



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## REPORT TO HOSPITALS AND HOUSING COMMITTEE MEETING OF WEDNESDAY, NOVEMBER 04, 2020

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**SUBJECT**     Regional Housing First Program: Project Update, Third Quarter 2020

### **ISSUE SUMMARY**

This report is in fulfillment of the Hospitals and Housing Committee request that staff provide a quarterly update on Regional Housing First Program (RHFP) projects.

### **BACKGROUND**

The RHFP partnership was formed in 2016, through which the CRD, BC Housing Management Commission and Canada Mortgage and Housing Corporation committed \$30 million (M) each to build housing units that would be used to address chronic homelessness in the region.

In 2020, the partners committed to increasing their contributions by \$10M each to address escalating land acquisition and construction costs. The total capital fund now available is \$120M and better positions the program to achieve the development of up to 400 units that rent at provincial assistance shelter rates. Within the mixed market model, the program is expected to build up to 2,000 units in total, of which the remaining non-RHFP housing units will operate as affordable rental. Overall, the program is expected to leverage the development of approximately \$600M in capital developments in housing.

### **ALTERNATIVES**

#### *Alternative 1*

The Hospitals and Housing Committee recommends to the Capital Regional District Board: That the Regional Housing First Program: Project Update, Third Quarter 2020 report be received for information.

#### *Alternative 2*

That the Regional Housing First Program: Project Update, Third Quarter 2020 report be referred back to staff for additional information.

### **IMPLICATIONS**

#### *RHFP Program*

Appendix A summarizes progress in the development of the nine RHFP projects that have previously received preliminary project approval by the CRD Board. These projects represent a total of 960 units with 226 to be rented at the provincial income assistance shelter rate.

#### *Financial*

These projects have been approved to receive a total of \$66,675,000 in RHFP funding.

### **CONCLUSION**

The project summary provides the Hospitals and Housing Committee with an update on the progress of nine previously approved RHFP projects. In doing so, it fulfills the request that the Committee receive quarterly progress reports on the advancement of the program.

### **RECOMMENDATION**

The Hospitals and Housing Committee recommends to the Capital Regional District Board:  
That the Regional Housing First Program: Project Update, Third Quarter 2020 report be received for information.

Submitted by:	John Reilly, Manager, Housing Planning, Policy & Programs, Regional Housing
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: Regional Housing First Program: Project Update, Third Quarter 2020

Description	Total Estimated Project Cost	RHFP Contribution	Partner Agency Funding RHFP	RHFP Units	Total Units	Operator	Funding Sources		HHC Approval Date	CRD Board Approval Date	Year Completed	Update
Cedar Grove (Victoria)	\$19,318,000	\$9,000,000	BC Housing	30	72	Victoria Cool Aid Society (VCAS)	BC Housing	Regional Housing Trust Fund \$600,000	n/a	March 8, 2017 & November 13, 2019 (increase)	2021	VCAS acquired and successfully relocated all tenants to the former Mayfair Hotel in May 2020. The structures on the property at 210 Gorge have been demolished and a Building Permit is nearing approval with the City of Victoria. Project has been tendered and a final construction price is complete.
Croftonbrook (Salt Spring)	\$19,092,858	\$5,400,000	BC Housing	18	56	Island Women Against Violence	BC Housing	Regional Housing Trust Fund \$408,000	n/a	March 8, 2017 & November 13, 2019 (increase)	2020 and 2022	Phase II construction continues to proceed with expected occupancy in December 2020. Phase III design work is being completed and the Development and Building Permits are being prepared. Occupancy is expected in spring 2022
Drennan and Sooke (Sooke)	\$45,622,950	\$10,200,000	BC Housing	34	170	EOI - TBD	BC Housing	Regional Housing Trust Fund \$765,000	June 13, 2018	June 13, 2018 & November 13, 2019 (increase)	2021	Development Permits submitted and expect District approval by September 30. Working through design feedback from the District with the builder. Regional Housing Trust Fund (RHTF) application was submitted to the CRD and a RHTF Commission recommendation for grant of \$765K was approved by the CRD Board at its October 2020 meeting.
Charters (formerly called Throup) (Sooke)	\$20,917,220	\$3,375,000	BC Housing	15	75	EOI - TBD	BC Housing	Regional Housing Trust Fund \$330,000	June 13, 2018	June 13, 2018	2021	Development Permits submitted and expect District approval by September 30. Working through District design element feedback with the builder. RHTF application was submitted to the CRD and a RHTF Commission recommendation for grant of \$330K was approved by the CRD Board at its October 2020 meeting.

Description	Total Estimated Project Cost	RHFP Contribution	Partner Agency Funding RHFP	RHFP Units	Total Units	Operator	Funding Sources		HHC Approval Date	CRD Board Approval Date	Year Completed	Update
Spencer Road (Langford)	\$38,263,972	\$7,800,000	CMHC	26	130	CHRC	CMHC \$7,800,000	n/a	June 13, 2018	June 13, 2018	Nov 2020	Phase 1: Floors 6-2 are 98% complete with deficiency repairs underway. Floor 1 is 85% complete with final paint underway. Phase 2: Floors 6-3 are 98% complete with deficiency repairs underway. Floors 2-1 are 85% complete with final paint underway. Carpet in the common stairwells and corridors is complete on floors 6-3. Parking lot paving and line painting is underway. Commissioning, testing, balancing and inspections will commence in the second week of October. The anticipated occupancy permit date is October 30, 2020. CRD/CRHC project closing is scheduled for November 20, 2020.
Treanor (Langford)	\$45,215,533	\$9,000,000	CMHC	30	132	CRHC	CMHC \$9,000,000	n/a	n/a	November 14, 2018	2019	COVID 19 has presented some unique challenges for the property regarding rent collection, rent increases and vacancy.
Hockley (Langford)	\$32,775,114	\$7,200,000	CMHC	24	120	CHRC	CMHC \$7,200,000	n/a	n/a	November 14, 2018	March 2021	Phase 1: Drywall, cabinet installation and vinyl flooring are complete with second coat painting underway. Phase 2: Drywall installation and first coat paint underway. The building is watertight with roofing and rain screen complete. Anticipated completion of the building envelope system is November 20, 2020. Elevator installation is underway. Offsite water connections are complete for domestic and fire suppression systems. Project completion estimated for March 2021.



Description	Total Estimated Project Cost	RHFP Contribution	Partner Agency Funding RHFP	RHFP Units	Total Units	Operator	Funding Sources		HHC Approval Date	CRD Board Approval Date	Year Completed	Update
West Park Lane (View Royal)	\$41,673,485	\$10,200,000	CMHC	34	152	CRHC	CMHC \$10,200,000	Regional Housing Trust Fund \$660,000	May 1, 2019	May 8, 2019	Nov 2020	Phase 1: Occupancy permit was issued on September 15, 2020. Phase 1: CRD third-party inspections are underway. Phase 2: Deficiency repairs and final cleaning underway. Phase 2: Commissioning, testing, balancing and inspections are underway. Phase 2: Occupancy permit was issued on October 9, 2020. CRD/CRHC project closing is scheduled for November 2, 2020.
Michigan Square Building 1	\$21,000,000	\$4,500,000	CRHC	15	53	CRHC	CRHC \$4,500,000	Regional Housing Trust Fund \$570,000	July 29,2020	August 12, 2020	2023	The Development Permit with Variances is proceeding to a City of Victoria Public Hearing on October 22, 2020.
Total RHFP Units				226	960							
Total RHFP Investment	\$283,879,132	\$66,675,000										



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## **REPORT TO HOSPITALS AND HOUSING COMMITTEE MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**     **Spencer Close Mortgage – Tri-Partite Agreement and Landlord Estoppel Certificate: 2763 Spencer Road**

### **ISSUE SUMMARY**

BC Housing Management Commission (BCHMC) requires that the Capital Regional District (CRD) Board of Directors authorize the execution of the Tri-Partite Agreement and Landlord Estoppel Certificate in order for the Capital Region Housing Corporation (CRHC) to execute the Spencer Close mortgage documents.

### **BACKGROUND**

In November 2018, the Regional Housing First Program (RHFP) partnership approved the Spencer Close development project, located at 2763 Spencer Road. At the same time the CRHC Board of Directors agreed that the CRHC would be operator of this property.

The CRD will purchase this property and hold 100% ownership. Canada Mortgage and Housing Corporation (CMHC) will provide a grant for 20% of the units through CMHC's contribution to the RHFP to the CRD. The CRHC will enter into a 60-year prepaid lease agreement with the CRD equal to the amount of the mortgage. The CRHC will also enter into an operator agreement with the CRD to ensure that the CRHC meets the terms of the RHFP. The CRHC will operate 100% of the units and will be responsible for financing the remaining 80% of the cost of the project. This will be financed through the BC Housing Community Partnership Initiative (CPI) Financing Program. Operations and debt financing will be paid for through the tenant rent revenue. No ongoing subsidy is required.

The final project budget is \$38,263,972. The approved project budget included a \$7,800,000 RHFP equity contribution, and a repayable \$30,463,972 mortgage. BC Housing projected interest rate forecast for 2021 is 2.25%.

As planned, the repayable mortgage will be charged initially as short-term financing and will convert to take-out financing in January 2021. Until January, a variable rate will be charged under the loan and a fixed rate during take-out financing. At the time of take-out financing, the mortgage documents will be modified to reflect the final amount, term, and interest rate.

#### ***Mortgage Documents Registered on Title***

Mortgage registration requires registration of a Section 219 Covenant granted in favour of BCHMC and registered on title. A Section 219 Covenant is a means of preserving a property's special attribute; in this case, the use of the building for affordable housing. The conditions of the Section 219 Covenant are set out in the CPI Operating Agreement. The CPI Operating Agreement states that the CRHC will provide housing to households with low-to-moderate incomes.

### *Tri-Partite Agreement*

The Tri-Partite Agreement, which forms part of the mortgage documents, is an agreement between the CRD, the CRHC, and BCHMC. This agreement overlaps with the Landlord Estoppel Certificate and is in place because the land and improvements will be leased to the CRHC by the CRD. As a condition of making the loan, the lender wishes to use this Tri-Partite Agreement to set out rights and obligations relating to the lease and mortgage. The agreement will ensure that the lease remains in force and in effect, and the parties agree to keep the lease in good standing. It also prevents the CRHC and the CRD from terminating their lease agreement without written consent of BCHMC.

## **ALTERNATIVES**

### *Alternative 1:*

The Hospitals and Housing Committee recommends to the Capital Regional District Board:

- a) That the resolutions required by BC Housing Management Commission to authorize the execution of the Tri-Partite Agreement and Landlord Estoppel Certificate for 2763 Spencer Road be approved; and
- b) That the Staff be authorized to execute any agreements with Capital Region Housing Corporation and BC Housing Management Commission and to take steps necessary to conclude the purchase of 2763 Spencer Road, Langford, BC.

### *Alternative 2:*

That staff be directed to review other financing options based on Hospitals and Housing Committee direction.

## **IMPLICATIONS**

### *Financial Implications*

Short-term financing and take-out financing must be secured in order to advance the purchase of 2763 Spencer Road. The Tri-Partite Agreement and Landlord Estoppel Certificate forms part of the mortgage agreement and is a condition of financing.

## **CONCLUSION**

CRHC must secure short-term and take-out financing to purchase the Spencer Close development project. The Tri-Partite Agreement and Landlord Estoppel Certificate must be in place in order to secure financing.

## **RECOMMENDATION**

The Hospitals and Housing Committee recommends to the Capital Regional District Board:

- a) That the resolutions required by BC Housing Management Commission to authorize the execution of the Tri-Partite Agreement and Landlord Estoppel Certificate for 2763 Spencer Road be approved; and
- b) That the Staff be authorized to execute any agreements with Capital Region Housing Corporation and BC Housing Management Commission and to take steps necessary to conclude the purchase of 2763 Spencer Road, Langford, BC.

Submitted by:	Rob Fowles, Manager Construction & Capital Projects, Regional Housing
Concurrence:	Kevin Lorette, P.Eng., MBA, General Manager Planning & Protective Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT(S)**

Appendix A: Spencer Close Landlord Estoppel Certificate and Acknowledgement of Notice

LANDLORD ESTOPPEL CERTIFICATE AND ACKNOWLEDGEMENT OF NOTICE

To: **British Columbia Housing Management Commission** (the "Lender")

Re: **CAPITAL REGION HOUSING CORPORATION** (the "Lessee")

**PID: 030-668-638, LOT 1 SECTIONS 5 AND 99 ESQUIMALT DISTRICT PLAN**

**EPP72773**

(the "Property")

This certificate is given to you in connection with your mortgage and assignment of rents from the Lessee. **Capital Regional District** (the "Lessor") confirms, acknowledges and certifies to you as follows:

1. The Lessee holds a lease (the "Lease") of the Property from the Lessor.
2. The rent due under the Lease will be paid in full the earlier of the interest adjustment date or occupancy of the Property.
3. The Lease is in full force and effect, has not been cancelled or surrendered, and has not been modified or amended since its execution except as follows:
4. To the best information and belief of the maker of the statements contained in this document, the Lessee and the Lessor are not in default under any provision of this Lease except as follows:
5. The Lessor consents to the Lessee granting a mortgage of the Lease to the Lender and acknowledges that in accordance with the Lease the Lessor has received from the Lender a copy of the mortgage of Lease and notice of the Lender's address for notice under the Lease. For greater certainty, the notices, demands and requests which may or are required to be given to the Lender pursuant to the Lease shall be in writing and shall be sufficiently given if served personally upon the Lender or an executive officer of the Lender or mailed prepaid and double registered and addressed to: British Columbia Housing Management Commission, #1701 - 4555 Kingsway, Burnaby, BC V5H 4V8, or such other address as the Lender may from time to time advise by notice in writing.

DATED at \_\_\_\_\_, British Columbia, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**CAPITAL REGIONAL DISTRICT**

Per:

\_\_\_\_\_

\_\_\_\_\_

**REPORT TO HOSPITALS AND HOUSING COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**      **Government of Canada Rapid Housing Initiative**

**ISSUE SUMMARY**

The Capital Regional District (CRD) Board needs to delegate authority to staff to negotiate and execute an agreement with the Government of Canada in order to access and use a minimum of \$13.1 million in Rapid Housing Initiative (RHI) funding to help house people experiencing homelessness in the region.

**BACKGROUND**

In September 2020, the Government of Canada announced it would be allocating \$1 billion to a RHI. Further to this announcement, on October 23, 2020, the Government of Canada Social Development Minister, contacted Board Chair Colin Plant by phone to inform him that the CRD was allocated \$13,056,502 in funding under the program to support the creation of a minimum of 52 units of new permanent housing. This was followed by a letter from the Canada Mortgage and Housing Corporation (CMHC) confirming this allocation (see Appendix A).

The CRD has been asked to develop and submit an Investment Plan that outlines the capital projects that will be built in the region. This plan is due to CMHC by November 27, 2020. CMHC has also provided a sample Agreement outlining the specific terms of the program and expectations of funding recipients (Appendix B). In summary, the funding can be used for the following purposes:

- acquisition of land and the construction of affordable multi-residential modular housing units (as defined in Schedule A);
- acquisition of land and buildings for the purpose of conversion of non-residential into affordable multi-residential housing units;
- acquisition of land and buildings in disrepair or abandoned for the rehabilitation into affordable multi-residential housing units; and
- costs related to the pre-development, pre-construction (e.g., environmental site assessments, cost consultant reports, architectural or engineering reports, legal/closing costs related to acquisition of land and buildings) for the development of permanent affordable housing units.

CRD staff have engaged BC Housing in a dialogue to explore the potential to leverage this funding with other provincial programs.

The negotiation of the terms of the Investment Plan and the Agreement with CMHC will require timely responses from the CRD, hence a request being made that CRD staff be delegated the authority to negotiate and execute an agreement with CMHC under the RHI.

## **ALTERNATIVES**

### *Alternative 1*

The Hospitals and Housing Committee recommends to the Capital Regional District (CRD) Board: That CRD staff be authorized to negotiate and execute agreements with the Government of Canada for the Rapid Housing Initiative and do all things incidental to finalize such agreements.

### *Alternative 2*

The Hospitals and Housing Committee provide Capital Regional District staff with alternate direction with respect to negotiating and executing these agreements.

## **IMPLICATIONS**

### *Intergovernmental Implications*

Approval of this recommendation will allow CRD staff to act quickly on a unique opportunity to respond to the Government of Canada's decision to allocate funding to the CRD to address matters of significant community concerns related to homelessness. By engaging with BC Housing, there is also the opportunity to leverage this funding through their Modular Build program to better meet the terms of the RHI program as they relate to meeting the needs of vulnerable populations. The CRD will also engage with all municipal and electoral area partners to identify opportunities for projects within their jurisdictions.

### *Social Implications*

Mobilizing the funding being provided by the Government of Canada will help build additional housing that will be used to meet the needs of vulnerable populations who are currently experiencing homelessness or are at acute risk of homelessness in the region. Currently, it is estimated that there are up to 350 people still sheltering out-of-doors during the COVID19 Pandemic, many of whom suffer mental health and substance use issues. The opportunity to leverage this funding through the BC Housing Modular Build Program could help secure funding for the supports needed to address the unique needs of these populations.

### *Financial Implications*

The use of this funding will require the CRD to flow an additional \$13.1 million in funding to capital projects in the community. The Government of Canada is not requesting matching funding, however the CRD will be engaging with partners to look for potential ways to leverage this funding and confirm funding and availability of the necessary support services.

The RHI operates on a very aggressive timeline. Once the CRD enters into an Agreement with the Government of Canada, the total funding request will be transferred to the CRD and the CRD will have only 12 months to complete and have projects occupied with qualified tenants. Should the CRD not achieve the agreed upon building completion and occupancy targets, CMHC may request that unused funds be returned to the Government of Canada.

### *Service Delivery Implications*

The delivery of this funding will be supported through the Regional Housing section of Planning and Protective Services. The draft Agreement indicates that funding can be used to support soft costs associated with the developments. Staff will explore the resources needed in order to advance projects according to the RHI's aggressive timeline.

The expectations of the Government of Canada is that projects created with this funding will meet the needs of vulnerable populations, with specific targets for proportions of units to be made available to women and girls (30%) and Indigenous people (15%). It is also expected that these units will be used to house people who are experiencing or at acute risk of homelessness, which means the future tenants will likely require health and/or social supports. The CRD does not have the capacity or mandate to provide such services. Staff are exploring the potential to fund these supports through federal or provincial programs. The inability to secure funding for such supports could contribute to significant operational risks for tenants and project operators.

Should the CRD enter into operating agreements with third parties (non-profit housing providers) to operate housing for the target population, the CRD will remain fully responsible for 20 years for the projects continuing to achieve the targets outlined in the Agreement.

### **CONCLUSION**

The allocation of RHI funding through the Government of Canada has provided evidence that the CRD is held in high regard with respect to its housing services and its capacity to respond in a timely way to urgent housing needs in the community. This funding opportunity also demonstrates the understanding the Government of Canada has of the significant problems that the capital region faces with respect to the impacts of homelessness in the community. Within the negotiations with the Government of Canada the CRD will ensure the identified risks to proceeding are addressed. Responding affirmatively to this allocation of funding will allow the CRD to strengthen its partnerships with other levels of government while also providing the opportunity to leverage additional resources through other government agencies in order to create more housing directed toward improving the quality of life of vulnerable people experiencing or at acute risk of experiencing homelessness.

### **RECOMMENDATION**

The Hospitals and Housing Committee recommends to the Capital Regional District (CRD) Board: That CRD staff be authorized to negotiate and execute agreements with the Government of Canada for the Rapid Housing Initiative and do all things incidental to finalize such agreements.

Submitted by:	John Reilly, MSW, RSW, Manager, Housing Initiatives and Programs
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT(S)**

Appendix A: Letter from Canada Mortgage and Housing Corporation

Appendix B: Sample Contribution Agreement

Appendix C: Rapid Housing Initiative Questions and Answers for Municipalities Under the Major Cities Stream



October 23, 2020

Robert Lapham  
[rlapham@crd.bc.ca](mailto:rlapham@crd.bc.ca)  
Chief Administrative Officer  
Capital Regional District

Dear Mr. Lapham,

**RE: Priority Allocation for Your Municipality from the Rapid Housing Initiative**

I am pleased to inform you that your municipality has been identified for immediate funding to create new permanent affordable housing under the Rapid Housing Initiative (RHI) that was announced by the Government of Canada on September 21.

RHI will deliver \$1 billion to help address urgent housing needs of people and populations who are vulnerable by rapidly creating new affordable housing units across the country.

This funding will be delivered through the Canada Mortgage and Housing Corporation (CMHC), and the RHI will cover the construction of modular housing, as well as the acquisition of land, and the conversion of existing buildings to affordable housing. This initiative will be delivered through two funding streams:

- Major Cities Stream: which will flow directly to municipalities to ensure funds are directed to areas where chronic homelessness is most prevalent and;
- Projects Stream: which will prioritize applications received from Provinces, Territories, municipalities, Indigenous governing bodies and organizations and non-profits based on the overall strength of the application.

As part of the first funding stream, your municipality has been identified for immediate funding of \$13,056,502 to create a minimum of 52 units of new permanent affordable housing. This funding will be transferred to your municipality in full upon the successful execution of an agreement. Your collaboration to execute an agreement quickly is needed in order for the funding to be transferred before the end of the calendar year.

An investment plan outlining the capital projects that will be built with your municipality's RHI allocation is needed before November 27 in order to confirm the take-up of funds. Unused funds will be reallocated within the Major Cities Stream. You are encouraged to take a community benefits approach and are asked to prioritize 30% of projects targeting women and 15% of projects for urban Indigenous peoples.

There will be an opportunity for your municipality to request additional funding for consideration under the Projects Stream, that you can identify in your investment plan without needing to submit a separate application.

Projects funded under the RHI are intended to serve populations and operate for a minimum of 20 years, which may require support beyond what is provided through RHI and what municipalities can cover. We would be pleased to support you in your discussions with your provincial government counterparts regarding supports that may be needed over this 20-year period.

Later today, CMHC will be hosting a multilateral call with all the municipalities receiving funding under the Major Cities Stream. We invite you to participate in this call, as we will present further details on RHI and the next steps to complete an agreement and advance funding (template attached).

Please designate a key contact who will be involved with the funding agreement to reach out to Lance Jakubec, CMHC lead for your discussions with your municipality (contact information below), following the multilateral call in order to facilitate the coordination of activities.

Congratulations on being selected for this important initiative. We look forward to working with you to help address urgent housing needs of people and populations who are vulnerable.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Pam Hine". The signature is fluid and cursive, with the first name "Pam" being more prominent than the last name "Hine".

Pam Hine  
Vice-President, Partnership and Promotions  
Client Solutions

CC

Lance Jakubec: [ljakubec@cmhc-schl.gc.ca](mailto:ljakubec@cmhc-schl.gc.ca)

Janet Neves: [jneves@cmhc-schl.gc.ca](mailto:jneves@cmhc-schl.gc.ca)

[Governmentrelationsgouvernementales@cmhc-schl.gc.ca](mailto:Governmentrelationsgouvernementales@cmhc-schl.gc.ca)

## RAPID HOUSING INITIATIVE AGREEMENT

THIS AGREEMENT is made as of the \_\_\_\_ day of \_\_\_\_\_, 202\_\_ (the "**Effective Date**") between **CANADA MORTGAGE AND HOUSING CORPORATION ("CMHC")** and **[NAME OF CITY/MUNICIPALITY]** ("**Recipient**").

(collectively the "**Parties**" and individually a "**Party**")

**WHEREAS** the COVID-19 crisis has exacerbated existing housing affordability and homelessness issues particularly for the most vulnerable Canadians;

**WHEREAS** the Parties wish to implement the Rapid Housing Initiative ("**RHI**") to rapidly house some of the most vulnerable Canadians; and

**WHEREAS** in connection with the RHI, CMHC is authorized under the *National Housing Act* to make contributions to the Recipient for the purposes of developing, in conformity with an investment plan to be approved by CMHC and attached as **Schedule B** (the "**Investment Plan**"), at least **[number of units]** affordable housing units in **[Municipality / Region]** (the "**Units**");

**NOW THEREFORE** for value received, the Parties agree as follows:

### **1. Contribution and Purposes**

The contribution by CMHC under this Agreement is \$**[●]** (the "**Contribution**") and will be advanced to the Recipient following signature of this Agreement, subject to the terms and conditions herein and for only to be used for the following purposes (as will be further specified by the Recipient in the Investment Plan):

(a) (i) acquisition of land and the construction of affordable multi-residential Modular Housing Units (as defined in **Schedule A**); (ii) acquisition of land and buildings for the purpose of conversion of non-residential into affordable multi-residential housing Units; or (iii) acquisition of land and buildings in disrepair or abandoned for the rehabilitation<sup>1</sup> into affordable multi-residential housing Units; and

(b) costs related to the pre-development, pre-construction (e.g. environmental site assessments, cost consultant reports, architectural or engineering reports, legal/closing costs related to acquisition of land and buildings) for the development of permanent affordable housing Units.

For greater certainty, costs must be incurred on or after the date of this Agreement and do not include operational expenses.

### **2. Conditions to Funding**

The Recipient agrees it will:

(a) use the Contribution only for the purposes specified in the Investment Plan (and no other purpose) to create affordable Units for People And Populations Who Are Vulnerable (as defined in **Schedule A**) who are targeted by the Affordability Criteria (as defined in **Schedule A**);

(b) ensure, for a minimum period of 20 years (or for such longer period as agreed to in the Investment Plan) commencing on March 31, 2022, or on another date as may be set by CMHC at this discretion (the "**Term**"), the Units meet the Affordability Criteria (as defined in **Schedule A**) and are for People And Populations Who Are Vulnerable;

---

<sup>1</sup> The land and buildings to be rehabilitated must have been in disrepair and/or abandoned and in both cases inhabitable and lost to the housing stock.

- (c) ensure the Units, and the newly constructed building(s) where the Units are situated, will exceed by at least 5 percent the local accessibility requirements in its jurisdiction during the Term;
- (d) ensure the Units, and the newly constructed building(s) where the Units are situated, will exceed by at least 5 percent the energy efficiency standards, as set out in the 2015 National Energy Code for Buildings (NECB), or as set out in the local/regional standard, whichever is higher;
- (e) deliver within 30 days of receipt of the notice of the Recipient's allocation,<sup>2</sup> for CMHC's review and approval, the Investment Plan in the form and content attached as **Schedule B**, which will among other elements (1) show that the Units can be available for occupancy within twelve months of its approval by CMHC;<sup>3</sup> (2) indicate how the Recipient is considering community benefits in the development of the Units; (3) indicate how the development of the Units by the Recipient is targeting, where possible, women and girls (30% of the Units) and urban Indigenous peoples<sup>4</sup> (15% of the Units); and (4) confirm (i) how the full Contribution will be committed by the Recipient; (ii) how the Recipient will construct and operate the Units in accordance with this Agreement; and (iii) how the Recipient will, throughout the Term, comply with the covenants of affordability, accessibility and energy efficiency set out in this Agreement;
- (f) where it intends to engage a third party intermediary (the "**Intermediary**") to construct and/or operate the Units: (i) exercise appropriate care in selecting an Intermediary who is a reputable entity that meets the Recipient's integrity regime and Know-Your-Client requirements; (ii) enter with the Intermediary into agreements as may be needed, setting out terms and conditions reflecting the requirements of this Agreement; and (iii) take all necessary actions to cause the Intermediary to comply with the obligations under this Agreement, noting however that the Recipient shall remain at all times primarily liable to CMHC for the fulfillment of all obligations under this Agreement; and
- (g) be, and cause the Units and any property on which the Units will be constructed and operated to be, at all times in compliance with all applicable laws including environmental laws and municipal zoning, in all material respects.

### **3. Return of Contribution**

In support of the implementation of the RHI to rapidly house some of the most vulnerable Canadians affected by the COVID-19 crisis, the Recipient will select projects that can be implemented within the short period of time specified in the Investment Plan. As a consequence, the Recipient agrees to the following:

- (a) CMHC may periodically review the progress in fulfilling the Investment Plan. Where CMHC or the Recipient considers that there may be reasonable doubt any part of the Investment Plan will be fully and timely delivered as expected, or where the Recipient has not started a project within [●] months of [●], the Parties shall consult together and make all efforts to find an acceptable solution that minimizes impacts on the projects and that is in the best interest of the RHI implementation, following which CMHC may reduce or cancel the Contribution to the extent that CMHC considers reasonable. In that case, the Recipient shall return any such reduced or cancelled Contribution within 30 days of being notified in writing by CMHC.

<sup>2</sup>The 30 days period starts as of the date the Recipient receives its notice of allocation, notwithstanding whether or not the Recipient already signed this Agreement.

<sup>3</sup> If the Recipient has projects in excess of their initial allocation for consideration for future contributions that may be available, the Recipient should provide additional information (e.g. expediency of project completion; evidence of long-term viability), which may be considered by CMHC in connection with any future funding under the RHI.

<sup>4</sup> The Recipient should, where possible, select and engage Indigenous governing bodies or organizations with the necessary experience and capacity as their intermediaries to construct, operate and deliver housing targeted at Indigenous peoples under this Agreement.

(b) The Recipient shall return to CMHC any undisbursed funds within 30 days of the Quarterly Attestation (as defined below) for the quarter in which all projects set out in the Investment Plan are completed, and in all cases no later than May 30, 2022, unless otherwise agreed by CMHC.

#### **4. Disposition and Encumbrance of Units**

(a) The Recipient is permitted to dispose of Units provided that (i) such Units are substituted by the Recipient with units that satisfy the terms and conditions of this Agreement; or (ii) the transferee acquiring such Units agrees to comply with the obligations of this Agreement by entering in a contract with the Recipient that is satisfactory to CMHC, acting reasonably; and (iii) in both cases, CMHC confirms in writing its consent to such disposition, after conducting a due diligence that is satisfactory to CMHC.

(b) The Recipient may not encumber the Units or any lands acquired with the Contribution without CMHC's prior written consent, acting reasonably.

#### **5. Reporting**

The Recipient agrees it will:

(a) deliver an attestation to CMHC within 30 days of each of March 31, 2021, June 30, 2021, September 30, 2021, December 31, 2021 and March 31, 2022, unless directed otherwise by CMHC, and in accordance with **Schedule C** (the "**Quarterly Attestation**"); and

(b) deliver an attestation to CMHC within 60 days of the Recipient's fiscal year end, commencing in the first fiscal year ending after March 31, 2022 and on each fiscal year thereafter, until the completion of the Term and in accordance with **Schedule C** (the "**Yearly Attestation**").

#### **6. Projects Stream**

The Recipient may, as part of the Investment Plan submitted under this Agreement for RHI funding pursuant to the *Major Cities Stream*, ask CMHC to be also considered for RHI funding pursuant to the *Projects Stream*. To do so, the Recipient must provide and include in the Investment Plan in the form and content attached as **Schedule B**, all additional information that is necessary for the *Projects Stream*, for CMHC's review and approval. In this scenario, the Investment Plan will serve for both RHI streams.

#### **7. Schedules**

Schedules attached hereto, including the Investment Plan (**Schedule B**) and the Additional Terms (**Schedule D**), form a part of this Agreement.

**[Signature pages follow]**

**IN WITNESS WHEREOF** the Parties hereto have duly executed this Agreement as of the date first written above.

**CANADA MORTGAGE AND HOUSING CORPORATION**

700 Montreal Rd  
Ottawa, Ontario  
K1A 0P7

\_\_\_\_\_  
**Name:**  
**Title:**

\_\_\_\_\_  
**Name:**  
**Title:**

*[Signature page for the Rapid Housing Initiative Agreement  
between Canada Mortgage and Housing Corporation and [Recipient]]*

**[RECIPIENT]**

**[Address]**

\_\_\_\_\_  
**Name:**

**Title:**

\_\_\_\_\_  
**Name:**

**Title:**

*[Signature page for the Rapid Housing Initiative Agreement  
between Canada Mortgage and Housing Corporation and **[Recipient]**]*

## **SCHEDULE A**

### **Definitions**

**"Affordability Criteria"** means:

All units must serve and be affordable (household is paying less than 30% of gross income on housing costs) to targeted People and Populations Who Are Vulnerable and who are also, or otherwise would be, in severe housing need or people experiencing or at high risk of homelessness as described below. Affordability must be maintained for a minimum of 20 years. The Recipient will be required to confirm, through an attestation, that all units serve the intended targeted population. CMHC may require incremental validation throughout the 20-year affordability period as needed.

A household in severe housing need is a subset of core housing need households that pays 50% or more for their current dwelling. A household is said to be in core housing need if its housing falls below at least one of the adequacy, affordability or suitability standards and it would have to spend 30% or more of its total before tax income to pay the median rent of alternative local housing that is acceptable (meets all three housing standards).

Homelessness is described as the situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it. Populations at imminent risk of homelessness are defined as individuals or families whose current housing situation will end in the near future (for example, within 2 months) and for whom no subsequent residence has been established.

A Recipient who has already adopted its own definitions for 'severe core housing need', 'homelessness' or at 'risk of homelessness' may, with approval of CMHC, apply such definitions to the Affordability Criteria. Otherwise, the definitions for these terms indicated herein apply.

**"Modular Housing Units"** means housing units which are partially or fully built in off-site (e.g. a factory, warehouse, or similar facility) by a qualified manufacturer and delivered to the site in whole or in parts and installed on an appropriately zoned and serviced lot.

**"People and Populations Who Are Vulnerable"** means the following groups and the individuals belonging to these groups:

- Women and children fleeing domestic violence;
- Seniors;
- Young adults;
- Indigenous peoples;
- People with disabilities;
- People dealing with mental health and addiction issues;
- Veterans;
- LGBTQ2+;
- Racialized groups;
- Black Canadians;
- Recent immigrants or refugees; and
- Homeless people or those at risk of homelessness.



**SCHEDULE B**

**Investment Plan**

[see attached]

1. Identification	Project A	Project B
Date submitted :		
Project name :		
Project description (Need, targeted population, program support, etc) :		
Street number :		
Street name :		
Municipality :		
Province :		
Postal code :		
Please provide the name of the intermediary, if different from the municipality (developer, owner or operator) :		

2. Project details	Project A	Project B
Type of intervention :		
Building type :		
Building purpose :		
Total soft costs :		
Soft costs incurred before agreement date :		
Soft cost eligible for RHI:	0.00 \$	0.00 \$
Total hard costs :		
Hard costs incurred before agreement date :		
Hard cost eligible for RHI :	0.00 \$	0.00 \$
Total land and acquisition cost :		
Was the land purchase/acquisition of building done before the agreement date :		
Total land and acquisition cost eligible for RHI:	0.00 \$	0.00 \$
Contingency costs (as % of soft and hard costs):		
Contingency costs	0.00 \$	0.00 \$
Total other costs :		
Total other costs incurred before agreement date :		
Other costs eligible for RHI :	0.00 \$	0.00 \$
Total project costs :	0.00 \$	0.00 \$
Total eligible project costs :	0.00 \$	0.00 \$
CMHC funding requested (must be equal or less to Total eligible project costs) :		

**Note: If each individual is assigned a specific bed, please enter the number of beds serving a priority group, otherwise, please enter the number of units.**

3. Eligibility	Project A	Project B
Total number of new affordable units/beds created :		
Primary vulnerable population targeted :		
Number of new affordable units/beds created for primary vulnerable population :		
Secondary vulnerable population targeted :		
Number of new affordable units/beds created for secondary vulnerable population :		
Tertiary vulnerable population targeted :		
Number of new affordable units/beds created for tertiary vulnerable population :		
Is every unit/bed associated with a vulnerable population group? (Mandatory)	Yes	Yes
Provide a general description of the Community Employment Benefits that will be derived from each Project (see footnote for detail)		
Residential Space (% of Area) including program space :		
Date of acquisition / construction start date :		
Estimated completion date / ready for occupancy :		
Estimated full occupancy date :		
Will the tenants occupying the units (1) not spend more than 30% of their income on the applicable unit, and (2) be composed of individuals and families who are, or otherwise would be, in severe housing need, or people experiencing or at high risk of homelessness?		
How long will the affordability be maintained?		
For modular projects, will your project exceed by 5% the local accessibility requirements in its jurisdiction?		
For modular projects, will your project exceed by 5% the energy efficiency standards as set out in the 2015 National Energy Code for Buildings (NECB) or local/regional standard whichever is greater?		

**Please fill-out the following section only for projects you wish to be considered for additionnal funding under the "Cities / projects stream" funding.**

4. Prioritization	Project A	Project B
Will your project meet the affordability definition for a minimum of 20 years?		
Will 100% of the units provide permanent housing to tenants from the vulnerable population groups?		
Will your project reach first occupancy witin 12 months of the execution of the contribution agreement?		
Are project lands located Off Reserve?		
Are project lands located On Reserve?		
Are project lands located North?		
Are project lands in a Remote location?		
How long will affordability be maintained?		
How quickly do you expect reaching first occupancy?		
How quickly do you expect completing your project?		
What is the status of the land?		
What is the duration of confirmed operating subsidy?		
What percentage of funding is needed from CMHC?		
Please confirm if you are specifically targeting any of these vulnerable population groups.		
For modular projects, will your project exceed the energy efficiency standards as set out in the 2015 National Energy Code for Buildings (NECB) or local/regional standard		

For modular projects, will your project exceed the local accessibility requirements in its jurisdiction?		

Footnotes :

Questions

Type of intervention :

Building type :

Building purpose :

Note related to costs incurred before the agreement date

Was the land purchase/acquisition of building done before the agreement date : Yes / No

Primary, secondary and tertiary targeted vulnerable population :

Provide a general description of the Community Employment Benefits that will be derived from each Project.

Confirm that the contribution will create units for vulnerable populations who are in severe housing need or people experiencing or at high risk of homelessness :

Project exceeds local accessibility criteria by 5% of the local accessibility requirement in it's jurisdiction :

Project exceeds local accessibility criteria by 5% of the energy efficiency standard as set out in the 2015 National energy code for buildings (NECB) or as set out in the local/regional standard, whichever is higher :

Will your project meet the affordability definition for a minimum of 20 years?

Will 100% of the units provide permanent housing to tenants from the vulnerable

Will your project reach first occupancy witin 12 months of the execution of the

Are project lands located Off Reserve?

Are project lands located On Reserve?

Are project lands located North?

Are project lands in a Remote location?

How long will affordability be maintained?

How quickly do you expect reaching first occupancy?

How quickly do you expect completing your project?

What is the status of the land?

What is the duration of confirmed operating subsidy?

What percentage of funding is needed from CMHC

Please confirm if you are specifically targeting any of these vulnerable population groups.

For modular projects, will your project exceed the energy efficiency standards as set out in the 2015 National Energy Code for Buildings (NECB) or local/regional standard whichever is greater?

For modular project, will your project exceed the local accessibility requirements in its jurisdiction?

Answers

Conversion to residential, Rehabilitation of abandoned/disrepair, or Modular

High-rise Apartment, Low-rise Apartment, Duplex, Triplex, Four-plex, Row Houses, Semi-Detached house, Single family house, Other, Mobile - RTM, Non-residential, Secondary Suite, Garden Suite

Standard Apartment, Senior Residence, Student Residence, Shelter, Rooming House, Transitional Housing, Supportive Housing, Other

All costs incurred before the agreement date are deemed ineligible. CMHC may recognize those costs at a later point in time.

Yes / No

Black canadians, Homeless people or those at risk of homelessness, Indigenous people, LGBTQ2+, Newcomers (including refugees), Non-targeted, People with developmental disabilities, People with mental health or addiction issues, People with physical disabilities, Racialized groups, Seniors, Veterans, Women and children fleeing domestic violence, Women and their children, Young adults

Please confirm if this project will have any impact on employment in your community. This can include job creation for targeted groups, contracts awarded, and any other kind of impact

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

Yes / No

20 years, 21 to 30 years, 31 to 40 years+

First occupancy within 12 months of execution of contribution agreement, First occupancy within 6 months of execution of contribution agreement, First occupancy within 3 months of execution of contribution agreement

Project completed within 12 months of execution of contribution agreement, Project completed within 9 months of execution of contribution agreement, Project completed within 6 months of execution of a contribution agreement

Land is not yet owned/no agreement of purchase and sale and no executed lease in place (or current lease is not for min 20-year duration), Land has an agreement of purchase and sale with closing date within 3 months, Land is already owned in fee simple/leasehold interest

Operating subsidy not yet confirmed, Confirmed up to 5 years, Confirmed more than 5 years up to 10 years, Confirmed more than 10 years but less than 20 years, Confirmed for full 20-year affordability period

RHI Funding requested for 100% of costs, RHI Funding requested for 81% to 90% of costs, RHI Funding requested for 71% to 80% of costs, RHI Funding requested for 60% to 70% of costs, RHI Funding requested below 60%

Specifically targeting Black Canadians, Specifically targeting Women and Children, Specifically targeting Indigenous People, Not targeting any of these vulnerable population groups

It meets the energy efficiency standards, but doesn't exceed them, It exceeds by 5%, It exceeds by 10%, It exceeds by 15%, It exceeds by 20%

It meets the accesibility requirements of the jurisdiction, but doesn't exceed them., It exceeds by 5%, It exceeds by 10%, It exceeds by 15%, It exceeds by 20%

## **SCHEDULE C**

### **Reporting**

#### **Quarterly Attestation**

[see attached]

#### **Yearly Attestation**

[see attached]

1. Attestation	Project A	Project B
Attestation date :		
Municipal building address :		
Amount of RHI funding that was used towards eligible costs?		
% of completion of the project :		
Construction / Renovation / Conversion start date :		
Construction / Renovation / Conversion completion date (all units are ready for long term occupancy) :		
Full occupancy date (all units are occupied) :		
Total number of new affordable units/beds in project :		
Number of new affordable housing units temporarily occupied (conversion/renovation not complete) :		
Number of new affordable housing units completed (occupancy permit obtained) :		
Number of new affordable housing units occupied (long term occupancy) :		
Type of intervention :		
Building type :		
Building purpose :		
Did changes to the distribution of units among vulnerable groups occur? (If changes occurred, please fill out the following)		
Primary vulnerable population targeted :		
Number of new affordable units/beds created for primary vulnerable population :		
Secondary vulnerable population targeted :		
Number of new affordable units/beds created for secondary vulnerable population :		
Tertiary vulnerable population targeted :		
Number of new affordable units/beds created for tertiary vulnerable population :		
Comments - please describe any other material changes to the project or units :		
Signature :		

	Project A	Project B
Attestation Date:		
Total number of affordable units that have been retained		
Building purpose :		
Did changes to the distribution of units among vulnerable groups occur? (If changes occurred, please fill out the following)		
Primary vulnerable population targeted :		
Number of new affordable units/beds created for primary vulnerable population :		
Secondary vulnerable population targeted :		
Number of new affordable units/beds created for secondary vulnerable population :		
Tertiary vulnerable population targeted :		
Number of new affordable units/beds created for tertiary vulnerable population :		
Are the tenants occupying the units (1) pay less than 30% of gross income on the applicable unit, and (2) composed of individuals and families who are, or would otherwise be, in severe housing need, or people experiencing or at high risk of homelessness?		
Is the project meeting the commitment towards number of accessible units?		
Comments - please describe any other material changes to the project or units.		
Signature		

**SCHEDULE D**  
**Additional Terms**

Parties agree to the following additional terms and conditions:

**1. Termination**

In the event that the Recipient (or a representative thereof) does not adhere to the terms and conditions of this Agreement, or commits fraud, misconduct, criminal acts, gross negligence or willful misconduct, CMHC may immediately terminate this Agreement and declare the Contribution to be repayable to CMHC in whole or in part, and may exercise any other rights and remedies it has by operation of law or equity. Sections 2, 3 and 4 of this **Schedule D** shall survive the expiry or termination of this Agreement.

**2. Indemnification**

The Recipient agrees to indemnify and save harmless the Government of Canada, CMHC, its officers, directors and employees against all claims, demands, actions, suits or other proceedings (including but not limited to environmental claims) of any nature whatsoever arising from or as consequence of or relating to (a) any breach by the Recipient of its obligations, or any misrepresentation by the Recipient under this Agreement, (b) the construction or operation of the Units, (c) the failure of the Recipient to comply with all environmental laws or losses suffered in connection with the presence of any hazardous material on the land upon which Units are situated; or (d) any act or failure to act on the part of the Recipient in connection with the Contribution or the Units, whether or not CMHC is named as a party.

**3. Liability**

CMHC shall not be liable to the Recipient or any other party in relation to the Contribution. To the extent the Recipient engages or retains any third party in respect of its obligations under this Agreement, the Recipient shall remain primarily liable to CMHC for the fulfillment of its obligations under this Agreement. For the purposes of this Agreement, CMHC will only deal with the Recipient, and not with third parties retained by the Recipient including the Intermediary.

**4. Recipient's Representations and Warranties**

(a) The Recipient has the requisite power, authority and capacity to execute, deliver and perform its obligations under this Agreement, which has been duly authorized, executed, and delivered by the Recipient and constitutes a legal, valid, and binding obligation of the Recipient.

(b) The Recipient and any property on which the Units are situated are in compliance with all applicable laws, including all environmental laws and municipal zoning, in all material respects.

(c) It is a condition of this Agreement that all representations and warranties made in this Agreement or any other document or reporting by the Recipient are true, complete and correct.

**5. Official Languages**

In areas of significant demand, the Recipient agrees to provide all information and services pertaining to the RHI in both French and English. The Recipient will use the criteria for communications and services in the *Official Languages Regulations* made pursuant to Canada's *Official Languages Act* as a guideline to determine "significant demand". The Recipient will consult with representatives of local minority language groups.

## **6. Information and Communications**

(a) Subject to the *Access to Information Act* (Canada), the *Privacy Act* (Canada), and the applicable provincial, territorial or municipal freedom of information and privacy legislation, the Parties shall hold confidential any information clearly identified and marked as confidential or that reasonably should be understood to be confidential given the nature of the information and the circumstances of disclosure. Nothing in this Agreement shall be construed in a manner that would contravene the access to information and privacy legislation that applies to the Parties.

(b) The Recipient consents to the collection, use and disclosure of information submitted to CMHC by the Recipient for the following purposes: (i) to assess the Recipient's eligibility under the RHI; (ii) for analytics, policy analysis, auditing and research by CMHC; (iii) to communicate to the Recipient possible opportunities under other CMHC programs, or possible collaboration opportunities with third parties; (iv) for evaluation of the RHI; (v) for use by CMHC in and the Government of Canada for purposes related to the *National Housing Act* (Canada); and (vi) for information verification and due diligence purposes, including to detect and protect CMHC from errors and fraud. The Recipient shall obtain the foregoing consents from any third party intermediary engaged by the Recipient to construct and/or operate the Units.

(c) CMHC and its representatives are authorized to use and disclose the information, on a need to know basis, to CMHC employees, officers and directors, the office of the Minister responsible for CMHC and provincial/territorial/municipal entities collaborating with CMHC for the purposes outlined in Section 6(b) of this **Schedule D**.

(d) Any public communications related to projects under this Agreement must be approved in advance by CMHC. Notwithstanding the preceding, each Party retains the right to communicate information to Canadians about the projects to meet its respective legislated and regulatory obligations, with prior notice to the other Party.

(e) If requested by CMHC, the Recipient shall publicly acknowledge CMHC's and the Government of Canada's Contribution under this Agreement in a manner acceptable to CMHC, acting reasonably, including through use of signage at the project (at the costs of CMHC).

## **7. Audit**

(a) CMHC and any of its officers, employees and agents shall have the right to inspect, audit and make extracts from the Recipient's books and records in relation to the Contribution upon its request, acting reasonably, until the completion of the Term.

(b) CMHC or a third party representative may conduct onsite visits to inspect and monitor the construction and operation of the Units and compliance with the terms and conditions of this Agreement. All site visits are for CMHC's program and risk management purposes only and are not to be considered a technical inspection to confirm the quality of the work or the Recipient's compliance with applicable laws, including building codes.

## **8. Notice**

Delivery of notice under this Agreement shall be effective three days after posting by regular mail, or on the day following transmission by e-mail, to the Parties at addresses set out on the signature pages of this Agreement.

## **9. Independent Recipient**

The Parties agree that under this Agreement CMHC is solely a financial contributor in respect of the Units and there shall be no legal partnership or joint venture between CMHC and the Recipient or the Intermediary. No



Party will use the name, logo or marks of the other party without the prior express written consent of that other party.

**10. Costs**

The Recipient is responsible for its own costs and expenses incurred in connection with the preparation, execution, enforcement and implementation of this Agreement.

**11. Conflict of Interest**

The Recipient shall avoid any conflict of interest during the Term of this Agreement and shall immediately declare any existing, potential or apparent conflict and shall, upon direction of CMHC, take steps to eliminate any conflict, or perception that a conflict of interest exists.

**12. House of Commons/Senate**

No member of the House of Commons or the Senate of Canada shall be admitted to any share or part of this Agreement or to any benefit arising therefrom.

**13. Assignment and Amendment**

This Agreement shall be binding upon and shall enure to the benefit of the Parties and their successors and assigns. This Agreement may not be assigned by a Party without the prior written consent of the other Party. Any amendment to this Agreement must be approved by both Parties in writing.

**14. Counterparts**

This Agreement may be executed in any number of counterparts, which taken together will be deemed to constitute one and the same instrument. This Agreement may be executed by electronic signature and such electronic signature shall be deemed to be an original signature for the purpose of this Agreement with the same legal effect as a manual signature.

**15. Waiver**

The failure of CMHC to insist on strict compliance with one or more of the terms of this Agreement shall not constitute a waiver of its right to enforce those terms at a later date. No provision of this Agreement shall be deemed to have been waived as a result of a breach by either Party of the provisions of this Agreement, unless such waiver is in writing and signed by CMHC. Any such waiver shall not be deemed a waiver for a subsequent breach of the same or any other provision of this Agreement.

**16. Governing Law and Jurisdiction**

This Agreement will be governed by and construed in accordance with the laws of the province or territory where the Units are situated, and the federal laws of Canada applicable therein. The courts of such jurisdiction shall exclusively hear any dispute related to this Agreement. Funding under this Agreement is at all times subject to appropriations by the Parliament of Canada.

**17. Entire Agreement**

This Agreement contains all of the agreements and understandings between the Parties and no other representations or warranties, verbal or otherwise, exist between the Parties. If any provision of this Agreement

is held by a competent authority to be invalid, illegal or unenforceable for any reason, the remaining provisions of this Agreement and any schedules attached hereto, will continue to be in full force and effect.

#### **18. Additional Funds**

Notwithstanding Section 17 of this **Schedule D**, if following the Effective Date, the Recipient is allocated - under either RHI streams - additional RHI funds that are separate and in addition to what is provided in the initial Investment Plan<sup>5</sup> under this Agreement (the "**Additional Funds**"), CMHC may use this Agreement as a basis for its agreement with the Recipient in relation to the Additional Funds. If the Recipient accepts such allocation, and unless directed otherwise by CMHC, it shall deliver an additional investment plan substantially in the form of the Investment Plan attached as **Schedule B** (the "**Additional Investment Plan**") in respect of the Additional Funds (including the additional contribution, units and applicable term) within 30 days of receiving notice of the additional allocation, for CMHC's review and approval at its sole discretion. The terms and conditions of this Agreement, as varied by the Additional Investment Plan, shall apply to the Additional Funds mutatis mutandis unless otherwise agreed by the Parties.

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<sup>5</sup> For the avoidance of doubt, as per section 6 of the Agreement, the initial Investment Plan may itself comprise RHI funds pursuant to both RHI streams, without the need for an Additional Investment Plan for the *Project Stream* at that initial stage. Additional Funds are separate and in addition to the initial Investment Plan, and require an Additional Investment Plan.

## **RAPID HOUSING INITIATIVE (RHI)**

### **QUESTIONS AND ANSWERS FOR MUNICIPALITIES UNDER THE MAJOR CITIES STREAM**

**Q1.** Is the allocation provided to municipalities under the Major Cities Stream a forgivable loan? Does it need to be repaid?

**A1.** The funding provided under the RHI is a capital contribution. It does not need to be repaid provided the terms of the agreement are met.

**Q2.** How long will it take to receive funding under each individual funding stream?

**A2.** Municipalities selected under the Major Cities Stream will receive their allocation immediately following the signature of their agreements; investment plans are required within 30 days of being advised of their allocation.

For the Projects Stream, the application window will be open until December 31, 2020 and CMHC will review applications within 30 days of the end of the application window. Once an agreement has been signed funding will flow.

Municipalities under the Major Cities Stream do not need to submit an application for the Projects Stream if their investment plans submitted prior to November 27, 2020 provide details of projects for additional funding consideration under the Projects Stream.

**Q3.** What types of projects can be funded under RHI?

**A3.** Costs associated with one of the three categories noted below to develop permanent housing under the RHI:

1. Acquisition of land and construction of modular housing,
2. Acquisition of land and existing buildings for the purpose of conversion,
3. Acquisition of land and rehabilitation of housing.

Construction must be completed within 12 months of agreement. For clarity, construction, conversion and rehabilitation costs are included in addition to the acquisition of land and buildings.

**Q4.** What other expenses are eligible under RHI?

**A4.** Costs related to the pre-development, pre-construction (e.g. environmental site assessments, cost consultant reports, permits, architectural or engineering reports, legal/closing costs related to acquisition of land and buildings) will be eligible as part of an application to develop permanent affordable housing. RHI funding cannot be used to cover operational expenses.

Expenses listed below are only eligible if they form part of the construction costs of units eligible under RHI. CMHC will not fund costs related to non-residential space.

- Deposits to secure eligible goods or services related to project development
- Off-site fabrication and delivery of housing units
- Costs related to relocation of units, including transportation and insurance

**Q5.** If a municipality has been selected to receive funding but does not think it can deliver within the allotted timelines, can it opt out of the Initiative?

**A5.** Yes, if a municipality does not wish to receive its allocation under the Major Cities Stream, it can opt out of the initiative. In such cases, the allocation will be reallocated to other municipalities within the Major Cities Stream.

**Q6.** Is there a maximum amount of funding a municipality can receive under both combined funding streams?

**A6.** There is no maximum amount that a municipality can receive under the combined RHI streams, however funding under the Projects Stream will be prioritized based on level of need, duration of affordability, expediency of delivery, availability of operational funding and additional capital contributions, and prioritization of certain vulnerable groups.

**Q7.** Why is modular the only type of new construction that's eligible? How is modular defined?

**A7.** Modular housing is an efficient method for delivering housing quickly. One of the objectives of RHI is to deliver housing rapidly to people and populations who are vulnerable, modular housing is being included along acquisitions and conversions.

For the purposes of RHI, modular housing is defined as housing units which are partially or fully built in off-site (e.g. a factory, warehouse, or similar facility) by a qualified manufacturer and delivered to the site in whole or in parts and installed on an appropriately zoned and serviced lot. This may range between single, scattered units up to larger multi-unit housing projects.

**Q8.** How was the funding allocation determined for municipalities under the Major Cities Stream?

**A8.** The allocation methodology considers cities with the highest incidence of renters in severe housing need according to 2016 Census data and number of people experiencing homelessness according to point-in-time count data. The final allocation was indexed to the average cost per unit for each city to account for varying housing market realities across municipalities.

**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION  
MEETING OF TUESDAY, OCTOBER 6, 2020**

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**SUBJECT**     **Juan de Fuca Water Distribution Service - 2021 Operating and Capital Budget**

**ISSUE SUMMARY**

To provide an overview of the 2021 Juan de Fuca Water Distribution Service budget, highlighting the proposed significant changes from the 2020 budget. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

**BACKGROUND**

The draft 2021 Juan de Fuca (JDF) Water Distribution Service budget has been prepared for the JDF Water Distribution Commission's (Commission) consideration. The Commission will make budget recommendations to the Capital Regional District (CRD) Board through the Committee of the Whole in October. As in previous years, the draft 2021 JDF Water Distribution Service budget has been prepared considering the CRD Board's 2021 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential synergies or efficiencies between departments and services, reviewing of service levels and adjustments related to regulatory compliance, and undertaking infrastructure improvements to maintain service levels across the service area, including incremental ongoing operational and maintenance requirements in the expanding service area. The following sets out the key components of the budget.

**2020 Year End Financial Projections**

Year-end revenue and expenditure projections have been established and estimated variances are summarized as follows:

Budget Item	Variance (\$)	Variance (%)
Distribution System operating expenditures	\$67,502	(1.0%)
Bulk water purchase cost	\$0	(0.0%)
Capital expenditures and transfers	\$17,877	(0.3%)
Debt servicing - principal and interest expenditures	\$0	(0.0%)
Revenue	\$85,379	(0.4%)
Transfers from DCC reserves to fund DCC debt	\$0	(0.0%)

**Rate Base**

The rate base for 2021 has increased by \$8,427,055 from 2020. This increase relates to physical plant additions, including distribution pipes, water meters and services, and pump station upgrades (Pages 2 & 3 of the budget document).

### Revenue Requirement

The revenue requirement for 2021 has increased by \$660,371 over 2020. This is resulting from an increase in operational expenses of \$227,569, increased depreciation expenses of \$301,002 net of expired depreciation on existing assets, and a net increase in the return on the rate base of \$131,800. The increase in the return on the rate base is a result of the growing asset base (Page 4 of the budget document).

### Operating Budget

The 2021 operating budget reflects an increase in non-discretionary expenses such as negotiated wage/salary increases, departmental support service allocation increases, maintenance expenses due to new infrastructure additions, and other operating expense increases such as electricity costs.

As reported in recent years, a result of continued growth in new land development in the service area over the last several years, the distribution system has and continues to expand at an accelerated rate. For context, the following summarizes the additions in 2020 (over 2019) to the asset units in the major categories, all of which require regular maintenance to ensure reliable performance:

- |                               |                              |
|-------------------------------|------------------------------|
| • Water distribution mains    | 4,000 metres                 |
| • Service laterals            | 440 (9 metre length average) |
| • Fire hydrants               | 39                           |
| • Line valves                 | 110                          |
| • Flush, air and check valves | 18                           |
| • Water meters <50mm          | 440                          |
| • Water meters =>50mm         | 25                           |

As noted previously, with at least four major developments underway in the service area including South Skirt Mountain, Bear Mountain, Royal Bay and Centre Mountain, it is expected that the water system asset base will continue to grow significantly in the near future as initial water servicing infrastructure is installed which will impact operating and maintenance costs. Given the size of the developments and anticipated phasing and build-out timelines, it is expected that there will be an element of 'revenue lag', possibly over several years, before revenue generated from retail water sales in these and other developments offsets the initial infrastructure operating and maintenance costs. Staff will be examining this issue and possible rate options to mitigate the budget implications further in 2021 through the Water Rate Methodology and Option Study, directed by the Commission earlier this year.

The net core 2021 operating budget increase is \$187,569, plus a one-time budget request of \$40,000 for the water rate study. The core operating budget increase is primarily due to labour budget adjustments and corporate overhead allocation adjustments. Operating budget forecasts for 2022 through 2025 have been presented for information.

### Capital Budget

There are a number of capital projects planned for 2021 with a total value of \$25,215,000, including \$4,850,000 that are in progress or are multi-year projects, and \$4,630,000 in Development Cost Charge (DCC) projects. There are also \$1,570,000 in projects cost shared with the Regional Water Supply Service. See pages 10-27 of the budget document for capital plan details. The major projects in 2021 include accelerated asbestos cement water main replacement including the Goldstream Avenue main replacement from Veterans Memorial Parkway to Spencer Road, reservoir upgrades at Rocky Point Reservoir, Sun River Reservoir and Silverspray Reservoir, pumpstation upgrades at Rocky Point Pumpstation and Coppermine Pumpstation, and residential service line and water meter replacements. Under the DCC program, 2021 construction is planned to continue at the McCallum Pumpstation and South Skirt Mountain Tank 4 and Pumpstation 7. A five year capital plan has been presented for information. The total five year (2021-2025) capital plan budget is currently \$63,190,000.

### Capital and Debt Expenditures

The 2021 capital expenditures will be partially funded through a transfer to the water capital fund budgeted at \$5,278,916, with the balance funded through debt. 2021 debt expenditures for existing and new debt servicing are budgeted to be \$1,888,336. Debt servicing expenditures have increased by \$138,468 over 2020. This increase is primarily due to a \$5,100,000 borrowing undertaken in 2020, under the 2015 loan authorization intended to allow borrowing to partially fund the capital plan. This was the last loan that could be borrowed under this authorization which is now expired. The loan authorization was for \$14,800,000, but only \$10,100,000 was borrowed as the balance was funded through budgeted capital contributions and water sales revenue surpluses over the past five years. The upcoming debt retirements on existing borrowings are summarized as follows:

Loan Number	Retirement Date	Loan Amount
LA3164-096	October 2020	\$1,000,000
LA3164-099	October 2021	\$500,000
LA3164-101	April 2022	\$500,000
LA3782-118	April 2027	\$2,500,000
LA3782-124	April 2028	\$4,500,000
LA3782-127	April 2029	\$5,000,000
LA3981-137	April 2031	\$2,000,000
LA3981-145	April 2033	\$3,000,000
LA3981-150	April 2035	\$5,100,000

A new loan authorization in the amount of \$14,800,000 is proposed to allow continued partial funding of the five year capital plan. The loan authorization bylaw and approval process is addressed under a separate staff report.

The recently incurred debt and proposed future debt will change the funding make-up of the capital plan. When assessing key financial health indicators, the service maintains an affordable level of debt over the next five years. The percentage of revenue dedicated to debt costs is forecast to be between 9-12%, which is less than an annual benchmark rate of 25%. Additionally, the debt funding for capital investment in each of the next five years does not exceed 40%.

A summary indicator table is provided below:

Year	% Revenue for Debt	Capital Funded by Debt
2021	9.1%	25.8%
2022	10.9%	37.1%
2023	11.8%	25.9%
2024	11.8%	4.1%
2025	11.4%	0.0%

A \$71,730 transfer to the vehicle/equipment replacement fund is planned in 2021. The reserve fund balance is estimated at \$196,009 at year end 2020 (See reserve schedule – Page 30 of the budget document).

The DCC projects will be funded entirely from the DCC reserve fund, which is projected to have a balance of \$6,458,821 at year end 2020 (See reserve schedule – Page 29 of the budget document).

#### Bulk Water Purchase

Based on the proposed 2021 budgeted water demand and Regional Water Supply wholesale water rate, the bulk water purchase budget has been set at \$6,361,720.

#### Water Demand

Total water demand in the service area is anticipated to continue to increase year over year, primarily as a result of growth in the service area. Although this trend has resulted in actual demand exceeding budgeted demand in recent years, the 2020 year end demand is projected to be on budget at 8,900,000 cubic metres. The cooler than normal temperatures and above average precipitation in June (140% of the monthly average precipitation), did significantly affect total daily demand in June which can often be a high demand month. In addition, staff have analyzed the impact of the COVID-19 pandemic on local water demand, particularly across the residential and business sectors. Overall, the Regional Water Supply System experienced a net reduction of 6% in total water demand over the March – August 2020 period compared to the previous three year average over the same period. This equates to a reduction in consumption of 624 million litres of water. At the regional level, May demand was down 12.9% and June demand was down 17.7% compared to 2019 demand. These reductions are primarily tied to school, office, restaurant and hotel closures, and virtually no tourism. In summary, the pandemic health directives and public response have had a negative impact on water demand across all water service areas.

The recommended 2021 water rate has been calculated using a budget demand of 8,900,000 cubic metres (Page 6 of the budget document), which is the same volume used in the 2020 budget.



Proposed 2021 Wholesale Water Rate

The proposed 2021 wholesale water rate is \$0.7148 per cubic metre, a 2.58% increase from the 2020 rate, subject to the Regional Water Supply Commission's approval.

Proposed Agricultural Water Rate

The proposed 2021 agricultural water rate has been maintained at the 2020 rate of \$0.2105 per cubic metre, subject to the Regional Water Supply Commission's approval. The Regional Water Supply agricultural water rate budget funds the difference between the municipal retail water rate and the agricultural water rate.

Proposed 2021 Juan de Fuca Water Distribution Service Retail Water Rate

The recommended retail water rate has taken into consideration the revenue required to meet operating and capital expenditures, debt obligations, the bulk water purchase expense, and the budget demand volume established for 2021. The proposed 2021 Juan de Fuca Water Distribution Service retail water rate is \$2.3081 per cubic metre, a 4.16% increase from the 2020 rate (Page 7 of the budget document).

Retail and Wholesale Water Rate History and Projection

The retail and wholesale water rate history and projection is attached (Appendix C). The rates may be adjusted in the future to reflect actual revenue and expenditure circumstances and water demand volumes.

**RECOMMENDATIONS**

That the Juan de Fuca Water Distribution Commission recommends that the Capital Regional District Board:

1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2021 Juan de Fuca Water Distribution Service retail water rate of \$2.3081 per cubic metre, adjusted if necessary by any change in the Regional Water Supply wholesale water rate; and
3. Amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

Submitted by:	Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENTS**

Appendix A: 2021 Juan de Fuca Water Distribution Service Budget  
Appendix B: Long Term Debt Obligations Summary  
Appendix C: Retail and Wholesale Water Rate History and Projection

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **JDF Water Distribution**

#### **COMMISSION REVIEW**

SEPTEMBER 2020

**Service:** 2.680 JDF Water Distribution

**Commission:** Juan De Fuca Water Distribution

#### DEFINITION:

To finance the administration, development, maintenance, and operational expenses, of the Juan de Fuca Water Distribution local service in the Western Communities of the Capital Regional District, as per the Water Distribution Local Service Area Establishment Bylaw No. 2538.

The establishment and operation of a Juan de Fuca water Distribution Commission is done by Bylaw No. 2540.

#### SERVICE DESCRIPTION:

Juan de Fuca Water Distribution Service provides retail water distribution system to participants within the Western Communities. The service administration and operation is provided by the Integrated Water Services Department.

#### PARTICIPATION:

City of Colwood	District of Metchosin
City of Langford	District of Sooke
Town of View Royal	District of Highlands
Juan de Fuca Electoral Area	

#### MAXIMUM LEVY:

The maximum amount that may be requisitioned is NIL.

#### MAXIMUM CAPITAL DEBT:

Authorized:	\$19,000,000 Pre - (Consolidated MFA Loan Authorizations - Juan de Fuca Water Distribution Facilities)
Borrowed:	\$17,500,000 Pre - (Consolidated amounts borrowed - Juan de Fuca Water Distribution Facilities)
Expired:	\$1,500,000
Authorized:	\$14,800,000 2015 - (MFA Bylaw No. 3981 Juan de Fuca Water Distribution Facilities)
Borrowed:	\$10,100,000
Expired:	\$4,700,000
Authorized:	\$10,000,000 DCC - (MFA Bylaw No. 3164 Juan de Fuca Water Distribution Facilities Development-DCC)
Borrowed:	\$3,500,000 DCC - (MFA Bylaw No. 3164 Juan de Fuca Water Distribution Facilities Development-DCC)
Expired:	\$6,500,000

#### FUNDING:

Costs are recovered from Water Sales, and transfer from DCC reserves to service DCC debt.

## Rate Base for 2021 Revenue Year

	<u>2019</u> <u>Applic</u>	<u>2020</u> <u>Applic</u>	<u>End of 2020</u> <u>for '21 Applic.</u>	<u>Change</u>	
<b>Retail System</b>					
Physical Plant	\$ 160,579,824	\$ 166,168,703	\$ 174,624,245	\$ 8,455,543	Note 1
Construction Work In Progress	1,593,750	1,019,107	962,562	(56,545)	Note 1
Cash Working Capital	741,992	826,902	854,959	28,056	
Inventory	<u>525,000</u>	<u>525,000</u>	<u>525,000</u>	<u>-</u>	
Total Retail Rate Base	\$ 163,440,566	\$ 168,539,712	\$ <b>176,966,766</b>	\$ 8,427,055	

Note 1: Refer to the Schedule of Change in Physical Plant & Work in Progress for details.

## Schedule of Change in Physical Plant &amp; Work In Progress

**Retail**

<b>Projected Asset Additions</b>	<b>Projected Assets Capitalized</b>
Pipes	\$ 8,780,093
Meters	900,000
Pump Stations	643,555
Reservoir rehabilitation and upgrades	312,834
Reservoir Demolition	209,608
Scada	195,955
Hydrants	175,000
Disaster Response Studies	150,000
Bulk Water Station	140,000
Building improvements	120,000
Building Modification	101,799
Update procedures & Eng Specifications	85,257
Computer upgrades	85,000
Small Diameter Program Update	83,323
Generator for Pump Station	75,000
Studies (Hydraulic model)	60,000
Other Projects (15 minor projects under \$50k)	217,352
Total projected assets capitalized	\$ 12,334,775
Less: current years depreciation	\$ (4,556,394)
Less: change in prior year forecast addition estimates, & disposals.	677,161
Change in Physical Plant	<u>\$ 8,455,543</u>

**Projected Construction Work In Progress (CWIP)**

Pump Stations	\$ 723,962
Reservoir rehabilitation and upgrades	60,262
Computer upgrades	51,750
Other Projects (8 minor projects under \$50k)	126,588
Projected CWIP	<u>\$ 962,562</u>
Less Prior years projected CWIP	(1,019,107)
Change in CWIP	<u>\$ (56,545)</u>

## Revenue Requirements for 2021 Year

	2019 Application	2020 Application	2021 Application	Change	
<b>Retail</b>					
Operations & maintenance	\$ 6,018,379	\$ 6,707,098	\$ 6,934,667	\$ 227,569	
Depreciation	4,269,223	4,532,773	4,833,774	301,002	
Return on rate base	<u>2,473,800</u>	<u>2,682,900</u>	<u>2,814,700</u>	<u>131,800</u>	Note 1
Subtotal of above	\$ 12,761,402	\$ 13,922,771	\$ 14,583,141	\$ 660,371	
Non-rate revenue	(174,500)	(174,500)	(174,500)	-	
DCC Repayment	<u>(239,785)</u>	<u>(228,160)</u>	<u>(228,160)</u>	<u>-</u>	
Total retail	\$ 12,347,117	\$ 13,520,111	\$ 14,180,481	\$ 660,371	

Note 1: Return on rate base is calculated with reference to the long term Canada bond rate & the average debt rate.

## Change in Budget 2020 to 2021

Service: 2.680 Juan de Fuca Water Distribution

## Total Expenditure

## Comments

## 2020 Budget

20,129,341

## Change in Salaries:

Change in Labour

98,600

Labour charges (Salaries and overhead, including corporate allocations)

Total Change in Salaries

98,600

## Other Changes:

Contract for Services

40,000

Water Rate Methodology and Options Study

Bulk Water Purchases

160,200

Transfers to Capital Funds

137,794

Principal &amp; Interest Payments

138,468

Standard Overhead Allocation

111,201

Other Costs

(22,232)

Total Other Changes

565,431

## 2021 Budget

20,793,372

% expense increase from 2020:

3.3%

% Requisition increase from 2020 (if applicable):

n/a

Requisition funding is (x)% of service revenue

## Overall 2020 Budget Performance

(expected variance to budget and surplus treatment)

Operating costs are \$67,500 (1.0%) over budget due to one time unplanned system maintenance work, partially offset by lower staffing costs due to vacant positions and lower contract for services. The overage is offset by increased revenue of \$85,000 (0.4%). The net surplus of \$17,500 will be transferred to the services' Water Capital Fund.

**2021 Demand Estimate****Retail Demand**

<u>Years</u>	<u>Actual Demand cu.metre</u>	<u>Budgeted Demand cu.metre</u>
2016	8,622,990	7,710,000
2017	8,595,300	8,000,000
2018	8,853,800	8,200,000
2019	8,911,315	8,600,000
2020	8,900,000*	8,900,000

**2021 Demand Estimate****8,900,000***\* Projected consumption for 2020*



### Summary of Retail Water Rates

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
<b>Retail (direct) water rate</b>						
Unit cost per cu.m.	\$1.9129	\$2.0739	\$2.1132	\$2.2159	\$2.3081	\$0.0922

### Retail Water Rate Increase Impact on Residential Water Bill

Average consumption per 2 month billing cycle: \* 39.0 cubic meters (annual = 234.0 cu.m)

<u>Charge for Two Months Consumption</u>	<u>Year</u>	<u>Bi monthly Charge</u>	<u>Annual Charge</u>	<u>2020 Annual Change \$</u>
Average Consumption	2020	\$ 86.42	\$ 518.52	
	2021	\$ 90.02	\$ 540.10	\$ 21.57
Half Average Consumption	2020	\$ 43.21	\$ 259.26	
	2021	\$ 45.01	\$ 270.05	\$ 10.79
Twice Average Consumption	2020	\$ 172.84	\$ 1,037.04	
	2021	\$ 180.03	\$ 1,080.19	\$ 43.15

**Schedule A**  
**Asset Useful Life Assignments - PSAB**

<u>Classes:</u>	<u>Code</u>	<u>Asset Categories</u>	<u>Useful Life, Years</u>
<b>Land</b>	LAND	Land & Rights of Way * (Note 1)	N/A
<b>Building</b>	BLDG	Building, Permanent	50
	BLOT	Building, Temporary/ Portable	20
	BLFX	Building fixture ( <i>sprinklers</i> )	20
<b>Equipment</b>	BOAT	Boats & Marine Equipment	10
	COMP	Computer Equipment ( <i>includes software</i> )	5
	ELEC	Electronic Equipment( <i>hydromet, weather stn eqpt</i> )	5
	FIRE	Fire & Safety Equipment	10
	GENT	Generator	20
	HYDR	Hydrants and Standpipes	20
	HYDY	Hydrology	10
	MTRS	Meters	20
	OFFE	Office Equipment	5
	OFFF	Office Furniture	10
	SCDA	SCADA Equipment	10
	SCRN	Intake Screens/Membranes ( <i>stop logs</i> )	20
	SHOP	Shop Equipment	10
	TELE	Telecommunication Eqpt ( <i>radios, phone systems</i> )	10
	WEQP	Water Works Eqpt( <i>W. Quality lab, Wshed eqpt</i> )	10
	NEW GRP	Weather stn & communication tower	15
<b>Vehicle</b>	VEHC	Vehicles	8
<b>Engineering</b>	BRDG	Bridge	50
<b>Structure</b>	CANL	Canal	50
	DAMS	Dam Structures	100
	PIPE	Pipelines, includes Vaults, Kiosks, Valve chambers	75
	PIPF	Pipelines, fittings	20
	PLPV	Parking lot paved	40
	PSEQ	Pump Station Equipment	20
	PSHS	Pump Station Housing	50
	PRVS	Valves, Flushes & PRV's	20
	RDGR	Roads gravel	20
	RDPV	Roads paved	40
	RESS	Reservoirs (steel & concrete)	50
	REST	Reservoirs (tower/tank)	35
	TANK	Storage tank	40
	TELP	Telephone and Power Lines	50
	TUNN	Tunnel, Culvert and Diversions	50
	WATP	Water Treatment Plant	25
	WELL	Wet well/ Well	50
<b>Other Assets</b>	CSTU	Capital Management Studies	5
	FENC	Fences	15
	LIMP	Land & Yard Improvements	20

Note 1: Land is not depreciated so a useful life assignment is not applicable.

# APPENDIX A

## CAPITAL REGIONAL DISTRICT

Program Group: CRD-JDF Water Distribution  SUMMARY OF PROGRAMS  1	2020 BOARD BUDGET  2	2020 ESTIMATED ACTUAL  3	2021 BUDGET REQUEST				FUTURE PROJECTIONS			
			2021 CORE BUDGET  4	2021 ONGOING  5	2021 ONE-TIME  6	TOTAL (COL 4, 5 & 6)  7	2022  8	2023  9	2024  10	2025  11
<b><u>OPERATING COSTS</u></b>										
ALLOCATION - OPERATIONS	4,298,560	4,586,339	4,539,881	-	-	4,539,881	4,617,043	4,713,263	4,802,799	4,895,671
OPERATING - OTHER COSTS	977,816	942,564	937,033	-	-	937,033	919,632	964,220	974,602	983,666
SALARIES AND WAGES	526,557	417,240	547,368	-	-	547,368	549,065	560,853	572,896	585,192
CONTRACT FOR SERVICES	540,916	465,208	395,935	-	40,000	435,935	423,452	430,411	437,611	444,219
ALLOCATION - STANDARD OVERHEAD	363,249	363,249	474,450	-	-	474,450	552,362	563,410	574,678	586,171
<b>TOTAL OPERATING EXPENDITURES</b>	<b>6,707,098</b>	<b>6,774,600</b>	<b>6,894,667</b>	<b>-</b>	<b>40,000</b>	<b>6,934,667</b>	<b>7,061,554</b>	<b>7,232,157</b>	<b>7,362,586</b>	<b>7,494,919</b>
Percentage increase over prior year's board budget			2.80%			3.39%	1.83%	2.42%	1.80%	1.80%
BULK WATER PURCHASE	6,201,520	6,201,520	6,361,720	-	-	6,361,720	6,564,600	6,895,980	7,181,520	7,529,280
<b>BULK WATER EXPENDITURES</b>	<b>6,201,520</b>	<b>6,201,520</b>	<b>6,361,720</b>	<b>-</b>	<b>-</b>	<b>6,361,720</b>	<b>6,564,600</b>	<b>6,895,980</b>	<b>7,181,520</b>	<b>7,529,280</b>
			2.58%			2.58%				
<b><u>CAPITAL EXPENDITURES &amp; TRANSFERS</u></b>										
TRANSFER TO WATER CAPITAL FUND	5,200,860	5,218,737	5,278,916	-	-	5,278,916	5,500,000	6,000,000	6,500,000	7,000,000
TRANSFER TO DEBT RESERVE FUND	56,050	56,050	71,730	-	-	71,730	65,730	27,730	9,730	6,730
TRANSFER TO EQUIPMENT REPLACEMENT FUND	213,945	213,945	258,003	-	-	258,003	263,163	268,426	273,795	279,270
<b>TOTAL CAPITAL EXPENDITURES &amp; TRANSFERS</b>	<b>5,470,855</b>	<b>5,488,732</b>	<b>5,608,649</b>	<b>-</b>	<b>-</b>	<b>5,608,649</b>	<b>5,828,893</b>	<b>6,296,156</b>	<b>6,783,525</b>	<b>7,286,000</b>
<b><u>DEBT SERVICING</u></b>										
DEBT - INTEREST & PRINCIPAL	1,749,868	1,749,868	1,888,336	-	-	1,888,336	2,370,709	2,721,305	2,851,316	2,869,346
<b>TOTAL DEBT EXPENDITURES</b>	<b>1,749,868</b>	<b>1,749,868</b>	<b>1,888,336</b>	<b>-</b>	<b>-</b>	<b>1,888,336</b>	<b>2,370,709</b>	<b>2,721,305</b>	<b>2,851,316</b>	<b>2,869,346</b>
<b>TOTAL EXPENDITURES</b>	<b>20,129,341</b>	<b>20,214,720</b>	<b>20,753,372</b>	<b>-</b>	<b>40,000</b>	<b>20,793,372</b>	<b>21,825,756</b>	<b>23,145,598</b>	<b>24,178,947</b>	<b>25,179,545</b>
<b><u>SOURCES OF FUNDING</u></b>										
REVENUE - SALES	(19,721,631)	(19,721,510)	(20,502,201)	-	(40,000)	(20,542,201)	(21,613,930)	(22,964,368)	(23,997,717)	(24,998,315)
REVENUE - OTHER	(179,550)	(265,050)	(181,230)	-	-	(181,230)	(181,230)	(181,230)	(181,230)	(181,230)
<b>TOTAL SOURCE OF FUNDING FROM OPERATIONS</b>	<b>(19,901,181)</b>	<b>(19,986,560)</b>	<b>(20,683,431)</b>	<b>-</b>	<b>(40,000)</b>	<b>(20,723,431)</b>	<b>(21,795,160)</b>	<b>(23,145,598)</b>	<b>(24,178,947)</b>	<b>(25,179,545)</b>
<b><u>SOURCES OF OTHER FUNDING</u></b>										
TRANSFER FROM DCC RESERVES TO FUND DCC DEBT	(228,160)	(228,160)	(69,941)	-	-	(69,941)	(30,596)	-	-	-
TRANSFER FROM PRIOR YEAR	-	-	-	-	-	-	-	-	-	-
TRANSFER TO FOLLOWING YEAR										
<b>TOTAL SOURCES OF ALL FUNDING</b>	<b>(20,129,341)</b>	<b>(20,214,720)</b>	<b>(20,753,372)</b>	<b>-</b>	<b>(40,000)</b>	<b>(20,793,372)</b>	<b>(21,825,756)</b>	<b>(23,145,598)</b>	<b>(24,178,947)</b>	<b>(25,179,545)</b>
Percentage increase over prior year's board budget			3.10%			3.30%	5.17%	6.05%	4.46%	4.14%

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

<b>Service No.</b>	<b>2.680</b>	<b>Carry</b>						
	<b>JDF Water Distribution</b>	<b>Forward from</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>
		<b>2020</b>						

**EXPENDITURE**

Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$4,400,000	\$24,565,000	\$15,565,000	\$7,910,000	\$6,660,000	\$6,555,000	\$61,255,000	
Vehicles	\$450,000	\$650,000	\$350,000	\$190,000	\$580,000	\$165,000	\$1,935,000	
	<b>\$4,850,000</b>	<b>\$25,215,000</b>	<b>\$15,915,000</b>	<b>\$8,100,000</b>	<b>\$7,240,000</b>	<b>\$6,720,000</b>	<b>\$63,190,000</b>	

**SOURCE OF FUNDS**

Capital Funds on Hand	\$2,100,000	\$11,275,000	\$4,990,000	\$5,790,000	\$6,340,000	\$6,535,000	\$34,930,000	
Debenture Debt (New Debt Only)	\$0	\$6,500,000	\$5,900,000	\$2,100,000	\$300,000	\$0	\$14,800,000	
Equipment Replacement Fund	\$250,000	\$450,000	\$350,000	\$190,000	\$580,000	\$165,000	\$1,735,000	
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Donations / Third Party Funding	\$0	\$2,360,000	\$0	\$0	\$0	\$0	\$2,360,000	
Reserve Fund	\$2,500,000	\$4,630,000	\$4,675,000	\$20,000	\$20,000	\$20,000	\$9,365,000	
	<b>\$4,850,000</b>	<b>\$25,215,000</b>	<b>\$15,915,000</b>	<b>\$8,100,000</b>	<b>\$7,240,000</b>	<b>\$6,720,000</b>	<b>\$63,190,000</b>	

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

<b>Service No.</b>	<b>2.670/2.680</b>							
	<b>Regional Water Supply &amp; JDF Water Distribution Combo</b>	<b>Carry Forward from 2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>

**EXPENDITURE**

Buildings	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
Equipment	\$500,000	\$1,490,000	\$980,000	\$330,000	\$330,000	\$330,000	\$330,000	\$3,460,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<b>\$500,000</b>	<b>\$1,570,000</b>	<b>\$1,060,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$3,860,000</b>
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**SOURCE OF FUNDS**

Capital Funds on Hand	\$500,000	\$1,570,000	\$1,060,000	\$410,000	\$410,000	\$410,000	\$410,000	\$3,860,000
Debenture Debt (New Debt Only)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Replacement Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<b>\$500,000</b>	<b>\$1,570,000</b>	<b>\$1,060,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$3,860,000</b>
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CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM  
2021 & Forecast 2022 to 2025

Service #:  
2.680

Service Name:  
JDF Water Distribution

Proj. No.  
The first two digits represent first year the project was in the capital plan.

Capital Exp. Type  
Study - Expenditure for feasibility and business case report.  
New - Expenditure for new asset only  
Renewal - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service  
Replacement - Expenditure replaces an existing asset

Funding Source Codes  
Debt = Debenture Debt (new debt only)  
ERF = Equipment Replacement Fund  
Grant = Grants (Federal, Provincial)  
Cap = Capital Funds on Hand  
Other = Donations / Third Party Funding

Funding Source Codes (con't)  
Res = Reserve Fund  
STLoan = Short Term Loans  
WU - Water Utility

Asset Class  
L - Land  
S - Engineering Structure  
B - Buildings  
V - Vehicles  
E - Equipment

Capital Project Title  
Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

Capital Project Description  
Briefly describe project scope and service benefits.  
For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".

Total Project Budget  
This column represents the total project budget not only within the 5-year window.

FIVE YEAR FINANCIAL PLAN													
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
INFRASTRUCTURE ENGINEERING AND OPERATIONS													
Planning													
16-03	Renewal	Asset Management Plan	Combine past studies to plan out future capital expenditures.	\$150,000	S	WU	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$50,000
21-14	Renewal	Fire Storage Analysis	Assess and update the fire flow upgrade program to inform future capital works.	\$120,000	S	WU	\$0	\$120,000	\$0	\$0	\$0	\$0	\$120,000
Capital													
16-05	Renewal	Comprehensive Pump Station Upgrades (10 year Program)	Continue pump station condition assessments, plan and carry out upgrades.	\$5,000,000	S	WU	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$0	\$0	\$3,000,000
18-02	Renewal	JDF Reservoir Upgrades	Reservoir improvements are required at Walfred, Peacock, and Helgesen Reservoirs. In 2018 a review of all three reservoirs was conducted including implementing improvements to Walfred.	\$1,250,000	S	WU	\$480,000	\$480,000	\$450,000	\$0	\$0	\$0	\$930,000
18-03	Renewal	JDF Site Decommissioning Program	Decommissioning of facilities that are no longer in use based on preliminary work from Annual Provisional	\$1,050,000	S	WU	\$450,000	\$450,000	\$100,000	\$350,000	\$100,000	\$0	\$1,000,000
18-05	Replacement	Rocky Point Upgrades	Replacement of Rocky Point P.S., additional storage at Rocky Point Reservoir & water main upgrades. Partnered with DND.	\$3,550,000	S	WU	\$0	\$3,300,000	\$0	\$0	\$0	\$0	\$3,300,000
18-05	Replacement	Rocky Point Upgrades	Replacement of Rocky Point P.S., additional storage at Rocky Point Reservoir & water main upgrades. Partnered with DND.	\$2,060,000	S	Other	\$0	\$2,060,000	\$0	\$0	\$0	\$0	\$2,060,000
18-06	New	Disaster Response Plan for Water Supply and Distribution	Determine and supply response equipment for disaster response.	\$350,000	S	WU	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
19-06	Renewal	Corrosion Protection Program	Undertake a program to assess and prevent corrosion to existing steel pipe within the Juan du Fuca water system.	\$50,000	S	WU	\$0	\$5,000	\$5,000	\$5,000	\$5,000	\$0	\$20,000
19-09	New	Distribution System Seismic Resiliency Improvements	Determine and commence improvements to the distribution system to provide seismic resiliency.	\$1,750,000	S	WU	\$50,000	\$50,000	\$150,000	\$500,000	\$500,000	\$500,000	\$1,700,000
20-03	Replacement	AC Pipe Replacement Program	Replacement of aging asbestos cement pipe as highlighted in the 2019 update report	\$24,000,000	S	WU	\$0	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$15,000,000

20-04	Replacement	William Head & VGH Meter Replacement	Replacement of the meter and chambers at William Head & VGH with the possibility of resilient connections.	\$700,000	S	WU	\$50,000	\$450,000	\$250,000	\$0	\$0	\$0	\$700,000
20-05	New	Electrical Isolation Audit	Inspection audit of facilities to ensure that there is sufficient electrical separation and isolation for safety.	\$50,000	S	WU	\$20,000	\$20,000	\$0	\$0	\$0	\$0	\$20,000
20-06	Replacement	Sun River Reservoir Replacement	Replace the existing concrete tank with a steel tank for increase capacity and resilience.	\$900,000	S	WU	\$800,000	\$800,000	\$0	\$0	\$0	\$0	\$800,000
20-07	Replacement	Goldstream AC Replacement	Replacement of aging asbestos cement pipe within Goldstream Rd, fromVMP to Spencer.	\$5,000,000	S	WU	\$0	\$4,800,000	\$0	\$0	\$0	\$0	\$4,800,000
21-02	Replacement	Sooke Rd - 2,200m of 600m Pipe - VMP to Jacklin	Replacement of aged, large diameter water main from Jacklin Rd to VMP	\$2,400,000	S	WU	\$0	\$0	\$2,400,000	\$0	\$0	\$0	\$2,400,000
21-11	Replacement	Marilyn Rd - 110m of 200mm Pipe	Replacement of 110m of watermain to ensure proper fire flows in the area.	\$150,000	S	WU	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
21-12	New	Ironmine Recirculation Line	Installation of a recirculation line to improve water quality at the Silverspray Reservoir	\$165,000	S	WU	\$0	\$165,000	\$0	\$0	\$0	\$0	\$165,000
21-13	Replacement	SCADA Master Plan Update & Upgrades	Update the SCADA Master Plan in conjunction with the RWS, Saanich Peninsula and Core Area infrastructure.	\$700,000	S	WU	\$0	\$200,000	\$500,000	\$0	\$0	\$0	\$700,000
21-15	New	Florence Lake Inclusion Upgrades	Upgrades are required to the Florence Lake water system prior to including it into the JDF Water System.	\$300,000	S	Other	\$0	\$300,000	\$0	\$0	\$0	\$0	\$300,000
Sub-Total System Infrastructure Engineering and Operations				\$49,695,000			\$1,900,000	\$17,450,000	\$7,905,000	\$4,905,000	\$3,655,000	\$3,550,000	\$37,465,000
CUSTOMER AND TECHNICAL SERVICES													
16-06	Replacement	Vehicle & equipment replacement (funding from replacement fund)	Vehicle and equipment replacement.	\$1,395,000	V	ERF	\$250,000	\$450,000	\$350,000	\$190,000	\$580,000	\$165,000	\$1,735,000

20-09	New	Vehicle for the Meter Replacement Program	A new Service Van to be used for the meter replacement program	\$200,000	V	WU	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
Sub-Total Customer and Technical Services				\$1,595,000			\$450,000	\$650,000	\$350,000	\$190,000	\$580,000	\$165,000	\$1,935,000
ANNUAL PROVISIONAL ITEMS													
17-07	New	Site Decommissioning - General	Planning for decommissioning of unused sites.	\$50,000	S	WU	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
17-09	Replacement	Emergency Main Replacement	Major main replacement under emergencies.	\$500,000	S	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
17-12	Replacement	Large Meters/Meter Vaults Components Replacement	Replacement or repairs to components in large meters/vaults as required.	\$1,250,000	S	WU	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
17-13	New	Site Security Upgrades	Upgrading and replacement of security systems for sites as required.	\$200,000	S	WU	\$0	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$200,000
17-15	Renewal	Distribution System Improvements	Unplanned distribution system improvements.	\$2,250,000	S	WU	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,250,000
17-16	New	Hydraulic Model Yearly Update	Annual hydraulic model update.	\$300,000	S	WU	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
21-03	Replacement	Hydrant & Flush Replacement, Upgrades and Additions	Upgrade, replacement or installation of flushes and fire hydrants, and fire flow testing.	\$1,125,000	S	WU	\$0	\$225,000	\$225,000	\$225,000	\$225,000	\$225,000	\$1,125,000
21-04	Replacement	Residential Service & Meter Replacement	Replacement of residential water meters as highlighted by the 2017 KWL Water Audit report.	\$6,000,000	S	WU	\$0	\$800,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$6,000,000
21-05	Replacement	Pump Station Equipment Replacements	Unplanned pump station repairs and equipment replacement	\$750,000	S	WU	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
21-06	Replacement	SCADA Equipment Replacement	Unplanned replacement of SCADA and electrical equipment.	\$500,000	S	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
21-07	Renewal	Reservoir Equipment Replacement	Replacement or repairs to components at reservoir sites.	\$500,000	S	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
21-09	Replacement	Valve Replacement	Unplanned replacement and repair of isolation and line valves, and air valves.	\$1,000,000	S	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
Sub-Total for Annual Provisional Items				\$14,425,000			\$0	\$2,485,000	\$2,985,000	\$2,985,000	\$2,985,000	\$2,985,000	\$14,425,000
DEVELOPMENT COST CHARGE (DCC)													
16-07	New	Update DCC Bylaw (Comprehensive Update in 2022)	Planned update of the DCC Bylaw.	\$255,000	S	Res	\$0	\$20,000	\$175,000	\$20,000	\$20,000	\$20,000	\$255,000
20-02	New	Bear Mountain Parkway Extension Supply Mains	Supply mains installed by the City of Langford.	\$2,000,000	S	Res	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$1,500,000
21-01	New	Sooke Henlyn Supply & Distribution Mains	Construction of water mains based upon development predictions from the Helgesen Pump Station westwards.	\$1,000,000	S	Res	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$1,000,000
23-01	New	Tank 4 and McCallum Pump Station (2020-2021) and Pump Station 7 and remaining Supply Main to Skirt Mtn Reservoir (2022)	Upgrades to complete the South Skirt Water System	\$7,110,000	S	Res	\$2,500,000	\$4,610,000	\$2,000,000	\$0	\$0	\$0	\$6,610,000
Sub-Total for Development Cost Charges (DCC)				\$10,365,000			\$2,500,000	\$4,630,000	\$4,675,000	\$20,000	\$20,000	\$20,000	\$9,365,000
GRAND TOTAL				\$76,080,000			\$4,850,000	\$25,215,000	\$15,915,000	\$8,100,000	\$7,240,000	\$6,720,000	\$63,190,000



CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM

2021 & Forecast 2022 to 2025

Service #:

2.670/2.680

Service Name:

Regional Water Supply & JDF Water Distribution Combo

Proj. No.

The first two digits represent first year the project was in the capital plan.

Capital Exp. Type

Study

- Expenditure for feasibility and business case report.

New

- Expenditure for new asset only

Renewal

- Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service

Replacement

- Expenditure replaces an existing asset

Funding Source Codes

Debt

= Debenture Debt (new debt only)

ERF

= Equipment Replacement Fund

Grant

= Grants (Federal, Provincial)

Cap

= Capital Funds on Hand

Other

= Donations / Third Party Funding

Funding Source Codes (con't)

Res

= Reserve Fund

STLoan

= Short Term Loans

WU

= Water Utility

Asset Class

L

- Land

S

- Engineering Structure

B

- Buildings

V

- Vehicles

Capital Project Title

Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

Capital Project Description

Briefly describe project scope and service benefits.

For example: *"Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".*

Total Project Budget

This column represents the total project budget not only within the 5-year window.

FIVE YEAR FINANCIAL PLAN													
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
SYSTEM REPLACEMENT AND UPGRADES THAT BENEFIT REGIONAL WATER SUPPLY AND JUAN DE FUCA DISTRIBUTION													\$0
16-01	Renewal	Upgrades to Buildings at 479 Island Highway	Maintenance and changes to buildings and office layouts.	\$400,000	B	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-01	Renewal	Voice Radio Upgrade	Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.	\$1,560,000	E	WU	\$0	\$640,000	\$650,000	\$0	\$0	\$0	\$1,290,000
20-01	New	Portable Pump Station	Portable pump station to provide backup when a pump station is offline, in construction or to bypass a section of pipe.	\$500,000	E	WU	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$500,000
21-01	New	Storage Container for vehicle and equipment Tires	Tires removed from vehicles are stored on site outside of the Fleet office. They need to be stored in a more safe and secured area.	\$20,000	E	WU	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000
Sub-Total System Replacement and Upgrades That Benefit Regional Water Supply and Juan de Fuca Distribution				\$2,480,000			\$500,000	\$1,240,000	\$730,000	\$80,000	\$80,000	\$80,000	\$2,210,000
ANNUAL PROVISIONAL CAPITAL ITEMS													
17-03	Replacement	Office Equipment, Upgrades and Replacements	Upgrade and replacement of office equipment as required.	\$225,000	E	WU	\$0	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$225,000
17-04	Replacement	Computer Upgrades	Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.	\$850,000	E	WU	\$0	\$170,000	\$170,000	\$170,000	\$170,000	\$170,000	\$850,000
17-05	New	Development of the Maintenance Management Systems	Develop maintenance management system.	\$100,000	E	WU	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
17-06	Replacement	Small Equipment & Tool Replacement (Water Operations)	Replacement of tools and small equipment for Water Operations as required.	\$400,000	E	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-07	Replacement	Small Equipment & Tool Replacement (Corporate Fleet)	Replacement of tools and small equipment for Fleet as required.	\$75,000	E	WU	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
Sub-Total for Annual Provisional Capital Items				\$ 1,650,000			\$ -	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	\$1,650,000
GRAND TOTAL				\$4,130,000			\$500,000	\$1,570,000	\$1,060,000	\$410,000	\$410,000	\$410,000	\$3,860,000

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<div> <div>Service: 2.680</div> <div>JDF Water Distribution</div> </div>			
<div>Proj. No.</div> <div>16-03</div>	<div>Capital Project Title</div> <div>Asset Management Plan</div>	<div>Capital Project Description</div> <div>Combine past studies to plan out future capital expenditures.</div>	
<div>Asset Class</div> <div>S</div>	<div>Board Priority Area</div> <div>0</div>	<div>Corporate Priority Area</div> <div>0</div>	
<div> <div>Project Rationale</div> <div>Several studies have been completed and are in progress to assess the JDF assets and programs and the proposed Strategic Asset Management Plan will consolidate the findings of the previous studies in a comprehensive approach to identify and prioritizes future capital expenditures and programs.</div> </div>			
<div>Proj. No.</div> <div>21-14</div>	<div>Capital Project Title</div> <div>Fire Storage Analysis</div>	<div>Capital Project Description</div> <div>Assess and update the fire flow upgrade program to inform future capital works.</div>	
<div>Asset Class</div> <div>S</div>	<div>Board Priority Area</div> <div>0</div>	<div>Corporate Priority Area</div> <div>0</div>	
<div> <div>Project Rationale</div> <div>In order to meet Fire Underwriters Survey recommendations for fire protection, it is necessary to provide certain volumes of water storage. It is proposed to assess fire storage volume requirements for different parts of the system and determine any required upgrades. Funding is required to retain a consultant to complete the analysis.</div> </div>			
<div>Proj. No.</div> <div>16-05</div>	<div>Capital Project Title</div> <div>Comprehensive Pump Station Upgrades (10 year Program)</div>	<div>Capital Project Description</div> <div>Continue pump station condition assessments, plan and carry out upgrades.</div>	
<div>Asset Class</div> <div>S</div>	<div>Board Priority Area</div> <div>0</div>	<div>Corporate Priority Area</div> <div>0</div>	
<div> <div>Project Rationale</div> <div>A previous capital project was completed by Delcan Corp. in 2012 which assessed each existing pump station and identified building deficiencies. This study concluded that on average approximately \$1.0M per year for the next ten years is needed to upgrade existing pump stations. A review of system hydraulics, electrical/mechanical issues and backup power is due to be completed in 2020. Funds in 2021 are for completion of design of and to start construction of the Coppermine PS.</div> </div>			
<div>Proj. No.</div> <div>18-02</div>	<div>Capital Project Title</div> <div>JDF Reservoir Upgrades</div>	<div>Capital Project Description</div> <div>Reservoir improvements are required at Walfred, Peacock, and Helgesen Reservoirs. In 2018 a review of all three reservoirs was conducted including implementing improvements to Walfred.</div>	
<div>Asset Class</div> <div>S</div>	<div>Board Priority Area</div> <div>0</div>	<div>Corporate Priority Area</div> <div>0</div>	

<b>Service:</b> 2.680 <b>JDF Water Distribution</b>			
<b>Project Rationale</b> Numerous deficiencies at the Walfred, Peacock and Helgesen reservoirs have been identified while operating the infrastructure. In 2020 planning and design of improvements at the Helgesen reservoir was undertaken. Improvements like valve reconfiguration, site drainage and controls will be undertaken in 2021 at the Peacock and Skirt reservoirs.			
<b>Proj. No.</b> 18-03	<b>Capital Project Title</b> JDF Site Decommissioning Program	<b>Capital Project Description</b> Decommissioning of facilities that are no longer in use based on preliminary work from Annual Provisional	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Numerous pump station and PRV facilities have been made redundant or have been decommissioned within the JDF system. Sites have been identified as part of the annual provisional project and funds are required to complete decommission of the sites and then demolish them. In 2021 the Townsview tank and pump station will be carried out.			
<b>Proj. No.</b> 18-05	<b>Capital Project Title</b> Rocky Point Upgrades	<b>Capital Project Description</b> Replacement of Rocky Point P.S., additional storage at Rocky Point Reservoir & water main upgrades. Partnered with DND.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Proposed work includes the design and construction of upgrades to the existing Rocky Point Pump Station, storage tank and associated water main upgrades. This work will improve the level of service to both the existing Metchosin water users and the expected increase in flow associated with the Spirit Bay Development in Beecher Bay. Cost sharing with DND for design and construction is underway with construction completing in 2021.			

Service: <b>2.680</b> <b>JDF Water Distribution</b>			
Proj. No.	18-06	Capital Project Title	Disaster Response Plan for Water Supply and Distribution
Capital Project Description	Determine and supply response equipment for disaster response.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Proposed work includes developing a response plan to disasters to the Juan de Fuca water supply or distribution system. Funds are required to procure equipment and carry out works developed the in 2018 plan in conjunction with the Regional Water Supply disaster response Plan.		
Proj. No.	19-06	Capital Project Title	Corrosion Protection Program
Capital Project Description	Undertake a program to assess and prevent corrosion to existing steel pipe within the Juan du Fuca water system.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	There are numerous steel pipes within the Juan du Fuca water distribution system. Some are located in corrosive conditions or connected to dissimilar metals. Funds are required to undertake a program to assess and prevent corrosion to existing pipes.		
Proj. No.	19-09	Capital Project Title	Distribution System Seismic Resiliency Improvements
Capital Project Description	Determine and commence improvements to the distribution system to provide seismic resiliency.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Determine and commence improvements to the distribution system to provide resiliency. In 2021, sites will be prioritized with design commencing in 2022 and construction starting in 2023.		
Proj. No.	20-03	Capital Project Title	AC Pipe Replacement Program
Capital Project Description	Replacement of aging asbestos cement pipe as highlighted in the 2019 update report		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This item is the 2021 to 2025 program for replacement of the water mains identified in the Water Main Upgrading and Replacement Program Update in 2021. All mains were assessed for such criteria as age, pipe material, record of leaks and hydraulic adequacy, and a long-term replacement program was developed. Planned works for 2021 include 1.3km on Luxton Rd, funds for Walfred Rd Phase 2 were used in 2020.		

Service: <b>2.680</b> <b>JDF Water Distribution</b>			
Proj. No.	20-04	Capital Project Title	William Head & VGH Meter Replacement
Capital Project Description	Replacement of the meter and chambers at William Head & VGH with the possibility of resilient connections.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Identified through Statement of Works, the William Head and Victoria General Hospital meters require replacement and redundancy to maintain service to the two facilities. In 2021 funds will be utilized to complete design of the two new meters that will allow for construction of the meters while maintaining service. Construction is to start in winter of 2021 and be completed in 2022.		
Proj. No.	20-05	Capital Project Title	Electrical Isolation Audit
Capital Project Description	Inspection audit of facilities to ensure that there is sufficient electrical separation and isolation for safety.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Identified through Statement of Works, numerous aging facilities with electrical services may pose safety hazards due to inadequate electrical separation from mechanical equipment.		
Proj. No.	20-06	Capital Project Title	Sun River Reservoir Replacement
Capital Project Description	Replace the existing concrete tank with a steel tank for increase capacity and resilience.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Sun River reservoir is experiencing leakage through concrete form tie holes as a result of the original construction process. Funding is required to replace the existing concrete tank with a bolted steel tank.		
Proj. No.	20-07	Capital Project Title	Goldstream AC Replacement
Capital Project Description	Replacement of aging asbestos cement pipe within Goldstream Rd, from VMP to Spencer.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The existing water main within Goldstream Rd, from VMP to Spencer Rd, is aging asbestos cement and identified as a risk for failure. Due to the numerous large connections to the RWS transmission main and complexity replacement of this water main cannot be carried out within the AC Replacement Program. Funds are required to completed design and construct replacement of the water main in 2021.		



Service: 2.680 JDF Water Distribution			
Proj. No.	21-02	Capital Project Title	Sooke Rd - 2,200m of 600m Pipe - VMP to Jacklin
Capital Project Description	Replacement of aged, large diameter water main from Jacklin Rd to VMP		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	According to a corrosion assessment, a 2.2 kilometre section of an existing steel pipe along Sooke Road and Allendale Road (between Wishart to Jacklin) was unprotected and in need of replacement. In 2014, the design of both phases of the water main was completed by a consultant and construction of the main from Wishart to VMP was completed by CRD resources. The balance of the construction, from VMP to Jacklin Rd along Sooke Rd, is to occur in 2022.		
Proj. No.	21-11	Capital Project Title	Marilyn Rd - 110m of 200mm Pipe
Capital Project Description	Replacement of 110m of watermain to ensure proper fire flows in the area.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Marilyn Road has an undersized pipe for fire flows and a hydrant, funds are required to replace 110 m of watermain to ensure proper fire flows in the area.		
Proj. No.	21-12	Capital Project Title	Ironmine Recirculation Line
Capital Project Description	Installation of a recirculation line to improve water quality at the Silverspray Reservoir		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Silverspray Reservoir experiences seasonal low disinfection residuals, funds are required to design and construct a recirculation line to ensure adequate disinfection residuals during low demand periods.		
Proj. No.	21-13	Capital Project Title	SCADA Master Plan Update & Upgrades
Capital Project Description	Update the SCADA Master Plan in conjunction with the RWS, Saanich Peninsula and Core Area infrastructure.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The 2015 SCADA Master Plan requires an update, additionally data radio and SCADA upgrades are required. Funds are required to update the joint SCADA Master Plan and conduct upgrades to pump stations, reservoirs and other communication sites.		

Service: 2.680 JDF Water Distribution			
Proj. No.	21-15	Capital Project Title	Florence Lake Inclusion Upgrades
Capital Project Description	Upgrades are required to the Florence Lake water system prior to including it into the JDF Water Svstem.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Upgrades to the Florence Lake water system are required be before the system can be connected and included in the JDF Water System. Funding provided by the Florence Lake water system will be utilized to complete these upgrades.		
Proj. No.	16-06	Capital Project Title	Vehicle & equipment replacement (funding from replacement fund)
Capital Project Description	Vehicle and equipment replacement.		
Asset Class	V	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is for the replacement of vehicles and equipment used by CRD Integrated Water Services for the day-to-day operation and maintenance of the Juan De Fuca distribution system. These replacements are funded from the Juan De Fuca Vehicle and Equipment Replacement Fund.		
Proj. No.	20-09	Capital Project Title	Vehicle for the Meter Replacement Program
Capital Project Description	A new Service Van to be used for the meter replacement program		
Asset Class	V	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Funds are required for procurement of a new service van for the meter and service replacement.		
Proj. No.	17-07	Capital Project Title	Site Decommissioning - General
Capital Project Description	Planning for decommissioning of unused sites.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is a provisional item to allow engineering and planning reviews of old facilities with a view to possible future site uses.		
Proj. No.	17-09	Capital Project Title	Emergency Main Replacement
Capital Project Description	Major main replacement under emergencies.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This item is to fund the costs of responding to emergency major main breaks and conducting replacements.		

Service: 2.680 JDF Water Distribution			
Proj. No.	17-12	Capital Project Title	Large Meters/Meter Vaults Components Replacement
Capital Project Description	Replacement or repairs to components in large meters/vaults as required.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is an annual provision for the replacement of obsolete and worn out large (greater than 2" diameter) meters, adding new meters and upgrading meter vaults.		
Proj. No.	17-13	Capital Project Title	Site Security Upgrades
Capital Project Description	Upgrading and replacement of security systems for sites as required.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is an annual allowance for upgrading and maintaining equipment, security and control systems at distribution facilities such as pump stations, PRV chambers and reservoirs. Items such as access hatches, fencing, etc., will be modified to provide a larger degree of security.		
Proj. No.	17-15	Capital Project Title	Distribution System Improvements
Capital Project Description	Unplanned distribution system improvements.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Historically, opportunities to complete work arise during the year which were not specifically identified and budgeted. This item typically relates to coordinating work programs (i.e. JDF water main replacements and municipal paving programs) with the municipalities or development and taking advantage of opportunities during the year that were not specifically identified.		
Proj. No.	17-16	Capital Project Title	Hydraulic Model Yearly Update
Capital Project Description	Annual hydraulic model update.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This item is required to input the pipes installed that year into the hydraulic computer model, followed by calibration and testing in order to keep the model up to date for design and planning purposes.		
Proj. No.	21-03	Capital Project Title	Hydrant & Flush Replacement, Upgrades and Additions
Capital Project Description	Upgrade, replacement or installation of flushes and fire hydrants, and fire flow testing.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is an annual provision for replacing old and outdated hydrants, flushes and associated works and access, as well as adding new hydrants to the system where requested by the municipalities or fire departments.		



Service: <b>2.680</b> <b>JDF Water Distribution</b>			
Proj. No.	21-04	Capital Project Title	Residential Service & Meter Replacement
Asset Class	S	Board Priority Area	0
Capital Project Description	Replacement of residential water meters as highlighted by the 2017 KWL Water Audit report.		
Corporate Priority Area	0		
Project Rationale	This is an annual provision for replacing failed residential services and meters, as well as proactively replacing services and meters in areas with historically large number of breaks.		
Proj. No.	21-05	Capital Project Title	Pump Station Equipment Replacements
Asset Class	S	Board Priority Area	0
Capital Project Description	Unplanned pump station repairs and equipment replacement		
Corporate Priority Area	0		
Project Rationale	This is an annual provision for unplanned pump station repairs and equipment replacement.		
Proj. No.	21-06	Capital Project Title	SCADA Equipment Replacement
Asset Class	S	Board Priority Area	0
Capital Project Description	Unplanned replacement of SCADA and electrical equipment.		
Corporate Priority Area	0		
Project Rationale	This is an annual provision for unplanned SCADA and electrical equipment replacement.		
Proj. No.	21-07	Capital Project Title	Reservoir Equipment Replacement
Asset Class	S	Board Priority Area	0
Capital Project Description	Replacement or repairs to components at reservoir sites.		
Corporate Priority Area	0		
Project Rationale	This is an annual provisional for unplanned replacement of equipment, such as safety devices and mechanical fittings, at reservoir sites.		
Proj. No.	21-09	Capital Project Title	Valve Replacement
Asset Class	S	Board Priority Area	0
Capital Project Description	Unplanned replacement and repair of isolation and line valves, and air valves.		
Corporate Priority Area	0		
Project Rationale	This is an annual provisional for unplanned replacement of valves, including air valves and check valves.		

Service: <b>2.680</b> <b>JDF Water Distribution</b>			
Proj. No.	16-07	Capital Project Title	Update DCC Bylaw (Comprehensive Update in 2022)
Capital Project Description	Planned update of the DCC Bylaw.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is a provisional item to cover questions that arise and referred to our consultants for advice. Every 5 years a comprehensive update is required and the previous DCC update was completed in 2017, with the next update scheduled for 2022 for \$175,000.		
Proj. No.	20-02	Capital Project Title	Bear Mountain Parkway Extension Supply Mains
Capital Project Description	Supply mains installed by the City of Langford.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The City of Langford has installed DCC eligible supply water mains as part of their 2017 Bear Mountain Parkway extension road project to avoid future pavement restoration and traffic disruption. It is proposed to pay back the eligible costs in 2022.		
Proj. No.	21-01	Capital Project Title	Sooke Henlyn Supply & Distribution Mains
Capital Project Description	Construction of water mains based upon development predictions from the Helgesen Pump Station westwards.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Proposed work includes the continued installation of the supply and distribution water mains connected to the Helgesen pump station which was previously constructed in 2011 as part of the DCC program. The supply and distribution water mains will continue west as development proceeds towards the proposed Henlyn Tank.		
Proj. No.	23-01	Capital Project Title	Tank 4 and McCallum Pump Station (2020-2021) and Pump Station 7 and remaining Supply Main to Skirt Mtn Reservoir (2022)
Capital Project Description	Upgrades to complete the South Skirt Water System		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Design and construct Tank 4, Pump Station 7, McCallum Pump Station and remaining supply main to the Skirt Mountain Reservoir based upon development and demand.		

<div> <div>Service:</div> <div>2.670/2.680</div> <div>Regional Water Supply &amp; JDF Water Distribution Combo</div> </div>			
<div> <div>Proj. No.</div> <div>16-01</div> </div>	<div> <div>Capital Project Title</div> <div>Upgrades to Buildings at 479 Island Highway</div> </div>	<div> <div>Capital Project Description</div> <div>Maintenance and changes to buildings and office layouts.</div> </div>	
<div> <div>Asset Class</div> <div>B</div> </div>	<div> <div>Board Priority Area</div> <div>0</div> </div>	<div> <div>Corporate Priority Area</div> <div>0</div> </div>	
	<div> <div>Project Rationale</div> <div> <p>The budget includes the following funds to upgrade and renew the buildings at 479 Island Highway:</p> <ul style="list-style-type: none"> <li>Repairs, upgrades and changes to the buildings (provisional \$50,000)</li> <li>Painting of the buildings. (provisional \$10,000 annually)</li> <li>Repair and replacement of carpets, floors and walls. (provisional \$10,000 annually)</li> <li>Repair, refurbishment and replacement of equipment and property. (provisional \$10,000 annually)</li> </ul> </div> </div>		
<div> <div>Proj. No.</div> <div>17-01</div> </div>	<div> <div>Capital Project Title</div> <div>Voice Radio Upgrade</div> </div>	<div> <div>Capital Project Description</div> <div>Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.</div> </div>	
<div> <div>Asset Class</div> <div>E</div> </div>	<div> <div>Board Priority Area</div> <div>0</div> </div>	<div> <div>Corporate Priority Area</div> <div>0</div> </div>	
	<div> <div>Project Rationale</div> <div> <p>Service Life and projected replacement:</p> <ul style="list-style-type: none"> <li>The service life of the mobile and portable units was forecast as 10 years at minimum, 15 years at maximum in 2005.</li> <li>The present radio models used in the system have just been taken out of production by the manufacturer, there will be no new units available for purchase as of July 1, 2015.</li> <li>Support for repairs and maintenance of the present radio will continue for the next 3 years at least.</li> </ul> <p>There are no pressing issues with equipment maintenance or repairs, present repair rates suggest we can maintain the system for the next few years, and perhaps reach a 12-15 year lifespan on the present equipment.</p> </div> </div>		
<div> <div>Proj. No.</div> <div>20-01</div> </div>	<div> <div>Capital Project Title</div> <div>Portable Pump Station</div> </div>	<div> <div>Capital Project Description</div> <div>Portable pump station to provide backup when a pump station is offline, in construction or to bvpass a section of</div> </div>	
<div> <div>Asset Class</div> <div>E</div> </div>	<div> <div>Board Priority Area</div> <div>0</div> </div>	<div> <div>Corporate Priority Area</div> <div>0</div> </div>	
	<div> <div>Project Rationale</div> <div> <p>The RWS and JdF operation numerous water mains and pump stations. There are situations, when a pump station fails, construction of a pump station or bypassing a section of pipe, where a portable pump station is required to maintain the level of service. Funds will be used in 2020 to design and in 2021 to procure a portable pump station.</p> </div> </div>		

Service: 2.670/2.680						Regional Water Supply & JDF Water Distribution Combo					
Proj. No.		21-01		Capital Project Title		Storage Container for vehicle and equipment Tires		Capital Project Description		Tires removed from vehicles are stored on site outside of the Fleet office. They need to be stored in a more safe and secured area.	
Asset Class		E		Board Priority Area		0		Corporate Priority Area		0	
Project Rationale		The tires that are purchased for replacing and winter rotating are stored outside the fleet office on the mezzanine. These tires which include large truck and equipment tires are bulky and heavy. Lifting these tires onto the mezzanine has been identified as a safety hazzard and requires more than one person. A solution to this is to purchase a storage container that can be placed and locked in the yard at 479 for the storage of the tires. The container will be at ground level which means that the onsite forklift can be used to move the tires around.									

Proj. No.		17-03		Capital Project Title		Office Equipment, Upgrades and Replacements		Capital Project Description		Upgrade and replacement of office equipment as required.	
Asset Class		E		Board Priority Area		0		Corporate Priority Area		0	
Project Rationale		Funds will be used for the replacement and upgrading of office equipment and furniture, as required.									

Proj. No.		17-04		Capital Project Title		Computer Upgrades		Capital Project Description		Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.	
Asset Class		E		Board Priority Area		0		Corporate Priority Area		0	
Project Rationale		This is an annual upgrading and replacement program of computers, photocopiers, network, monitoring and associated equipment, as required. This item has been increased from \$160,000 to \$175,000 annually to reflect actual costs.  Capital Budget Network Switch Maintenance \$10,000 Additional Wireless Access Points and Maintenance \$15,000 Photocopier Replacement \$20,000 Additional Data Storage \$15,000 Replacement Computers \$75,000 Equipment Maintenance (contingency) \$23,000 Replace Access Control System - Gates/ Video Cameras \$12,000 Total Capital \$170,000									

Service: 2.670/2.680				Regional Water Supply & JDF Water Distribution Combo			
Proj. No.	17-05	Capital Project Title	Development of the Maintenance Management Systems		Capital Project Description	Develop maintenance management system.	
Asset Class	E	Board Priority Area	0		Corporate Priority Area	0	
Project Rationale		The maintenance management system needs further development to meet user needs and to facilitate reporting. It is proposed that funds be approved for the following IT related projects:- <ul style="list-style-type: none"><li>• Develop a dashboard to display information.</li><li>• Investigate standardization of SAP mobile platform.</li></ul>					

Proj. No.	17-06	Capital Project Title	Small Equipment & Tool Replacement (Water Operations)		Capital Project Description	Replacement of tools and small equipment for Water Operations as required.	
Asset Class	E	Board Priority Area	0		Corporate Priority Area	0	
Project Rationale		Funds will be used for replacement of a variety of Operations and Welding equipment such as cutting saws, portable generators, gas detectors, Hilti drills,plasma cutter, wire welder, etc.					

Proj. No.	17-07	Capital Project Title	Small Equipment & Tool Replacement (Corporate Fleet)		Capital Project Description	Replacement of tools and small equipment for Fleet as required.	
Asset Class	E	Board Priority Area	0		Corporate Priority Area	0	
Project Rationale		Funds will be used for replacement of a variety of Fleet small equipment and tools as required. This includes provision to replace the Vehicle OBD reader for reading engine codes and the shop air compressor.					

**2.680 Juan de Fuca Water Distribution**  
**Summary Schedule**  
**2021 - 2025 Financial Plan**

**Asset Profile**

**Juan de Fuca Water Distribution**

Juan de Fuca assets include lands, office buildings, pump stations, pipe lines, meters, equipment, vehicles and other infrastructure.

**Reserve/Fund Summary**

	Actual	Estimate	Budget				
	2019	2020	2021	2022	2023	2024	2025
DCC Reserve Account	7,436,981	6,458,821	6,458,880	3,953,284	6,133,284	8,313,284	10,493,284
Equipment Replacement Fund	343,314	196,009	284,012	249,675	356,601	137,396	276,416
<b>Total</b>	<b>7,857,899</b>	<b>6,732,436</b>	<b>6,820,500</b>	<b>4,280,569</b>	<b>6,567,497</b>	<b>8,528,294</b>	<b>10,847,316</b>

**2.680 Juan de Fuca Water Distribution**  
**Development Cost Charges**  
**2021 - 2025 Financial Plan**

**Development Cost Charges Reserve Schedule**

**Reserve Fund:** Development Cost Charges for Juan de Fuca Water Distribution (Bylaw # 2758)

Fund: 1055 Fund Center: 101532	Actual	Estimate	Budget				
	2019	2020	2021	2022	2023	2024	2025
<b>Beginning Balance</b>	7,376,711	7,436,981	6,458,821	6,458,880	3,953,284	6,133,284	8,313,284
<b>Transfer to Cap Fund to fund DCC projects</b>	(814,305)	(3,020,000)	(2,130,000)	(4,675,000)	(20,000)	(20,000)	(20,000)
<b>Payment of P&amp;I on LA 3164</b>	(239,785)	(228,160)	(69,941)	(30,596)	-	-	-
<b>Payment of DCC liability</b>	(3,148,875)						
<b>DCC's received From Member Municipalities</b>	4,192,290	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000
<b>Interest Income*</b>	70,945	70,000					
<b>Ending Balance \$</b>	<b>7,436,981</b>	<b>6,458,821</b>	<b>6,458,880</b>	<b>3,953,284</b>	<b>6,133,284</b>	<b>8,313,284</b>	<b>10,493,284</b>

General Comments:

Development Cost Charges Reserve Funds for Juan de Fuca Water Distribution was adopted in year 2000 for the purpose of providing funds for the capital costs of water facilities in the service areas.

These Reserve funds are received from Member Municipalities as Development Cost Charges (DCC's) to provide for the capital costs attributable to water sytem capacity improvements projects specified in the DCC capital expenditure program. Municipalities collect these DCC charges through building permits that are issued to developers for subdivision development.

Future years DCC's received from member municipalities are difficult to predict, due to unknown development activity in the Municipalities, influenced by market conditions. Estimates based on recent annual collections of DCCs, and the cyclical nature of property development.

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

2.680 Juan de Fuca Water Distribution  
Equipment Replacement Reserve  
2021 - 2025 Financial Plan

**Equipment Replacement Reserve Schedule**

**Reserve Fund:** Juan de Fuca Distribution Equipment Replacement Reserve (covered by CRD-ERF Bylaw)

Fund: 1022 Fund Center: 101630	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
Beginning Balance	530,455	343,314	196,009	284,012	249,675	356,601	137,396
Equipment purchases (Based on Capital Plan)	(525,407)	(425,000)	(200,000)	(350,000)	(190,000)	(580,000)	(165,000)
Transfer from Operating Budget	251,115	213,945	258,003	263,163	268,426	273,795	279,270
Proceeds on disposals	80,949	63,750	30,000	52,500	28,500	87,000	24,750
Interest Income*	6,203						
<b>Ending Balance \$</b>	<b>343,314</b>	<b>196,009</b>	<b>284,012</b>	<b>249,675</b>	<b>356,601</b>	<b>137,396</b>	<b>276,416</b>

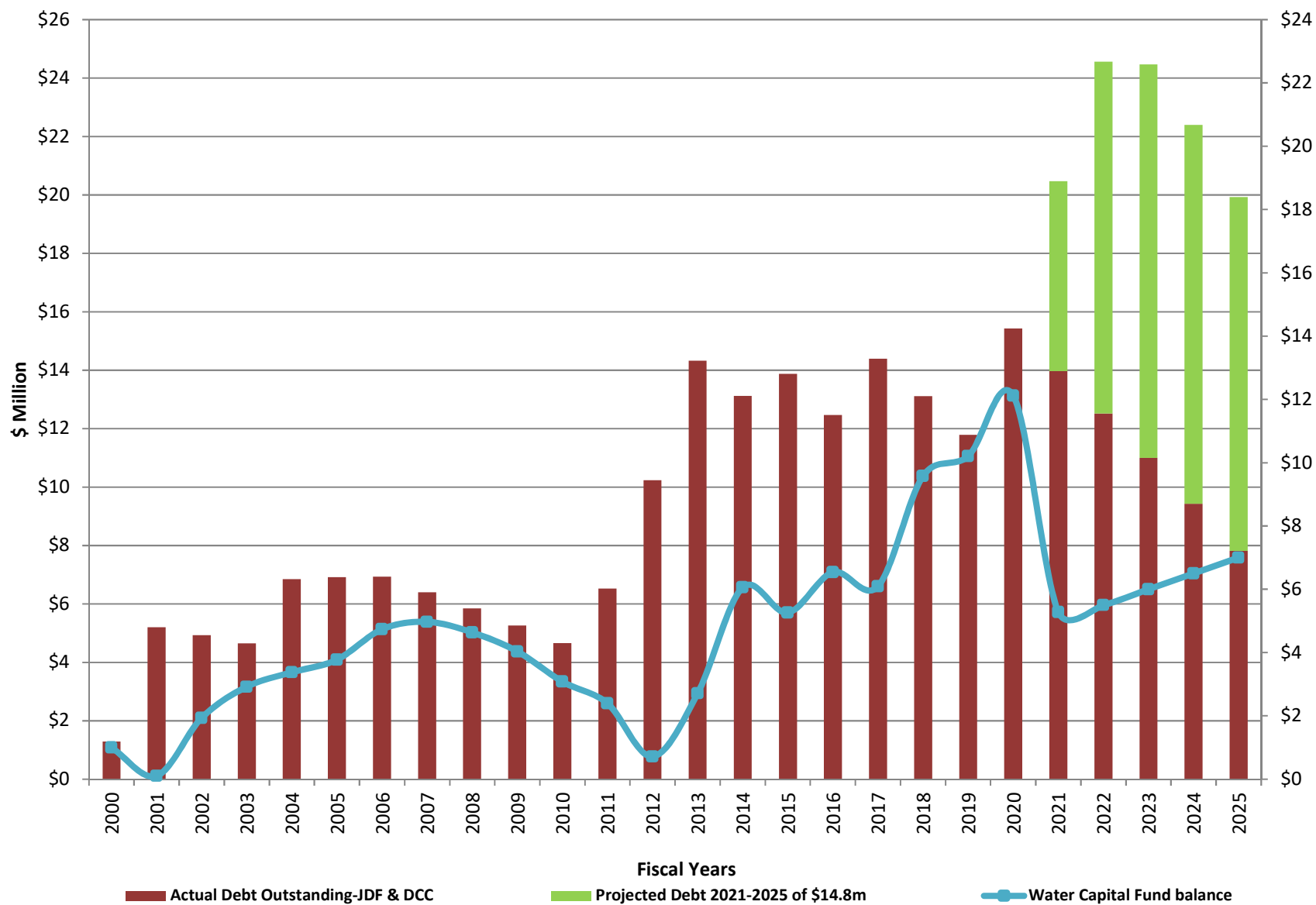
General Comments:

Reserve Fund is used for the purpose of replacing fleet vehicles including heavy equipment and associated mobile components, as outlined in the capital plan. Proceeds from disposals are estimated at 15% of replacement equipment purchases. Note not all vehicles are sold within the year in which they are replaced.

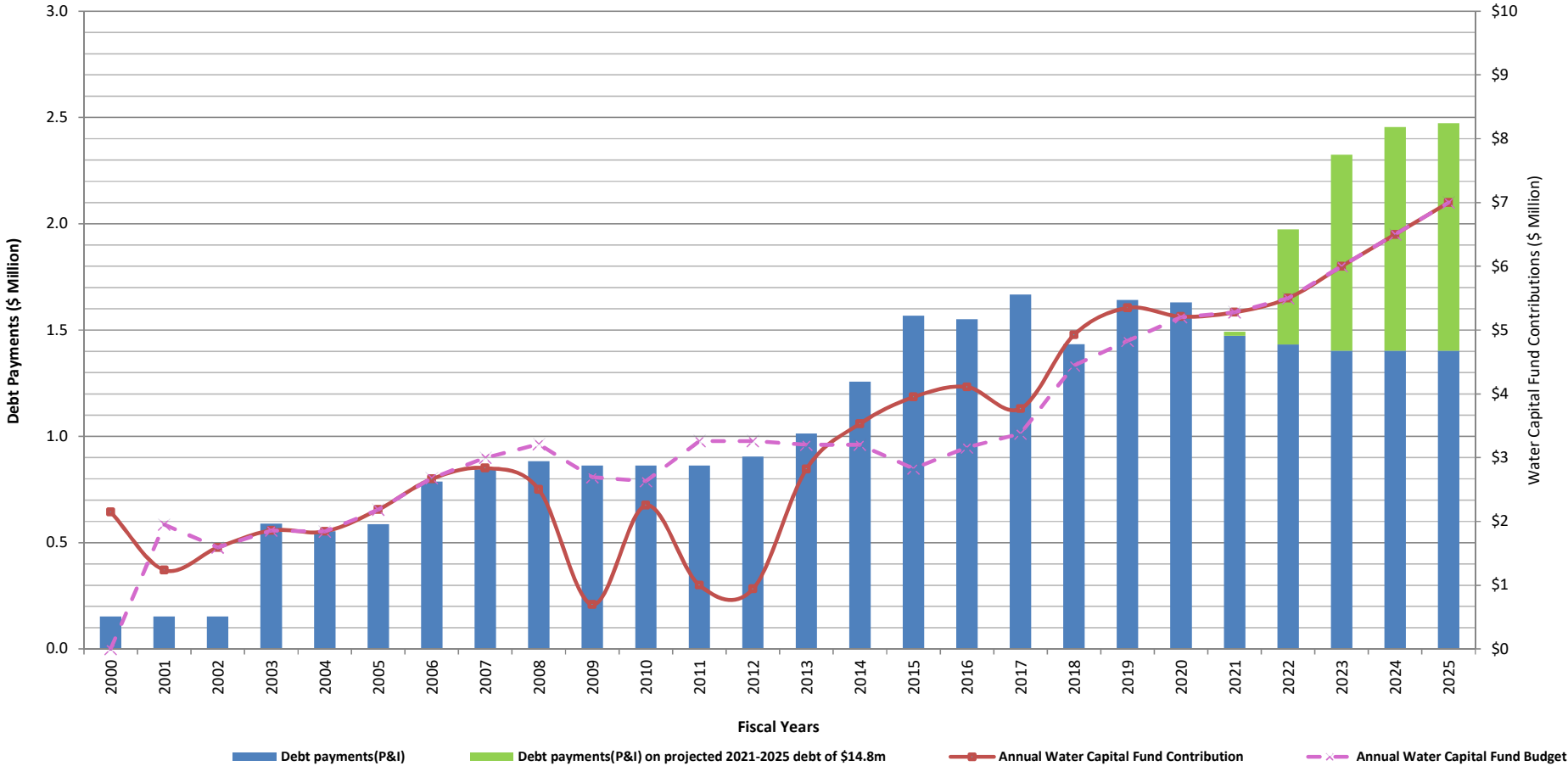
\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.



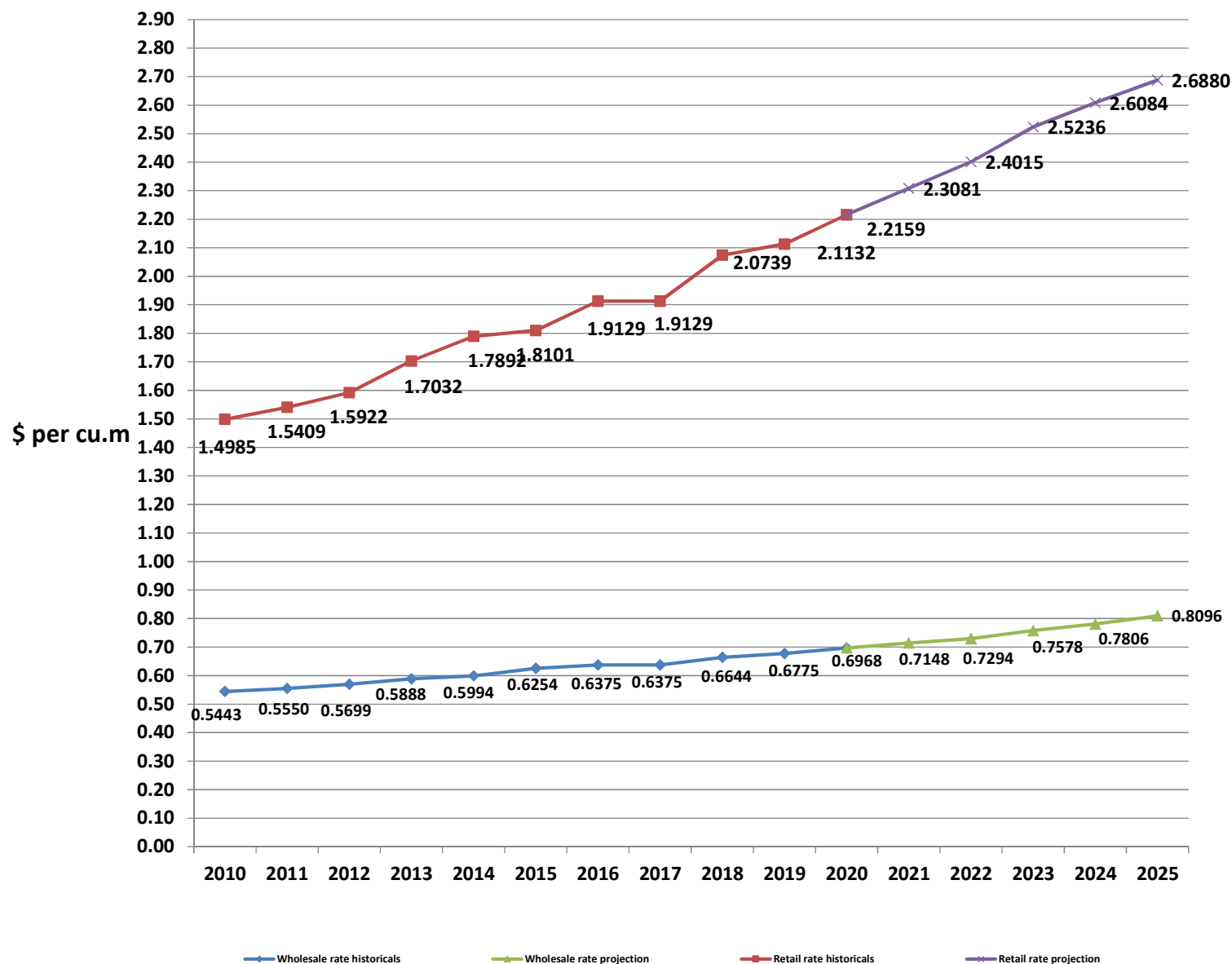
## JDF Water Distribution & DCC Debt Outstanding vs Water Capital Fund Balance



JDF Water Distribution  
Debt Payments (P&I) vs Water Capital Fund Contributions



# CRD Water Wholesale & Retail Rate, Historicals & Projections



## REPORT TO PLANNING, TRANSPORTATION AND PROTECTIVE SERVICES COMMITTEE MEETING OF WEDNESDAY, OCTOBER 21, 2020

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**SUBJECT**     2019-2022 Transportation Service Planning

### **ISSUE SUMMARY**

To provide the Planning, Transportation and Protective Services Committee with an overview of relevant initiatives undertaken by the Regional & Strategic Planning Division to deliver on approved Board Priorities and the Corporate Plan. Services and initiatives will be delivered in 2021 using core funding only.

### **BACKGROUND**

The CRD Board completed its strategic planning early in 2019 and approved the CRD Board Strategic Priorities 2019-2022.

The four priorities are:

1. Community Well-being – Transportation & Housing;
2. Climate Action & Environmental Stewardship;
3. First Nations Reconciliation; and
4. Advocacy, Governance & Accountability.

The priorities were confirmed at the annual check-in on May 13, 2020.

The 2019-2022 CRD Corporate Plan is aligned to Board direction. It highlights the initiatives the Capital Regional District (CRD) needs to deliver over the Board's four-year term to address the region's most important needs. The Corporate Plan identified six initiatives under Transportation, which fall under the Planning, Transportation and Protective Services Committee's mandate.

Appendix A *Community Need Summary - Transportation 2021* is a summary of the planned activities for 2021. It contains details about core service levels and performance metrics. No new initiatives requiring additional funding are proposed this year.

Appendix B *Transportation - Initiatives Progress Report* provides insights into what has been delivered through the nine delivery initiatives approved last year:

2a-1 Multi-modal Transportation System	2c-1 Regional Transportation Data
2a-2 E&N Corridor	2d-1 Traffic Safety Education
2b-1 Partner Collaboration for Multi-modal Transportation	2e-1 SSI Transit Services
2b-2 School Transportation Planning	2e-2 SSI Cycling & Pedestrian Infrastructure
	2e-3 SGI Public Transportation

Three of the initiatives, related to transit services, infrastructure and public transportation, were reported in the Electoral Areas Community Need Summary as they directly addressed a local need.

The Service Planning process gathered information necessary to assemble a provisional budget for Committee and Board review. The purpose of this report is to explain how the Regional & Strategic Planning divisional budget and program of work connects to the Board Priorities, Corporate Plan and provisional budget.

## **ALTERNATIVES**

### *Alternative 1*

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That Appendix A Community Need Summary - Transportation 2021 be approved as presented and advanced to the October 28, 2020 provisional budget review process.

### *Alternative 2*

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That Appendix A Community Need Summary - Transportation 2021 be approved as amended and advanced to the October 28, 2020 provisional budget review process.

## **IMPLICATIONS**

### *Financial Implications*

Initiatives identified in the Corporate Plan (including Board Priorities) cannot be undertaken without resourcing. The Board determines resourcing through its annual review and approval of financial plans. To support the Board's decision-making, staff, through the service planning process, provide recommendations on funding, timing and service levels.

During this year's service planning process, staff have been mindful of the fiscal challenges facing the region. Services and initiatives related to Transportation will be delivered in 2021 using core funding and one-time supplementary funding from the service's operational reserve. Budget impacts relate to cost of living increases.

### *Service Delivery Implications*

The Community Need Summary found in Appendix A provides an overview of all work that needs to be undertaken in order to meet regulatory requirements, satisfy Board direction and meet the needs of the communities served by the CRD.

### *Alignment with Board & Corporate Priorities*

Staff have not identified any new delivery initiatives for 2021.

Two of the corporate priority initiatives – the Multi-modal Transportation System and the E&N Corridor – approved in 2020 are still in progress. Another seven have now either been completed or are part of service operations.

**CONCLUSION**

Staff have been progressing initiatives and actions identified in the Corporate Plan, including Board Priorities. The Board determines resourcing through its annual review and approval of financial plans. As per previous years, to support the Board's decision-making, staff are providing recommendations on funding, timing and service levels through the service and financial planning processes.

**RECOMMENDATION**

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That Appendix A Community Need Summary - Transportation 2021 be approved as presented and advanced to the October 28, 2020 provisional budget review process.

Submitted by:	Emily Sinclair, MCIP, RPP, Senior Manager, Regional and Strategic Planning
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT(S)**

Appendix A: Community Need Summary - Transportation  
Appendix B: Transportation - Initiatives Progress Report

## Transportation

### Strategy

#### Target Outcome

We envision that residents have access to convenient, green and affordable multi-modal transportation systems that enhance community well-being.

#### Strategic Context

##### Strategies

- [Regional Transportation Plan](#)
- [Regional Housing Affordability Strategy](#)
- [Regional Growth Strategy](#)

##### Trends, Risks and Issues

- The CRD has demonstrated that playing a coordinating role on transportation projects can successfully enhance collaboration with stakeholders around the region. Collaboration is critical to securing investments and prioritizing management of the region's sustainable, long-term growth in terms of reducing congestion, improving travel time and taking action on climate change. This success has led to increasing demand for and scope of partnerships, which all have to be balanced against existing demands. To date, Regional & Strategic Planning (RSP) has been able to absorb these pressures.
- The manner in which information is conveyed and absorbed is changing. Our partners seek open data that is conveyed visually and is available in real-time on the CRD website. At the same time, demand for specialized data/information/modelling is increasing, with expectations for very short turn-around times. RSP aims to meet partner needs, while balancing the fast pace of change in this sector.
- The active transportation data review initiative is currently being implemented. Improved data collection has supported analysis of cycling volume along regional trails, providing early insights related to the climate action and trail usage impacts arising from the COVID-19 pandemic.
- The active school travel planning initiative has been in place for almost five years. Interest in the initiative and requests for participation continue to grow year-on-year.

### Services

Core Services Levels	
Service	Levels
<p><b>Regional Planning – Transportation</b></p> <p>Service is responsible for data collection, research and modelling related to multi-modal regional travel. The service supports the development and implementation of regional district services and informs local, agency and senior government transportation and land use planning processes.</p>	<ul style="list-style-type: none"> <li>• Every five years, update the regional transportation model with new census data and the origin and destination survey.</li> <li>• Collect and monitor multi-modal transportation data on an ongoing basis and liaise and disseminate findings to municipal, electoral area, government, academic and other partners, on demand.</li> <li>• Deliver active school travel planning services to five schools per year.</li> <li>• Analyse the impacts of actual and projected changes to the transportation system and provide transportation planning advice and expertise to regional, sub-regional and local planning and transportation projects and initiatives, on demand.</li> <li>• Implement and monitor the Regional Transportation Plan, including research, analysis and advice to achieve the multi-modal Regional Transportation Network and support CRD departments advance active transportation infrastructure and programming.</li> <li>• Support the Traffic Safety Commission.</li> </ul>
<p><b>Support Services</b></p> <p>The core services listed rely on the support of several corporate and support divisions to effectively operate on a daily basis. These services are reported on in the Accountability Community Need Summary.</p>	<ul style="list-style-type: none"> <li>• Services include Human Resources &amp; Corporate Safety, Corporate Communications, Asset Management, Financial Services, Information Technology &amp; GIS, Information Services, Legislative Services, Facility Management, Fleet Management, Legal Services, Risk &amp; Insurance and Real Estate Services.</li> </ul>



# Community Need



## 2021 Summary

Initiatives					
Ref	Initiative	Description	Year(s)	Status	2021 impacts
2a-1	Multi-modal Transportation System	Work with government/community partners to plan for & deliver an effective, long-term multi-modal transportation system & to increase use of public transit, walking & cycling	2020 - 21	In progress	Already funded
2a-2	E&N Corridor	Protect the E&N Corridor as a transportation corridor & participate in a provincial working group to come to agreement on the future use of the E&N corridor	2020 - 21	In progress	Already funded

### Initiative approved in prior years which have now been delivered or absorbed in Core Services:

- 2b-1 Partner Collaboration for Multi-modal Transportation
- 2b-2 School Transportation Planning
- 2c-1 Regional Transportation Data
- 2d-1 Traffic Safety Education
- 2e-1 SSI Transit Services
- 2e-2 SSI Cycling & Pedestrian Infrastructure
- 2e-3 SGI Public Transportation

## Business Model

Funding
<p><b>Who contributes</b></p> <ul style="list-style-type: none"> <li>• All 13 municipalities, all three electoral areas, Tsawout Nation and Songhees Nation</li> <li>• Support Services: varies per service</li> </ul> <p><b>Funding Sources</b></p> <ul style="list-style-type: none"> <li>• Requisitions and grants</li> </ul>

Reporting Structure
<ul style="list-style-type: none"> <li>• <a href="#">Planning, Transportation and Protective Services Committee</a></li> <li>• <a href="#">Traffic Safety Commission</a></li> </ul>

Community Need Key Performance Indicator (KPI)				
Definition and Source	2019 Actual	2020 Forecast	2021 Target	2022 Target
<p><b>Metric 1: Multi-Modal Transportation – achieve a transportation system that sees 42% of all trips made by walking, cycling and transit by 2038</b></p> <p>Percentage of all trips made annually in the capital region by walking, cycling and public transit; data from CRD Origin Destination survey 2017</p> <p>* based on data from 2017, new data will be available in 2022</p>	26.7%*	26.7%*	26.7%*	30%
<p><b>Metric 2: Active School Travel Planning – schools participation in the regional Ready Step Roll initiative</b></p> <p>Total number of schools that have participated in the regional Ready Step Roll initiative since 2015; data from CRD Regional Planning</p>	30	35	40	45
Discussion				
<p><b>Link to Target Outcome</b></p> <ul style="list-style-type: none"> <li>Mode share is a good indicator of residents' willingness and ability to make sustainable transport choices for at least some of their trips.</li> <li>Measuring the number of schools participating in the Ready Step Roll program tracks the number of schools that have received hands on support to educate younger residents on the matters of traffic safety and sustainable mode choice.</li> </ul> <p><b>Discussion</b></p> <ul style="list-style-type: none"> <li><b>Metric 1:</b> The target for this metric was set in the 2018 Regional Growth Strategy. Progress is being made toward this target. The past three Origin Destination Surveys show steady increases in active transportation and transit mode share over a decade (20.5% in 2006, 22.4% in 2011 and 26.6% in 2017).</li> <li><b>Metric 2:</b> This initiative is coordinated by the CRD alongside selected local governments, schools and school districts to facilitate active school travel planning. Ready Step Roll became a Regional Planning initiative in 2019 with the aim to work with five schools per year across the region. Where staff capacity permits, additional fee-for service schools may be considered at the request of a municipality. The initiative is on track.</li> </ul>				

# Community Need



## Initiative Progress Report

### Transportation

Initiatives approved in 2020 Budget		
Ref	Initiative	Progress to date
2a-1	Multi-modal Transportation System	<b>Progressing</b> – the Ministry of Transportation and Infrastructure released the South Island Transportation Strategy in September 2020. The strategy emphasizes the need for improved transportation choice, focusing in the short term on transit and active transportation improvements at mobility hubs and along connecting corridors. Staff provided data and technical expertise to inform the development of the strategy and will continue to advocate for infrastructure projects and investments to reflect Board priorities related to mode share, climate action and affordable housing.
2a-2	E&N Corridor	<b>Progressing</b> - the initial E&N Assessment Report was released in early 2020. The South Island Transportation Strategy identifies that exploring the potential for commuter rail is a long-term action to provide for a variety of travel modes across the region.
2b-1	Partner Collaboration for Multi-modal Transportation	<b>Part of core services</b> - provide data, analysis and advice through working groups and technical advisory committees led by partners including the Ministry of Transportation, BC Transit, municipalities and electoral areas. New projects and plans are initiated regularly, with a steady volume of work continuing into 2021 and beyond.
2b-2	School Transportation Planning	<p><b>Part of core services</b> – we intake five schools annually, with data collection and analysis occurring in spring and fall, and delivery of an active school travel plan the following summer.</p> <ul style="list-style-type: none"> <li>• 2019/20 school cohort final reports were completed and submitted to schools and local governments; in-school activities were rescheduled from spring to fall due to COVID-19 related school closure.</li> <li>• 2020/21 school cohort on schedule; walkabouts were rescheduled from spring to fall due to school closures. We will remain flexible in working with schools to deliver program while respecting COVID-19 guidelines.</li> </ul>

# Community Need



## Initiative Progress Report

Initiatives approved in 2020 Budget		
Ref	Initiative	Progress to date
2c-1	Regional Transportation Data	<p><b>Progressing</b> - bike counter program development continues to progress, as part of implementation of data review recommendations. To date, the CRD has purchased 15 bike counters which will be installed by the end of 2020, with coverage across the trail network. There are data collection and data sharing partnerships in place with the District of Saanich, City of Victoria and the University of Victoria. The CRD bike count website will be updated to include automated bike counts from our partners.</p> <p><b>Part of Core Services</b> - traffic counts are conducted each fall. Data is used as inputs in the transportation model as well as to inform decisions and inform trends across the region related to achieving mode share targets and reducing greenhouse gas emissions.</p>
2d-1	Traffic Safety Education	<p><b>Part of Core services</b> - in-person meetings of the Traffic Safety Commission resumed in July. The Constable Becket Scholarship was awarded on August 14, 2020 and the commission continues its work to advance traffic safety education in the region.</p>
2e-1	Salt Spring Island (SSI) Transit Services	<p><b>Progressing</b> – BC Transit initiating Salt Spring transit review on Salt Spring Fall 2020. Project completion anticipated in 3<sup>rd</sup> quarter 2021.</p>
2e-2	SSI Cycling & Pedestrian Infrastructure	<p><b>Progressing</b> - North Ganges Transportation Plan project nearing completion in 4<sup>th</sup> quarter 2020.</p> <p><b>Progressing</b> – Baker Road to Vesuvius Bay Road pathway project nearing completion in 4<sup>th</sup> quarter 2020.</p> <p><b>Initiating</b> – Booth Canal to Baker Road pathway planned to tender 4<sup>th</sup> quarter 2020.</p>
2e-3	Southern Gulf Islands (SGI) Public Transportation	<p><b>Progressing</b> – the project purpose is to investigate the establishment of an integrated, multi-modal transportation service or services for the SGI EA. Work is underway to engage qualified professionals to develop and cost a service model, including the steps necessary to develop a land-based public transit system, water-based passenger service and a multi-model trail system. This work is currently being funded through Community Works Funds; applications for additional funding via external grants is also underway.</p>

**REPORT TO PLANNING, TRANSPORTATION AND PROTECTIVE SERVICES COMMITTEE  
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

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**SUBJECT** South Island Transportation Strategy

**ISSUE SUMMARY**

To receive the South Island Transportation Strategy for information.

**BACKGROUND**

Transportation consistently ranks as a significant regional issue due to concerns related to congestion, travel time and greenhouse gas emissions. The CRD's Regional Growth Strategy (RGS) and Regional Transportation Plan (RTP) identify objectives and policies to address these matters of regional concern.

In recognition of the above, the Ministry of Transportation and Infrastructure (MoTI) commissioned the South Island Transportation Strategy (SITS) with the purpose of developing a regional roadmap for future provincial multi-modal investments in transportation infrastructure. The strategy focuses on road networks and agencies within MoTI's jurisdiction.

The strategy advances four key goals:

1. Ensure Sustainable Multi-Modal Travel Options
2. Strengthen Inter-Community and Inter-Modal Connections
3. Improve Safety and Reliability
4. Support and Encourage Active Transportation

SITS emphasizes the need for improved transportation choice, reliability and safety, focusing on green transit and active transportation improvements at mobility hubs and along connecting corridors. The strategy identifies short-, medium- and long-term priorities, as follows:

<b>SITS Priorities</b>	<b>Impact to the Region</b>
<b>Short-Term:</b> transit exchanges, queue jumpers, queue lanes, park and rides and ultimately grade separation of intersections along the highway network to meet provincial climate and transportation objectives.	<ul style="list-style-type: none"><li>• Consolidates provincial projects across the region into one strategy.</li><li>• Provides clear picture of committed and near-term investments in infrastructure upgrades.</li></ul>
<b>Medium- and Long-Term:</b> variety of potentially significant projects including rail, ferry, bridges, light rail transit (LRT) and bus.	<ul style="list-style-type: none"><li>• Many projects have been previously studied and were identified to have significant costs.</li><li>• Not identified as immediate provincial priorities.</li><li>• No level of regional agreement on whether the projects should have priority status.</li></ul>

Appendix A provides the South Island Transportation Strategy. Appendix B summarizes the alignment between the SITS goals and ongoing RTP implementation actions, identifies examples of CRD and partner actions to implement the RTP and outlines CRD involvement in external transportation projects. Appendix C provides a map of recent and planned infrastructure projects.

## **ALTERNATIVES**

### *Alternative 1*

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That the South Island Transportation Strategy be received for information.

### *Alternative 2*

That the South Island Transportation Strategy staff report be referred back to staff for further information based on Planning, Transportation and Protective Services Committee direction.

## **IMPLICATIONS**

### *Environmental & Climate Implications*

SITS was written through a climate action lens. The strategy recognizes that the CRD has declared a climate emergency and focusses on increasing active transportation, transit and the use of electric vehicles in an effort to mitigate climate change. This focus aligns to the CRD's Regional Climate Action Strategy.

### *Intergovernmental Implications*

MoTI staff engaged with municipal and First Nations stakeholders through the development of the strategy. MoTI staff presented and sought feedback from both the CRD Transportation Committee and the Committee of the Whole. Board members provided numerous suggestions with a focus on strengthening the climate change lens, incorporating active transportation more strongly and considering the equity impacts of recommendations. These suggestions were incorporated into the strategy.

Given the current governance and funding models, implementation of regional transportation objectives relies on collaborative partnerships between local, regional and provincial levels of government. With the introduction of SITS, the Province has identified a number of priorities that advance the RTP objectives on roadways within MoTI's jurisdiction, including transit priorities. A key RTP implementation activity at the municipal level has been the development of transportation plans for local street networks. These plans have frequently resulted in infrastructure improvements that advance the RTP objectives to shift mode share.

### *Regional Growth Strategy Implications*

The RGS sets out a settlement concept of complete communities connected by a multi-modal transportation network. SITS reinforces this concept through a focus on mobility hubs and prioritization of transit and active transportation improvements in provincial projects. Implementation of SITS priorities may progress the RGS mode share target of 42% cycling, walking and taking transit by 2038.

### *Financial Implications*

The strategy will have limited cost and funding implications to the CRD. Transportation infrastructure investments, other than the regional trail system, fall outside CRD jurisdiction and service mandate. No new funding was provided with the release of the strategy. Since 2017, the Province has invested or committed to investing more than \$500 million in the South Island. SITS references a need for shared investment from all levels of government. See Appendix C for a map of provincial investments in transportation infrastructure projects around the region.

### *Service Delivery Implications*

The strategy does not make any firm recommendations or commitments in relation to potential new infrastructure projects. It does provide very general time frames for some of the potential projects. Further, the strategy does not address the need for improved east west connectivity in the region (i.e., McKenzie improvements between Highway 1 and 17) or provide recommendations in relation to new potential major transit opportunities. Recommendations related to new governance models were outside the scope of the SITS project. See Table 1 in Appendix B for a summary of the RTP as it relates to SITS.

Given the current governance and funding model, the CRD's role in regional transportation is to provide transportation advocacy, data collection and dissemination, and technical expertise on transportation projects throughout the region. With a focus on maintaining and developing cooperative partnerships, CRD staff will work closely with partners across the region on any future initiatives resulting from the plan. See Table 2 in Appendix B for an outline of how the CRD is involved with transportation projects led by municipal, provincial and agency partners.

Per Board priorities, the RGS and the RTP, CRD staff will continue to:

- convey the need to protect the E&N Corridor for future transportation use;
- work with government/community partners to increase use of public transit, walking and cycling and to plan for and deliver an effective, long-term regional multi-modal transportation system;
- leverage opportunities to take a leadership role to pursue regional carbon neutrality by 2030;
- create and deliver more affordable housing in complete communities across the region;
- work with partners from municipalities, electoral areas and agencies to understand local priorities, share knowledge and facilitate implementation of the RTP; and
- provide data inputs and technical expertise on transportation projects through participation in technical working groups related to priority BC Transit and MoTI measures.

### *Alignment with Board & Corporate Priorities*

SITS aligns to Board and corporate priorities related to transportation, housing and climate action. Making progress on these priorities helps meet community needs for convenient and green transportation options, improved community well-being and reduced GHG emissions.

### *Alignment with Existing Plans & Strategies*

CRD adopted the RTP in 2014 to identify a regional multi-modal transportation system that meets future growth demands with a focus on sustainability. The RTP includes eight regional outcome statements and accompanying actions to guide partner implementation. CRD staff used the RTP and Board priorities as the basis for input in both the technical and advisory groups for this project. Appendix B shows the alignment of SITS goals to the RTP outcome statements and summarizes CRD and partner actions that will progress implementation.

Given that the RTP does not identify any priority transportation infrastructure projects, staff were not in a position to advocate for any individual infrastructure priorities. The biggest challenge for improving multi-modal travel continues to be the relationship of land use to transportation nodes in the region.

### **CONCLUSION**

SITS provides a roadmap for future provincial investments in multi-modal transportation predominately within areas under MoTI jurisdiction. The strategy reflects the CRD RTP objectives and rolls a number of existing plans and current projects into one document. While SITS aligns to Board priorities for transportation, the strategy does not identify any new funding or provide recommendations in relation to potential major infrastructure projects. Implementation of regional transportation objectives will continue to rely on a collaborative partnership approach between local, regional and provincial levels of government.

### **RECOMMENDATION**

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That the South Island Transportation Strategy be received for information.

Submitted by:	Emily Sinclair MCIP, RPP, Senior Manager, Regional & Strategic Planning
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### **ATTACHMENT(S)**

Appendix A: South Island Transportation Strategy

Appendix B: Summary Analysis – South Island Transportation Strategy and the Regional Transportation Plan

Appendix C: Recent and Planned Transportation Projects in the CRD





Ministry of  
Transportation  
and Infrastructure

September 2020

# South Island Transportation Strategy

Transforming South  
Island Transportation







Galloping Goose Regional Trail

21 DOWNTOWN

9850

BCTransit

9850

Santa Rosa St

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# Message from the Minister

Over the last few months, the lives of many British Columbians have been disrupted as we have been forced to adapt to the challenges presented by the COVID-19 pandemic. It's been a difficult time for many, but B.C.'s Restart Plan is putting us on a road to social and economic recovery.

This time has also provided a unique opportunity that we don't often get—a chance to see how our communities look and move when we slow down. It also gives us a glimpse at what our transportation future could look like with careful planning.

In neighbourhoods across southern Vancouver Island, you'll see more and more families out for walks. People are exploring their communities by bike. Joggers, skateboarders and people on scooters are bringing our streets and sidewalks alive.

As we reset and carefully find our way to a new normal, it's my sincere hope that the change people have begun to embrace will continue. Fewer gas-powered and single-occupant vehicles on the road; more people walking and biking; an increased emphasis on public transportation to get around.

That's the future we're working toward with our South Island Transportation Strategy.

Improvements to the public transportation network across the South Island are at the centre of this strategy, to make it easier for people to get to transit, and to make transit the quicker, more convenient choice for travel. We'll look at all options to make public transit more accessible, including exploring the possibility of commuter rail between Victoria and Langford.

We see existing regional employment and commercial centres, including Uptown/Mayfair, Sidney, Langford, Colwood and Sooke, becoming nodes for integrated transportation—places close to home that serve as a local hub for all modes of regional travel.

It's an approach to transportation that will strengthen neighbourhoods and help build healthy, sustainable communities that support transportation needs for all ages and abilities.

When we integrate park and ride facilities, and bike and pedestrian trails with transit service at regional hubs, it means that outlying, less expensive areas of the region become more accessible.

This will lead to an increase in affordable housing options across the region. People can choose to live in some of the more affordable areas of the region and still get to key destinations like the university, healthcare facilities and the downtown core quickly and efficiently.

These are all ideas we are exploring in our effort to invoke a bold and lasting change in mobility, and our work begins today. Partnerships with Indigenous, local, regional and federal governments, and transportation agencies like BC Transit and BC Ferries will be integral to moving this plan forward.

In short, we're working to close gaps in local networks and make travel across the region as seamless as possible. I look forward to continuing our good work together as we build liveable, affordable communities and make life better for those who live, work and play across southern Vancouver Island.



**Honourable Claire Trevena**  
Minister of Transportation and Infrastructure

# Introduction

The Province is committed to making life better for the people that live, work and travel in the South Island. This is reflected in many initiatives already underway across the province.

The South Island is home to a diverse population and economy situated in an exceptional natural location that continues to attract businesses and people that want to take advantage of all the region has to offer. To ensure the South Island remains prosperous, we've developed an integrated transportation strategy to support sustainable growth. This Strategy aims to connect people, services and goods safely and reliably across the South Island and to the rest of the province, while supporting affordable, accessible, healthy, vibrant communities, and a strong economy and environment.

The Province recognizes a growing need to fundamentally shift how people move around South Vancouver Island. New approaches are essential to address transportation challenges that go beyond reducing our dependence on single-occupancy vehicles. The COVID-19 pandemic has highlighted the true potential of our transportation network and the opportunity to create an integrated network that is desirable to use. People must feel safe using active transportation routes. Using public transportation must be appealing for commuters. This will require careful thought and consideration moving forward.

The pandemic has also highlighted the need for investments in our transportation infrastructure to be dynamic and responsive to rapidly changing situations.

There are many opportunities to improve existing transportation networks in new ways, such as shifting towards sustainable travel choices, improving connections and building integrated transportation networks, and accommodating a variety of transportation options to move people and goods throughout South Vancouver Island.

The South Island Transportation Strategy is an integrated approach to support and encourage many travel choices by focusing policy and investment on increasing the infrastructure needed to build connections, capacity, improve safety and the choices for sustainable travel. The Strategy identifies where there are gaps and barriers to a robust and sustainable inter-regional network.

In developing the Strategy, the Ministry of Transportation and Infrastructure worked with Indigenous and local governments, transportation authorities and key stakeholders to gather information as well as gain Indigenous, local and regional perspectives. What we heard is reflected in the goals we have developed and the priorities set out in this Strategy.

Achieving these goals will require partnerships with Indigenous, local and regional governments, transportation authorities, and key stakeholders. Furthermore, through strong relationships, the strategy will guide the Province in its policies, programs and investments for transportation on the South Island.

# South Island Vision

The South Island Transportation Strategy was informed and shaped by multiple priorities. Since 2017, the Provincial Government has implemented a wide range of strategies and plans to make life better for all British Columbians, including those in southern Vancouver Island. This includes building infrastructure that our growing province needs to benefit people and families, regardless of where they live or their economic status.

Additionally, in this year's Budget 2020, the Ministry of Transportation and Infrastructure, alongside the Ministry of Municipal Affairs and Housing, committed to undertaking a new Integrated Transportation and Development Planning (ITDP) process to create a collaborative vision for B.C.'s transportation and affordable development needs. This will contribute to an efficient and accessible transportation network for all travel options that connects communities, regions and global markets. Developing an integrated transportation plan that is founded on land use, affordable housing, sustainability and connectivity is key to making a lasting change in the South Island. It will improve economic prosperity and make life better for the people who live here.

The Province is committed to building a sustainable economy that will create good-paying jobs, help businesses succeed, and ensure we can supply the programs and services needed by our diverse and growing population.

The COVID-19 pandemic has emphasized the need to be responsive and adaptable to changing situations that can affect all aspects of day-to-day life. While it is still unknown what the lasting effects of the pandemic may be, the core values that make up the long-term strategy for a sustainable growth and a healthy economy remain unchanged. The current situation shows the need for a resilient and sustainable transportation system that can aid in our immediate recovery.

As recovery from the pandemic continues, in order for the economy to keep pace with projected population and trade growth, British Columbia needs an integrated transportation strategy aligned across regions, such as the South Island. We must be able to address congestion on our trade corridors, enable the seamless movement of people and goods, and encourage development of diverse, affordable, connected communities.

Providing people with affordable and efficient travel choices in the South Island will allow for better engagement in economic opportunities, partnerships with Indigenous communities, and better social connections.

Improving the connectivity of urban and rural areas for the movement of people and goods will assist the resource sectors and employment centres in the South Island, which support the economy of this region and the province.

Integrating land use, housing, and economic development with transportation investment and policies within the South Island will support sustainable development and have positive impacts on affordable housing, accessibility, climate change and quality of life.

Creating safe and reliable trade corridors in the South Island is a key component of a sustainable economy for the region and the province.

# Working with Indigenous, Local, Regional and Provincial Priorities

The Strategy does more than build on the many previous transportation planning initiatives completed in the South Island by the ministry and others. It is a new way of thinking that seeks to develop a distinct set of goals that still align with the current policies, goals, planning and priorities of Indigenous, local and regional governments, and key stakeholders.

The Strategy was developed with input from Indigenous, local, regional and provincial plans and initiatives which are shaping the direction of transportation in the region and across the province, including:

- Move. Commute. Connect. (B.C.'s Active Transportation Strategy)
- CleanBC
- Cowichan Tribes Transportation and Mobility Plan
- 2018 Vancouver Island Economic Alliance Report
- Capital Regional District (CRD) Regional Transportation Plan
- CRD Regional Trail Master Plan
- CRD Regional Growth Strategy
- Victoria Transit Future Plan
- Cowichan Valley Regional District (CVRD) Regional Collaboration Framework
- Municipal plans (Let's Move Saanich; GoVictoria)
- 2020 Island Rail Corridor Condition Assessment Report (Ministry of Transportation and Infrastructure)
- 2019 Westshore Express Passenger Ferry Service Pre-Feasibility Study (SNC Lavalin)

While the Strategy considered these plans and initiatives to ensure alignment with the various priorities across the region, it seeks to take it a step further with a bold and innovative approach to integrated planning.

These documents were developed and reviewed prior to the COVID-19 pandemic, but remain important and relevant to the Strategy.

## Aligning with Economic Recovery

As we look forward to implementation, additional engagement will be required to ensure the dynamic nature of the transportation sector continues to respond and react to the changing needs of communities, as we adjust to the new realities of life and work in a post-pandemic environment.

# South Vancouver Island's Transportation Network

The study area focused on all transportation corridors in South Vancouver Island and encompassed areas as far north as Duncan, as far west as Sooke, and the entire Saanich Peninsula. Corridors serving a variety of transportation choices, such as commuter corridors, marine and ferry corridors, rail corridors, and the active transportation and road corridors, were also part of the study area.

## The current network includes:

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**One Rail Corridor**  
(Island Rail Corridor)



**One dedicated bus only corridor**  
(Highway 1/Douglas Street)



**Two provincial ferry corridors**  
(Swartz Bay and Mill Bay/  
Brentwood Bay)



**Two international ferry corridors** (Belleville and  
Anacortes)



**Four Regional Trail Corridors**  
(E&N, Galloping Goose, Lochside  
and Trans Canada/Great Trail)



**Air corridors** (Victoria International  
Airport, Victoria Harbour and  
Camel Point)



**Three major highway corridors**  
(Highways 1, 14 and 17)



**Local and arterial corridors**  
(13 municipalities)



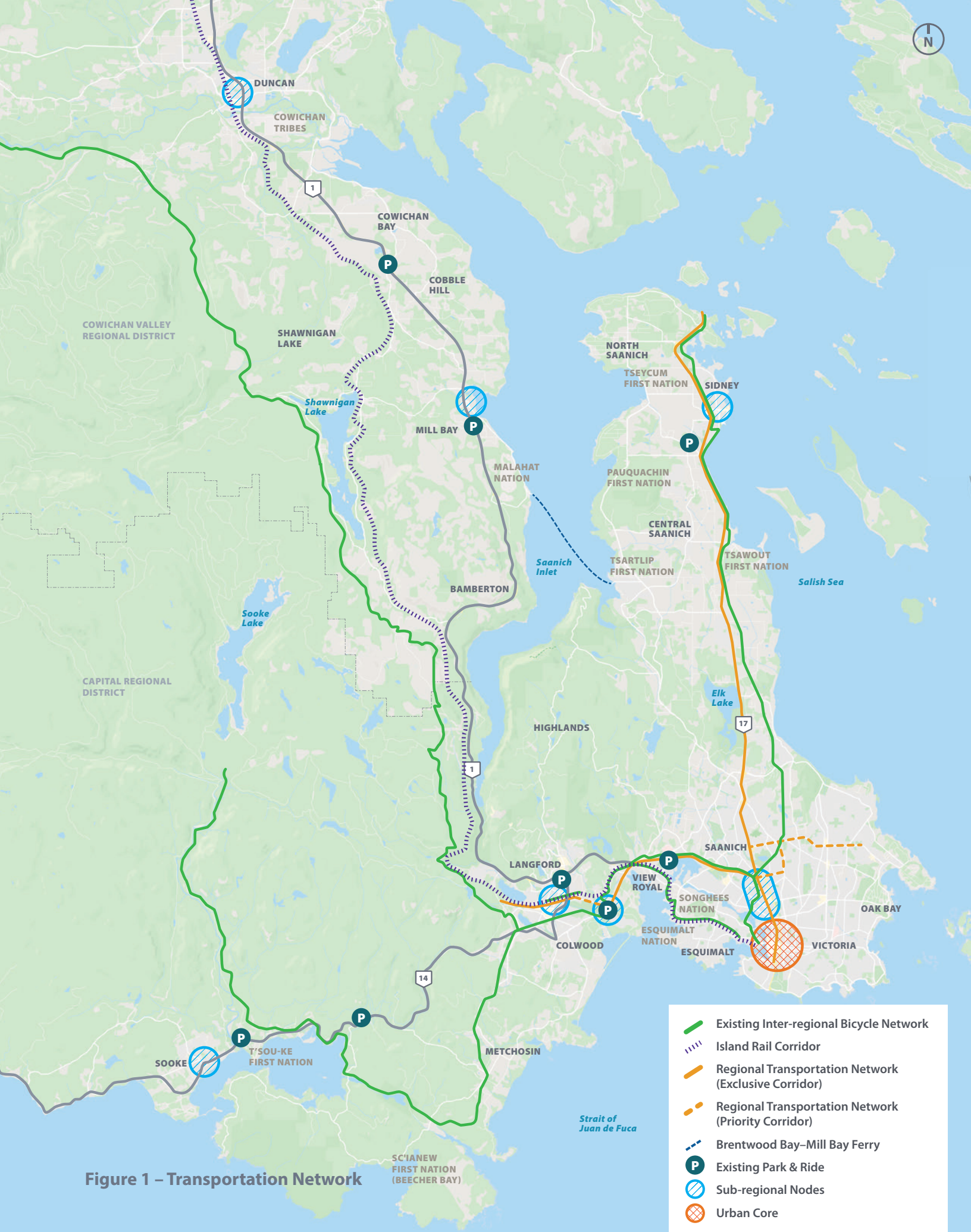


Figure 1 – Transportation Network

# Working with Indigenous and Local Governments, and Stakeholders

The Strategy was developed, in part, by building on the extensive consultation that has been undertaken to develop a wide variety of transportation initiatives in the area (for example, the CRD Regional Transportation Plan, BC Transit Future Plan, Active Transportation Strategy, Clean BC and municipal plans).

As part of the process, the ministry worked with Indigenous, local and regional governments, transportation authorities, and key stakeholders who offered valuable perspectives on various modes of transportation in the region.

The ministry engaged with the 16 Indigenous communities represented in the South Island to understand their specific interests and challenges. The ministry will continue to work collaboratively with these Indigenous groups to support safe and more accessible transportation networks for their communities.

A Technical Advisory Group consisting of representatives from the Capital Regional District (CRD), Cowichan Valley Regional District (CVRD), municipalities, BC Transit, BC Ferries and the Department of National Defense was created to provide a wide cross-section of the interests and priorities throughout the South Island.

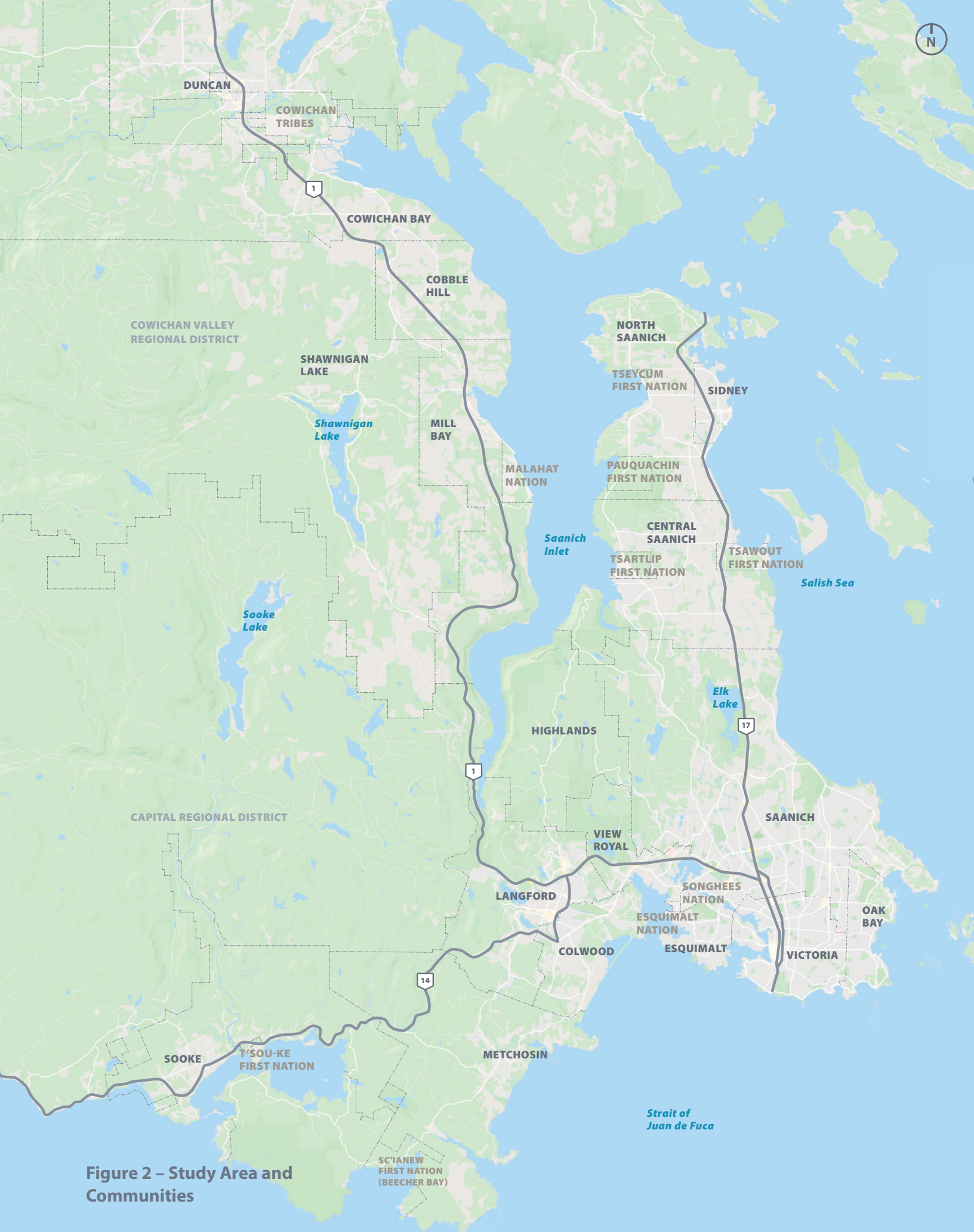
Feedback received from this group was used by the ministry to ensure that we fully understood regional challenges, and that our priorities and aspirations were aligned. It also reinforced that the successful implementation of the Strategy will require partnerships and collaboration.

## Engagement

The ministry held **more than 40 meetings, workshops and presentations** with Indigenous, local and regional governments, transportation authorities and key stakeholder groups over the course of the creation of the Strategy.







**Figure 2 – Study Area and Communities**

# Why Investments are Needed: Challenges and Opportunities

## Safety

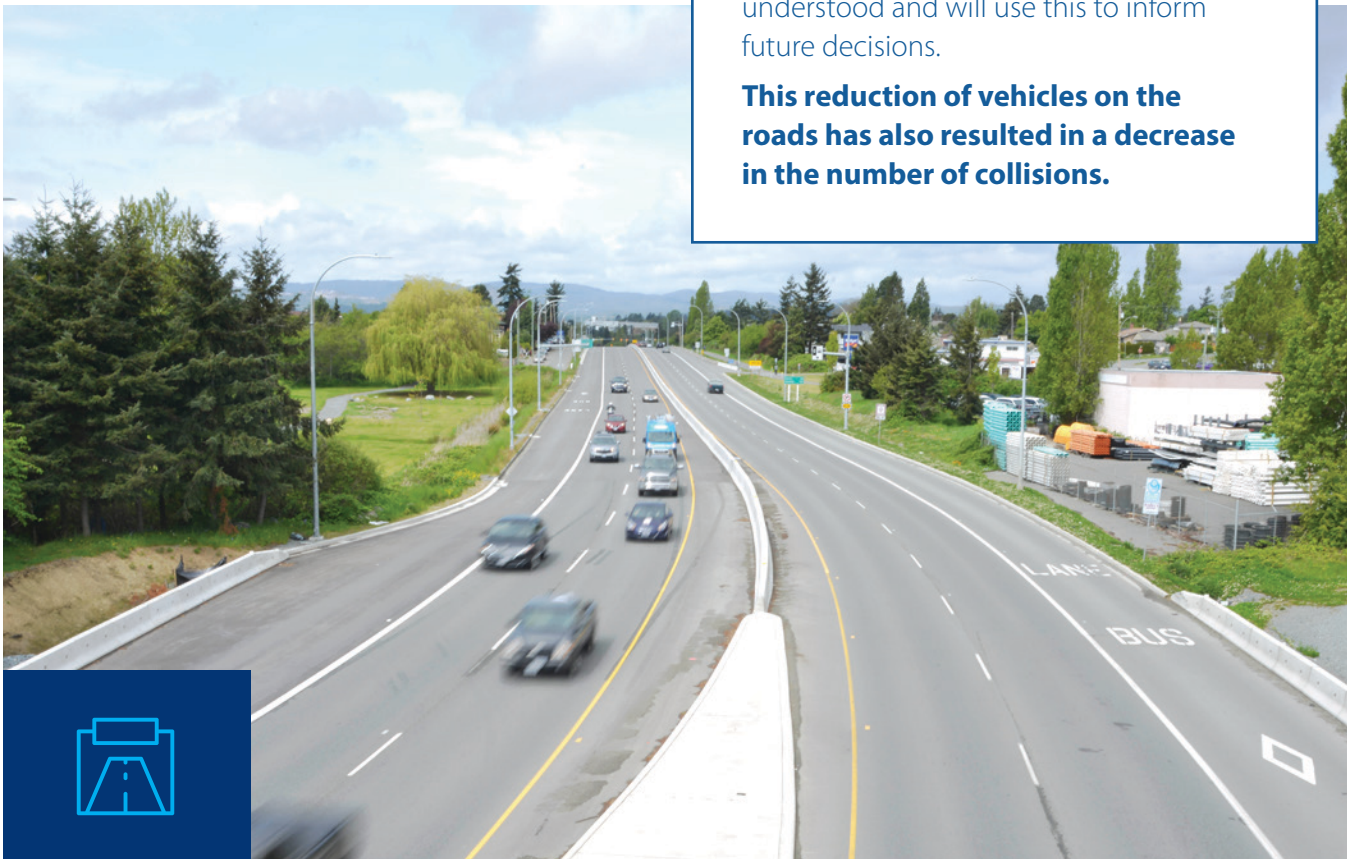
The ministry supports Vision Zero, in which traffic fatalities and serious injuries are eliminated. While safety is a priority throughout the South Island, safety issues are particularly evident along Highway 1 and Highway 17, where collision rates are highest at select major intersections.

Improvements to the active transportation networks, such as crossings and separation from traffic, reduces the conflict with vehicles.

Analysis of traffic volumes during two months of the COVID-19 pandemic (March and April 2020) shows a decrease of traffic on major corridors between 26-53%, when compared to the same period in 2019.

The ministry will continue to monitor travel patterns throughout the year to ensure that the long-term impacts of COVID-19 on the network are better understood and will use this to inform future decisions.

**This reduction of vehicles on the roads has also resulted in a decrease in the number of collisions.**





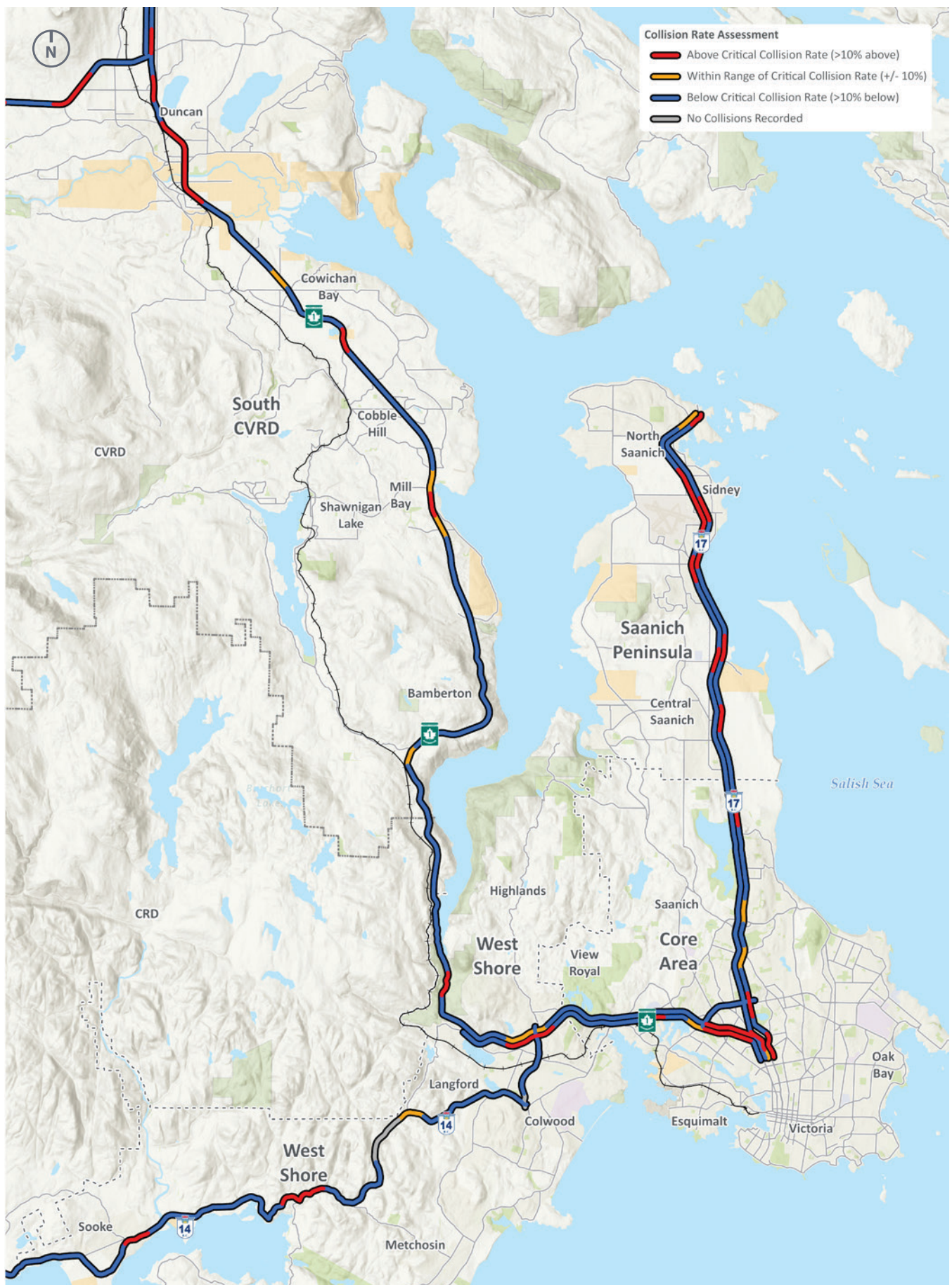


Figure 3 – Collision Rates

## Reliability

Greater variation in travel time indicates reduced reliability. The outlying areas of the South Island experience issues with reliability, such as along the Highway 17 and Highway 14 corridors, and sections of Highway 1 outside the core areas.

Reducing the reliance on single occupancy vehicles by increasing transit and active transportation options will result in travel time savings for all modes of transportation.

As people move from their vehicles to alternative modes of transportation, we will need to ensure that the transit and cycling infrastructure is sufficiently robust to afford users with reliable travel times.

Continued improvements to the transit network, such as the bus only Douglas Street Corridor, have led to improved reliability and travel times for transit users.

The COVID-19 situation has impacted travel times and will continue to be monitored to better understand the effects of the pandemic on the network.

### Unpredictable Travel Times

A typical vehicle trip in 2019 from Mill Bay to Victoria would take approximately:



**43 minutes** during the morning peak and **as long as 66 minutes** on some days.

With expected growth, by 2038, this same trip would take:



up to **87 minutes** on a typical day and up to **144 minutes with variability of conditions**.

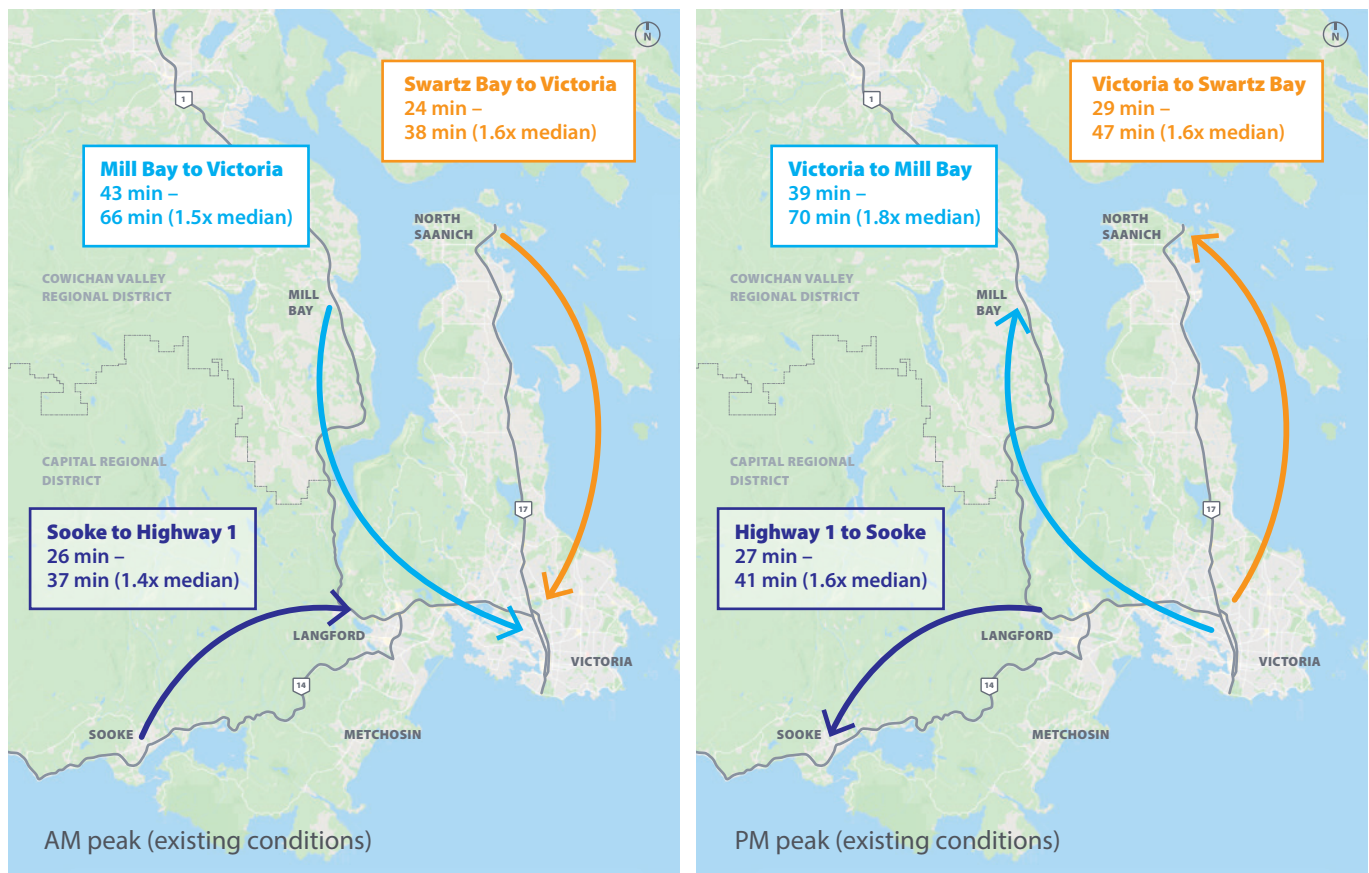
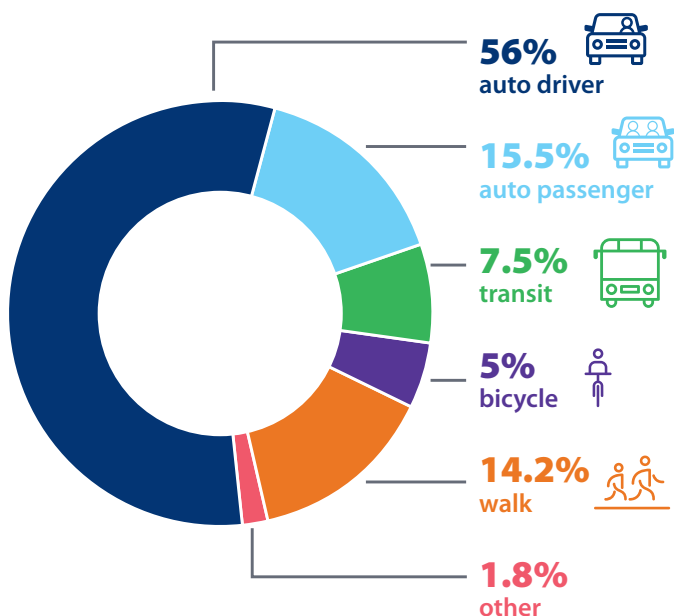


Figure 4 – Reliability



## Current Mode Share

2017 Capital Regional District,  
Origin Destination Household Travel Survey



## Sustainability

The Capital Regional District declared a climate emergency in 2019. A shift to sustainable transportation modes such as walking, cycling and transit, and the reduction of greenhouse gas (GHG) emissions is a priority throughout the province and South Island.

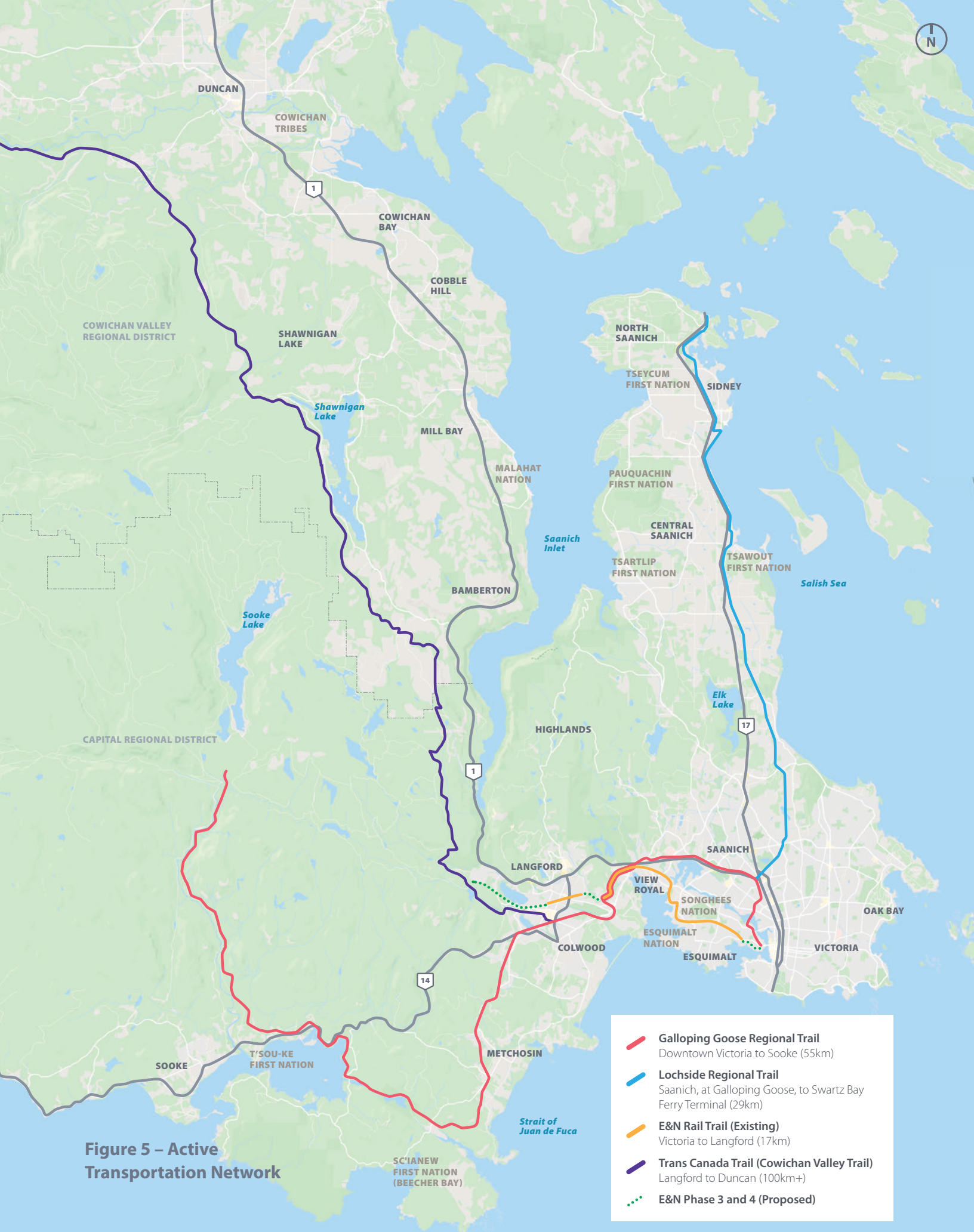
Priority is highest for investments in sustainable travel modes in core areas and communities along Highway 14 and Highway 17 where travel distances, settlement patterns, and infrastructure make these desirable options.

Compared to 2007 greenhouse gas emission levels, the Province, through the CleanBC initiative, is now **committed to reductions of 40% by 2030, 60% by 2040, and 80% by 2050.**

**cleanBC**  
our nature. our power. our future.







**Figure 5 – Active Transportation Network**

- Galloping Goose Regional Trail**  
Downtown Victoria to Sooke (55km)
- Lochside Regional Trail**  
Saanich, at Galloping Goose, to Swartz Bay Ferry Terminal (29km)
- E&N Rail Trail (Existing)**  
Victoria to Langford (17km)
- Trans Canada Trail (Cowichan Valley Trail)**  
Langford to Duncan (100km+)
- E&N Phase 3 and 4 (Proposed)**

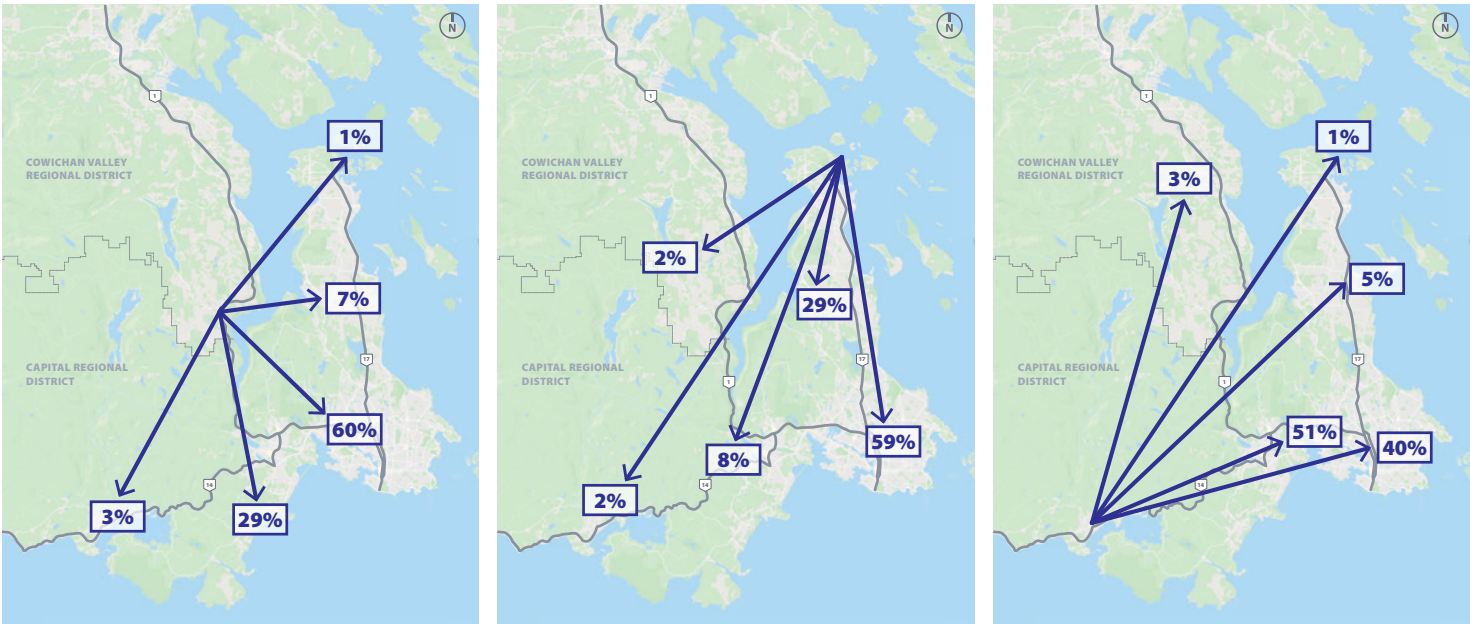


# Connectivity

Community connections have been identified as a challenge across the region with the greatest concern in the core areas, including Highway 14 and Highway 1. Affordable housing is often found outside of the core areas, putting added pressure on the transportation network to move people to and from areas of employment in the core.

Improvements targeting better connections are the highest priority in these locations. Strengthening connections between travel modes is also a key opportunity for improvement to support the goals for integrated transportation development.

We will work with municipal partners to create thoughtful development where transportation investment can support growth in the region.



**Figure 6 – Distribution of Daily Travel Across Key Gateways**

# Aligning Goals and Aspirations

## Aspirations

Plans and strategies developed for communities throughout the South Island by the Province and Indigenous, local and regional governments share a common vision of an integrated sustainable transportation network.

These aspirations lay the foundation for a vision for the South Island and highlight how an integrated transportation system supporting different travel options plays a vital role in achieving those future goals. Although the plans and strategies are unique and may point to slightly different actions, they are well aligned and point to a common vision. The Strategy supports and reinforces key aspirations from these plans and strategies, including:

### ✓ **Take Action on Climate Change**

- Reduce greenhouse gas emissions
- Tap into alternative fuel sources
- Support community liveability by complementing transportation investments with land use planning, housing development, economic and employment clusters
- Support CleanBC

### ✓ **Connect Communities**

- Increase the connections between all modes of travel
- Enhance transit services to sub-regional population centres
- Support projects that lessen barriers to affordability and allow for inclusivity of travel
- Support projects that improve access to economic opportunities and social services

### ✓ **Reduce Vehicle Dependency**

- Provide sustainable travel choices
- Promote sustainable travel options

### ✓ **Ensure Sustainable Travel Options**

- Improve reliability of sustainable travel networks
- Increase the connectivity between different modes

### ✓ **Support Active Transportation and Healthy Living**

- Establish active transportation network plans
- Continued investment in walking and cycling infrastructure

### ✓ **Grow the Economy**

- Ensure efficient movement of goods and services
- Provide attractive travel options to encourage tourism

## Goals

The ministry has developed four goals to advance the South Island Transportation Strategy:

- 1. Ensure sustainable options for a variety of travel modes**
- 2. Strengthen connections between travel modes and improve connections between communities**
- 3. Improve the safety and reliability of the transportation network**
- 4. Support and encourage active transportation options**

### Remaining flexible in the face of COVID-19

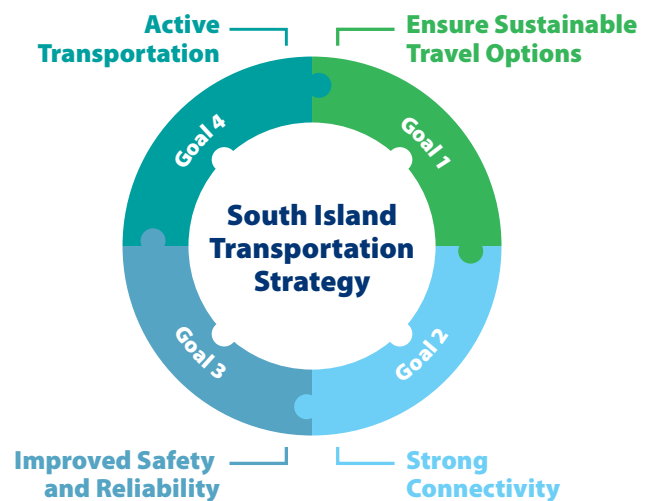
The COVID-19 pandemic poses an immediate and still-evolving challenge to the transportation network and society as a whole. Its long-term effects remain unknown. The pathway of implementation and timing to achieve the goals of the South Island Transportation Strategy will require flexibility as we recover from the pandemic.

The path forward will use this experience to make our communities more resilient and adaptable to respond to the potential for future outbreaks or other disasters that may impact the region in the future.

These goals reflect the priorities and aspirations of the region and the province, and support integrated transportation planning by focusing on:

- Leveraging existing plans, while expanding their geographic scope and time horizon
- Contributing to the design of affordable, liveable communities
- Building efficient transportation networks
- Achieving GHG targets and aligning with CleanBC and the Active Transportation Strategy
- Ensuring innovative solutions that respond to South Island and B.C. conditions
- Advancing an Integrated Transportation and Development Planning strategy

Given the integrated nature of the Strategy, success will require the collective achievement of all of the goals. Strategies and priorities will therefore need to directly support or consider all four goals, rather than focus on any individual goal.



## Goal 1

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### Ensure sustainable options for a variety of travel modes

Integrating transportation investment and policies with land use, housing, and economic development policies to support sustainable development will have positive effects on affordable housing, accessibility, climate change and the quality of life in the region.

Policies, programs and strategies to accelerate the move from gas-powered transport to alternative fuels such as electric vehicles, are also key elements to advance this goal. Sustainability objectives will be addressed by supporting and encouraging people to take public transportation and engage in active transportation wherever possible.

Since the completion of the dedicated bus lane facilities on Douglas Street/ Highway 1, northbound commuters on West Shore routes have seen travel time savings of up to 20 minutes during the PM peak.

#### Specific strategies include:

- Working with partners to establish an economic vision for the South Island
- Promoting investment, economic development and job opportunities near affordable housing and services
- Encouraging growth and densification in thoughtfully designated growth areas serviced by public transportation and active transportation networks
- Supporting and implementing bus lanes on highways and other inter-regional service corridors
- Implementing transit priority treatments at intersections along highways
- Supporting the provision of strategically located transit exchanges and park and rides
- Improving access to sustainable transportation choices for Indigenous communities
- Adding electric vehicle charging stations
- Developing policies and support infrastructure to increase use of energy efficient vehicles and alternative fuels
- Support policies and programs that encourage the shift away from single occupancy vehicles towards sustainable travel choices

#### The priorities to support and advance these strategies include:

##### Short-term

- Prioritizing transit stop improvements servicing Indigenous communities
- Installing electric vehicle charging stations at mobility hubs
- Supporting BC Transit's Low Carbon Fleet Program to electrify its fleet
- Prioritizing transit by installing transit queue jumpers along the Highway 17 corridor

##### Medium-term

- Supporting and advancing the Rapid Transit Corridor along Highway 1 between Victoria and the Western Communities through partnership with BC Transit
- Supporting BC Transit, View Royal and Colwood in establishing a Transit Priority Corridor along Old Island Highway

##### Long-term

- Exploring the viability of future marine transportation corridors
- Exploring the potential of commuter rail on the Island Rail Corridor between Westhills and Victoria



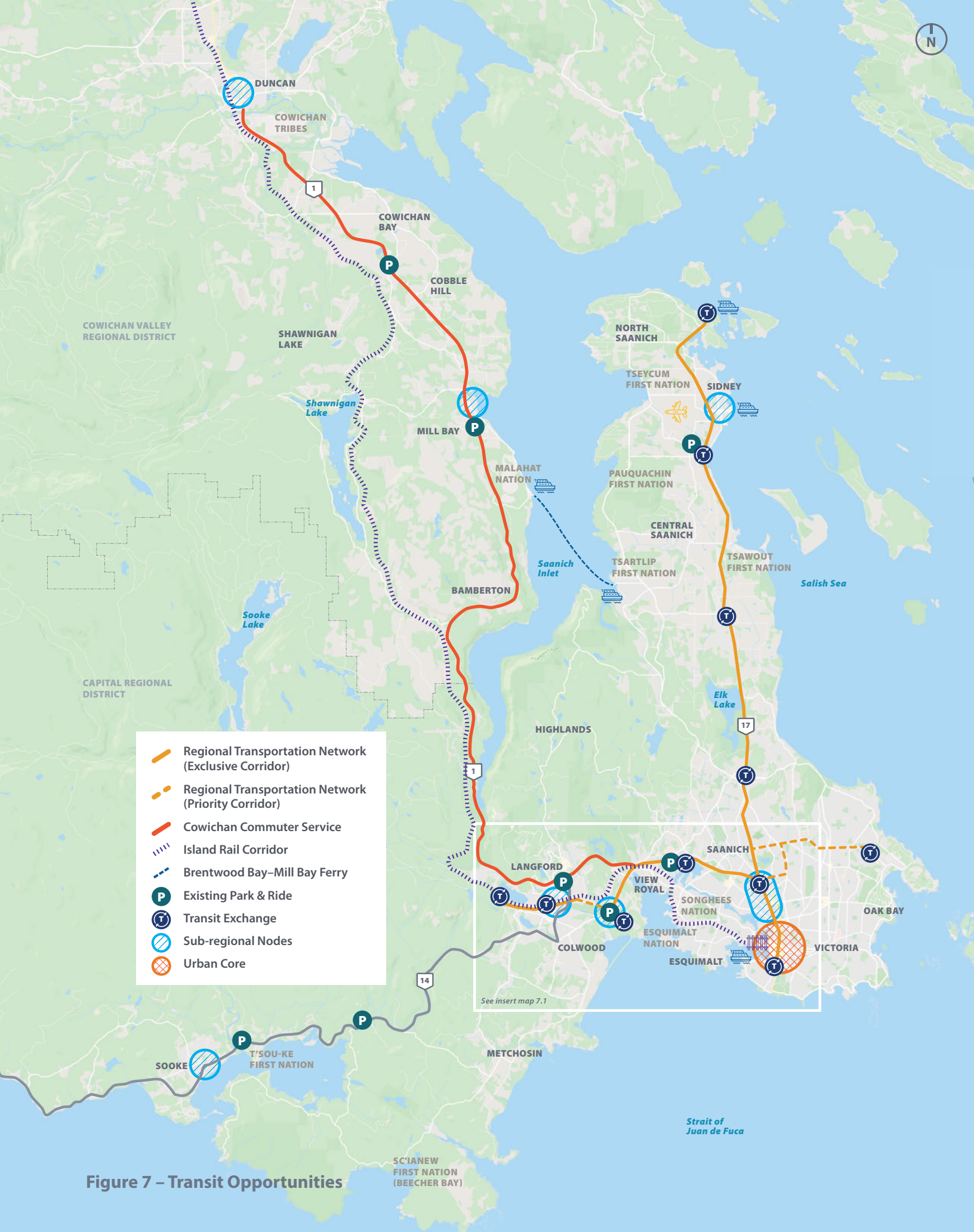
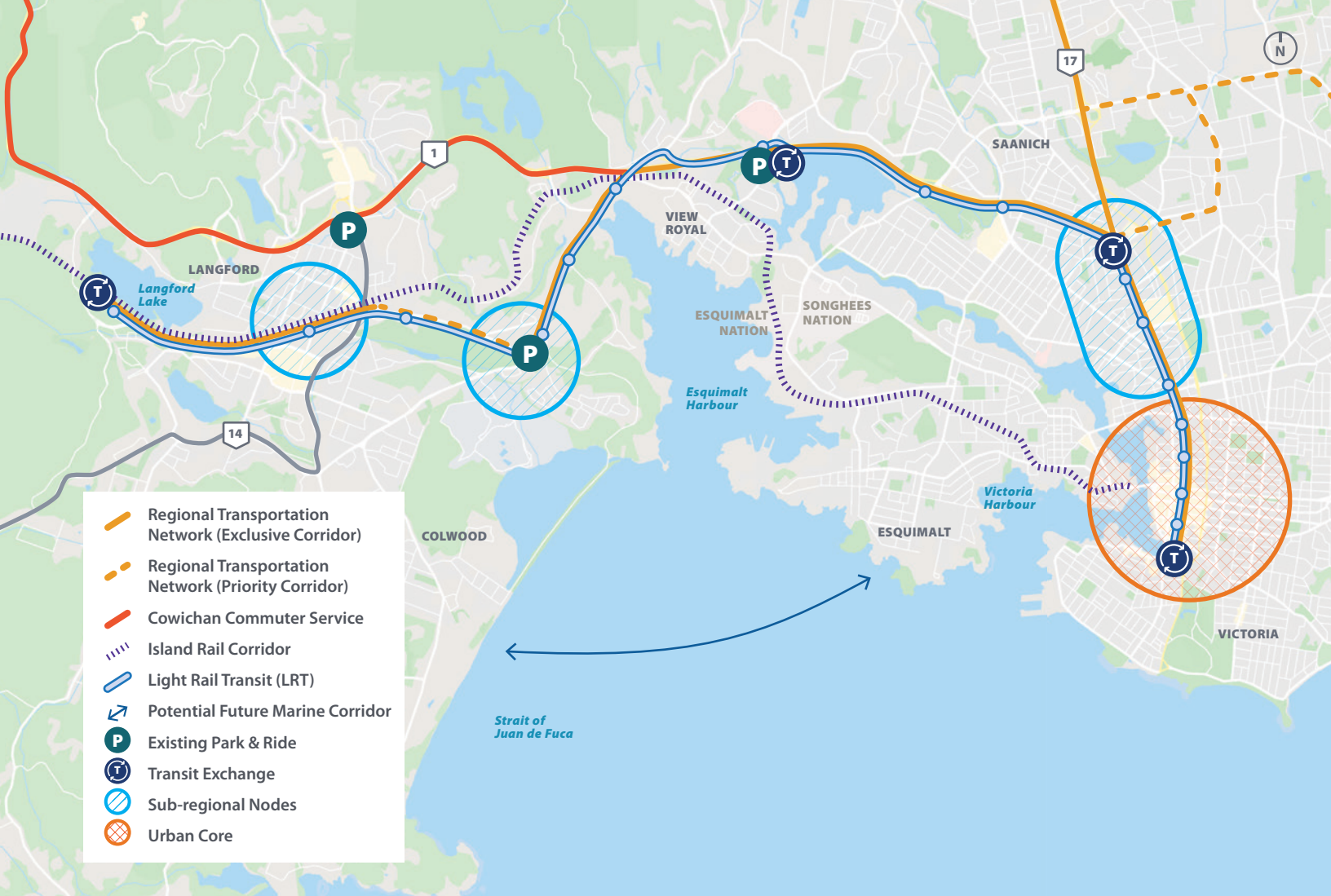


Figure 7 – Transit Opportunities





**Insert Map 7.1 – Core Transit Opportunities**



## Goal 2

### Strengthen connections between travel modes and improve connections between communities

Better integration between communities, and employment and industry centres, will enable more people to access services, participate in economic opportunities and support resource sectors across the South Island and beyond.

Integrating travel will be accomplished by identifying the missing links that prevent or discourage people from using sustainable choices, and partnering with Indigenous, local and regional agencies to close those gaps. This will include addressing the ‘first and last mile’ barriers within the region. By providing better travel choices in land use and development that align with regional growth strategies, the Strategy will support sustainable growth and the creation of integrated communities.

#### Specific strategies include:

- Connecting communities in the South Island, including Indigenous communities
- Supporting attractive intermodal connections at mobility hubs serving inter-regional travel
- Implementing policies and regulations to support new forms of mobility for sustainable choices that are aligned with regional growth strategies
- Identifying and prioritizing gaps in and between the networks
- Working with local and regional government to expand bike share and car share

#### The priorities to support and advance these strategies include:

##### Short-term

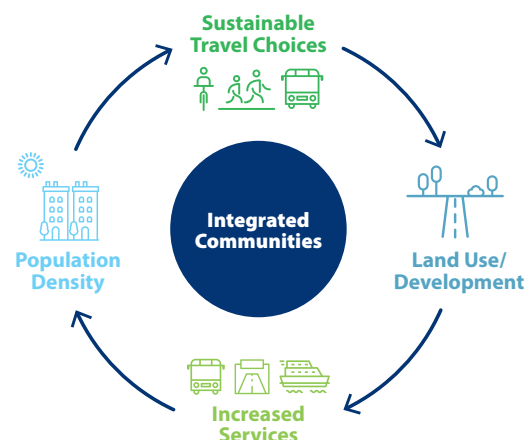
- Advancing development of key transportation hubs that accommodate all travel modes across the region in partnership with BC Transit
- Advancing the development of new park and ride stalls in the CRD and CVRD to increase capacity
- Adding secure bike parking/storage at key locations

##### Medium-term

- Continuing to assess the need for enhancement of inter-city transit commuter services (Cowichan Commuter Service)
- Working with Indigenous, local and regional governments to include Active Transportation Infrastructure in rehabilitation projects that improve inter-regional connections

#### Building Sustainable Communities

The Capital Regional District (through the Regional Growth Strategy) and the Cowichan Valley Regional District (through the Cowichan 2050 Regional Collaboration Framework) have identified growth management, housing affordability and liveability and sustainable transportation as key policy areas.





## Goal 3

### Improve the safety and reliability of the transportation network

Safe, reliable and cost-effective networks for all travel modes are critical for the movement of people of all ages and abilities and goods throughout the region, and are necessary to support all of the goals of this Strategy.

The safety and reliability of inter-regional travel will be addressed through upgrades that improve travel times for transit, active transportation users and general-purpose traffic, and that target high crash locations.

#### Specific strategies include:

- Exploring regional trail enhancements to increase safety of people walking and cycling
- Focusing on intersection improvements to protect vulnerable road users
- Implementing facilities that support sustainable modes and goods movement
- Supporting Vision Zero initiative
- Implementing highway safety and reliability improvements
- Targeting investments to improve network connectivity and redundancy

#### The priorities to support and advance these strategies include:

##### Short-term

- Prioritizing active transportation and pedestrian accessibility during project development within ministry projects
- Prioritizing transit facilities and improvements during project development within ministry projects
- Constructing the Leigh Road/Highway 1 Four-Laning and Median Barrier
- Completing the Connie to Glintz Lake/Highway 14 Project including park and ride, and pedestrian underpass

##### Medium-term

- Advancing work on the Keating Cross Road/Highway 17 project
- Advancing planning, engineering and design work to improve safety, efficiency and active transportation along Highway 1 over the Malahat



**Safety is the ministry's number one priority for all modes of transportation. Work will continue to identify and address the remaining priority sites.** Future infrastructure projects will incorporate active transportation and transit priorities during planning, design and construction.



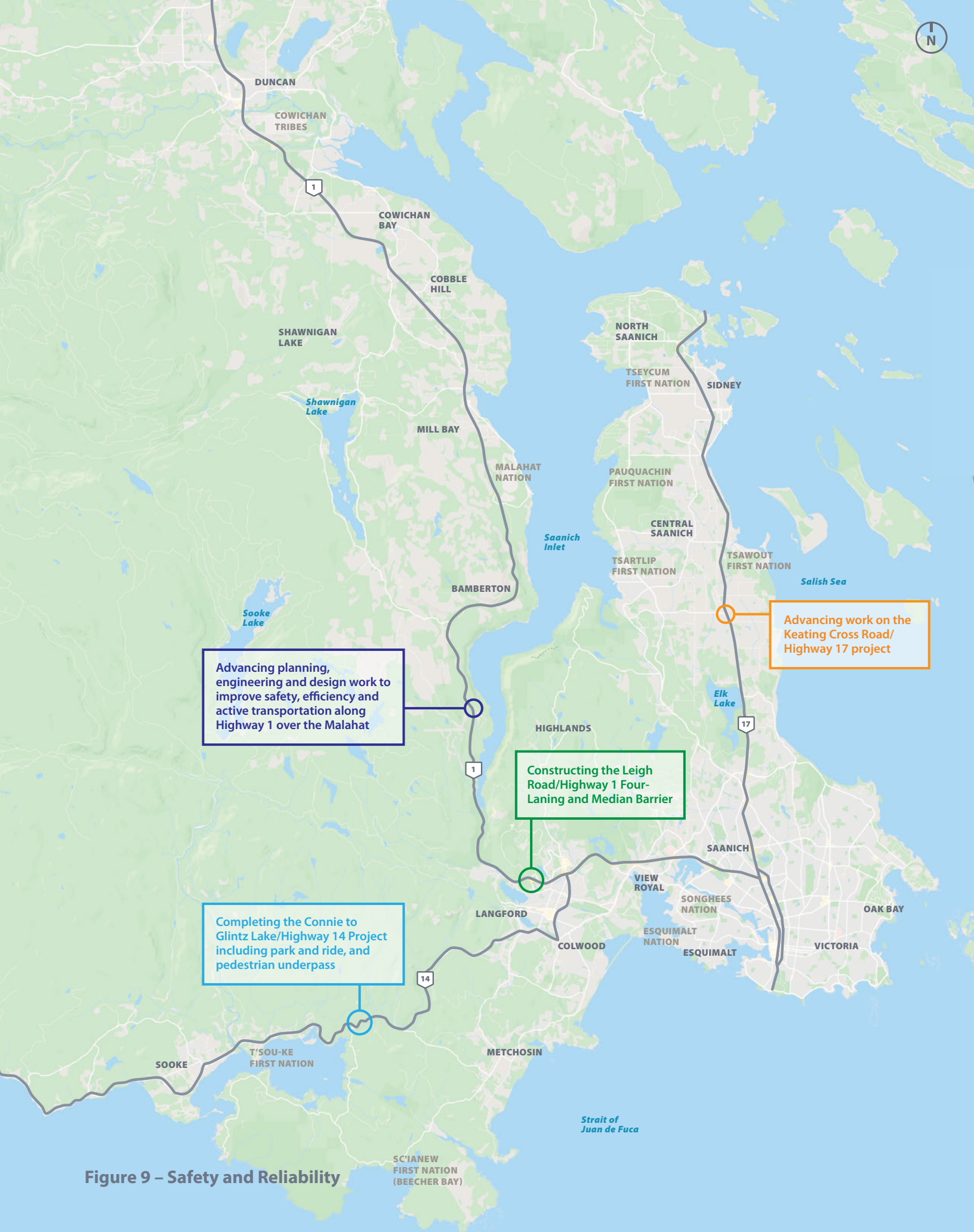


Figure 9 – Safety and Reliability

## Goal 4

### Support and encourage active transportation options

Active transportation infrastructure facilities and networks for all ages and abilities provide transportation options that are accessible to all, and create effective connections to essential community services.

They are also a key component to sustainable land use, housing and economic development and reduce the reliance of single-occupancy vehicles, resulting in lower GHGs. Support for active transportation will be accomplished primarily through partnerships to establish and improve active transportation infrastructure, as well as identifying gaps in inter-regional networks. This aligns with the Province's Active Transportation Strategy, as well as strategies developed by Indigenous, local and regional governments.

#### Specific strategies include:

- Implementing active transportation facilities along corridors serving inter-regional travel
- Supporting upgrades to active transportation facilities and crossings of highways
- Exploring pedestrian and cycling separations for regional trail networks
- Improving comfort and safety of active transportation crossing highways around key urban and sub-regional population centres
- Identifying and prioritizing intersection accessibility issues on urban highways
- Expanding funding for regional active transportation priorities
- Encouraging and supporting regional policies and directions for incentives for sustainable travel modes serving designated urban centres, gateways and sub-regional population centres

#### The priorities to support and advance these strategies include:

##### Short-term

- Encouraging growth of inter-regional trails in the CRD and CVRD: Galloping Goose Regional Trail, Lochside Regional Trail, E&N Rail Trail, Trans Canada Trail
- Supporting Active Transportation Infrastructure Grant applications that align with the British Columbia Active Transportation Design Guide
- Prioritizing the installation of bike lockers at mobility hubs

##### Medium-term

- Working with regional and local governments to advance grade separation of inter-regional trails, add specific bike signals and remove conflict points

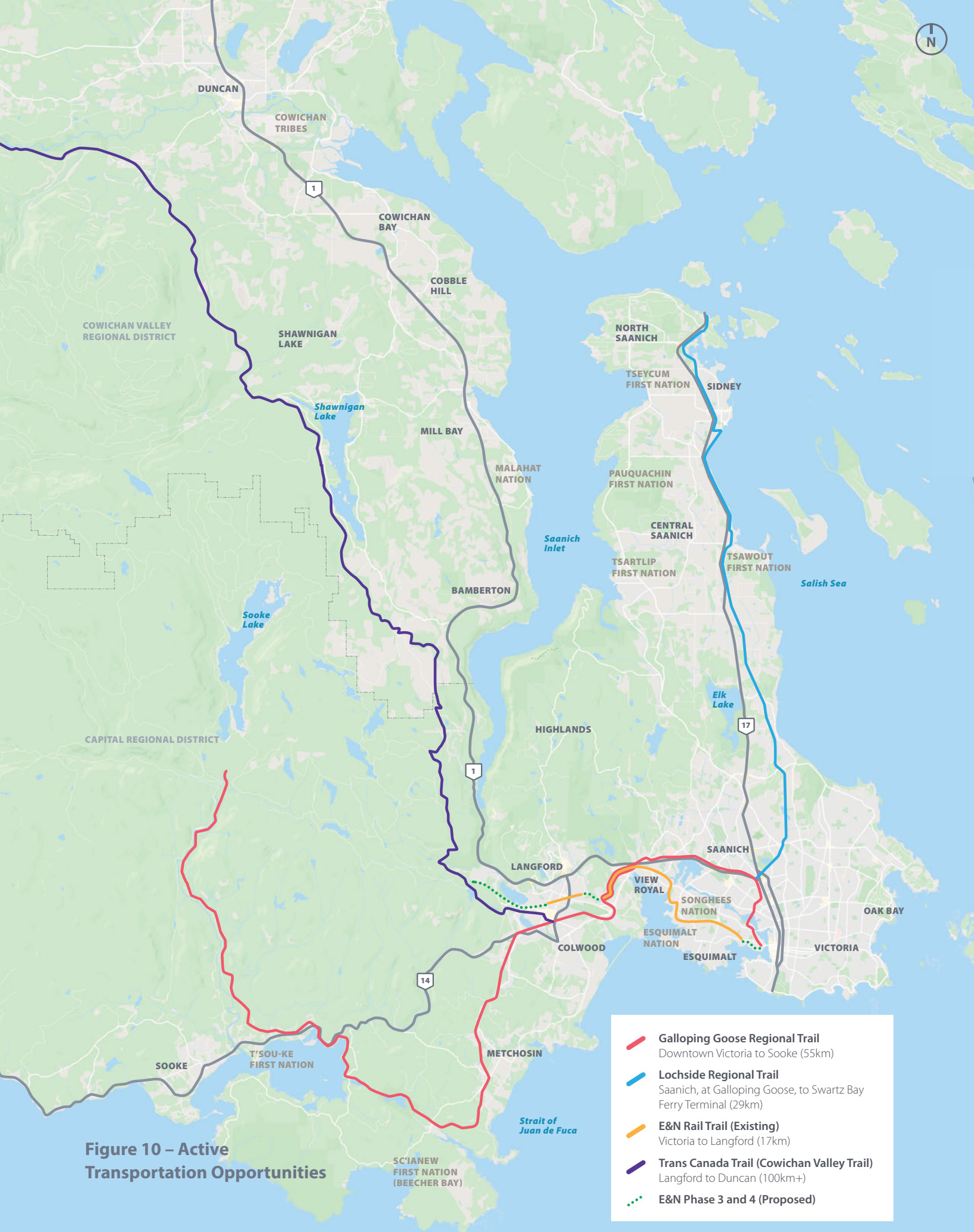
#### With CleanBC, we're building a more sustainable transportation system through BC's Active Transportation Strategy, Move. Commute. Connect.

Active transportation means helping people get out of their cars, with safe, easier options for everyone which includes:

- Double the trips taken with active transportation by 2030
- Provide incentives that encourage safe active transportation for all ages and abilities
- Help communities build integrated and accessible active transportation systems
- Deliver universal design principles for active transportation infrastructure







**Figure 10 – Active Transportation Opportunities**

- **Galloping Goose Regional Trail**  
Downtown Victoria to Sooke (55km)
- **Lochside Regional Trail**  
Saanich, at Galloping Goose, to Swartz Bay Ferry Terminal (29km)
- **E&N Rail Trail (Existing)**  
Victoria to Langford (17km)
- **Trans Canada Trail (Cowichan Valley Trail)**  
Langford to Duncan (100km+)
- ... **E&N Phase 3 and 4 (Proposed)**



# Summary of Priorities





# South Island Transportation Strategy



Goals

Strategies

Priorities

1. Ensure sustainable options for a variety of travel modes		2. Strengthen connections between travel modes and improve connections between communities		3. Improve the safety and reliability of the transportation network		4. Support and encourage active transportation options	
<ul style="list-style-type: none"><li>Working with partners to establish an economic vision for the South Island</li><li>Promoting investment, economic development and job opportunities near affordable housing and services</li><li>Encouraging growth and densification in thoughtfully designated growth areas serviced by public transportation and active transportation networks</li><li>Supporting and implementing bus lanes on highways and other inter-regional service corridors</li><li>Implementing transit priority treatments at intersections along highways</li><li>Supporting the provision of strategically located transit exchanges and park and rides</li><li>Improving access to sustainable transportation choices for Indigenous communities</li><li>Adding electric vehicle charging stations</li><li>Developing policies and support infrastructure to increase use of energy efficient vehicles and alternative fuels</li><li>Support policies and programs that encourage the shift away from single occupancy vehicles towards sustainable travel choices</li></ul>		<ul style="list-style-type: none"><li>Connecting communities in the South Island, including Indigenous communities</li><li>Supporting attractive intermodal connections at mobility hubs serving inter-regional travel</li><li>Implementing policies and regulations to support new forms of mobility for sustainable choices that are aligned with regional growth strategies</li><li>Identifying and prioritizing gaps in and between the networks</li><li>Working with local and regional government to expand bike share and car share</li></ul>		<ul style="list-style-type: none"><li>Exploring regional trail enhancements to increase safety of people walking and cycling</li><li>Focusing on intersection improvements to protect vulnerable road users</li><li>Implementing facilities that support sustainable modes and goods movement</li><li>Supporting Vision Zero initiative</li><li>Implementing highway safety and reliability improvements</li><li>Targeting investments to improve network connectivity and redundancy</li></ul>		<ul style="list-style-type: none"><li>Implementing active transportation facilities along corridors serving inter-regional travel</li><li>Supporting upgrades to active transportation facilities and crossings of highways</li><li>Exploring pedestrian and cycling separations for regional trail networks</li><li>Improving comfort and safety of active transportation crossing highways around key urban and sub-regional population centres</li><li>Identifying and prioritizing intersection accessibility issues on urban highways</li><li>Expanding funding for regional active transportation priorities</li><li>Encouraging and supporting regional policies and directions for incentives for sustainable travel modes serving designated urban centres, gateways and sub-regional population centres</li></ul>	
<div>Transforming South Island Transportation</div> <div><div>S</div> Short-term<div>M</div> Medium-term<div>L</div> Long-term</div>							
<ul style="list-style-type: none"><li><div>S</div> Prioritizing transit stop improvements servicing Indigenous communities</li><li><div>S</div> Installing electric vehicle charging stations at mobility hubs</li><li><div>S</div> Supporting BC Transit’s Low Carbon Fleet Program to electrify its fleet</li><li><div>S</div> Prioritizing transit by installing transit queue jumpers along the Highway 17 corridor</li><li><div>M</div> Supporting and advancing the Rapid Transit Corridor along Highway 1 between Victoria and the Western Communities through partnership with BC Transit</li><li><div>M</div> Supporting BC Transit, View Royal and Colwood in establishing a Transit Priority Corridor along Old Island Highway</li><li><div>L</div> Exploring the viability of future marine transportation corridors</li><li><div>L</div> Exploring the potential of commuter rail on the Island Rail Corridor between Westhills and Victoria</li></ul>		<ul style="list-style-type: none"><li><div>S</div> Advancing development of key transportation hubs that accommodate all travel modes across the region in partnership with BC Transit</li><li><div>S</div> Advancing the development of new park and ride stalls in the CRD and CVRD to increase capacity</li><li><div>S</div> Adding secure bike parking/storage at key locations</li><li><div>M</div> Continuing to assess the need for enhancement of inter-city transit commuter services (Cowichan Commuter Service)</li><li><div>M</div> Working with Indigenous, local and regional governments to include Active Transportation Infrastructure in rehabilitation projects that improve inter-regional connections</li></ul>		<ul style="list-style-type: none"><li><div>S</div> Prioritizing active transportation and pedestrian accessibility during project development within ministry projects</li><li><div>S</div> Prioritizing transit facilities and improvements during project development within ministry projects</li><li><div>S</div> Constructing the Leigh Road/Highway 1 Four-Laning and Median Barrier</li><li><div>S</div> Completing the Connie to Glintz Lake/Highway 14 Project including park and ride, and pedestrian underpass</li><li><div>M</div> Advancing work on the Keating Cross Road/Highway 17 project</li><li><div>M</div> Advancing planning, engineering and design work to improve safety, efficiency and active transportation along Highway 1 over the Malahat</li></ul>		<ul style="list-style-type: none"><li><div>S</div> Encouraging growth of inter-regional trails in the CRD and CVRD:<ul style="list-style-type: none"><li>› Galloping Goose Regional Trail</li><li>› Lochside Regional Trail</li><li>› E&amp;N Rail Trail</li><li>› Trans Canada Trail</li></ul></li><li><div>S</div> Supporting Active Transportation Infrastructure Grant applications that align with the British Columbia Active Transportation Design Guide</li><li><div>S</div> Prioritizing the installation of bike lockers at mobility hubs</li><li><div>M</div> Working with regional and local governments to advance grade separation of inter-regional trails, add specific bike signals and remove conflict points</li></ul>	

# Implementing the Strategy

Implementing the South Island Transportation Strategy will require a collective effort from the Province and Indigenous, regional and local governments. Together, we must establish and support decisions on how to plan and build for future growth, while recognizing that people will continue to make individual choices based on their lifestyle goals and preferences.

By bringing land use, transportation and regional growth planning together, we will be better poised to focus government policy and coordinate economic development initiatives. This will allow for distribution of some of the anticipated growth we will see in future decades, and the building of affordable, liveable communities and supplying convenient, efficient and comfortable transportation systems as a realistic alternative to driving.

Since 2017, the Province has invested or committed to investing over \$500 million in the South Island. We remain committed to further investments which will help achieve the goals of this Strategy. But the successful creation of a fully integrated transportation network across all modes of travel will require more than just provincial investment in infrastructure.

This Strategy represents a shift in our collective approach to building capacity in the South Island network. This will take meaningful collaboration and partnerships with Indigenous, local, regional and federal governments to effectively implement the priorities and commitments outlined in this Strategy.

As we move forward, additional work with our partners will be paramount to better understanding their specific economic, environmental, climate change and land use development goals to advance specific priorities.

While the long-term effects of COVID-19 remain unclear, the immediate impacts highlight the need for resilient and integrated transportation networks with the goal moving forward to build back better.





# Conclusion

The COVID-19 pandemic has affected all British Columbians and has served as an important lesson about building communities and transportation networks that can adapt to rapid and wide-spread changes.

While many aspects of our daily lives have been impacted, the long-term effects of the pandemic remain unknown. What has not changed is our core values and vision for improving the lives of British Columbians. An integrated transportation strategy represents one aspect of a holistic approach to sustainable development, a healthy and competitive economy, climate action, and more equity for everyone that lives in this region and across the province.

The South Island Transportation Strategy demonstrates the Province's commitment to increasing the capacity of all transportation networks through sustainable travel choices and smart investment decisions.

It provides a clear path forward to addressing the transportation challenges in the South Island and advancing the many opportunities in the region to support an integrated transportation network for all modes of travel.

The Sooke River Road Intersection Project was completed in 2019. This project improved safety for drivers, transit users, cyclists and pedestrians on a busy section of Highway 14 near the local school.





Ministry of  
Transportation  
and Infrastructure

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## Transforming South Island Transportation







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## Appendix B: Summary Analysis – South Island Transportation Strategy and the Regional Transportation Plan

The Capital Regional District (CRD) adopted the Regional Transportation Plan (RTP) in 2014 to identify a regional multi-modal transportation system that meets future growth demands with a focus on sustainability. The RTP includes eight regional outcome statements and accompanying actions to guide partner implementation. The RTP recognizes that achieving the regional multi-modal transportation system requires collaboration among all municipalities, electoral areas and key partners such as the Ministry of Transportation and Infrastructure (MoTI) and BC Transit.

The table below summarizes how the South Island Transportation Strategy (SITS) confirms the RTP outcomes and support implementation at the provincial level.

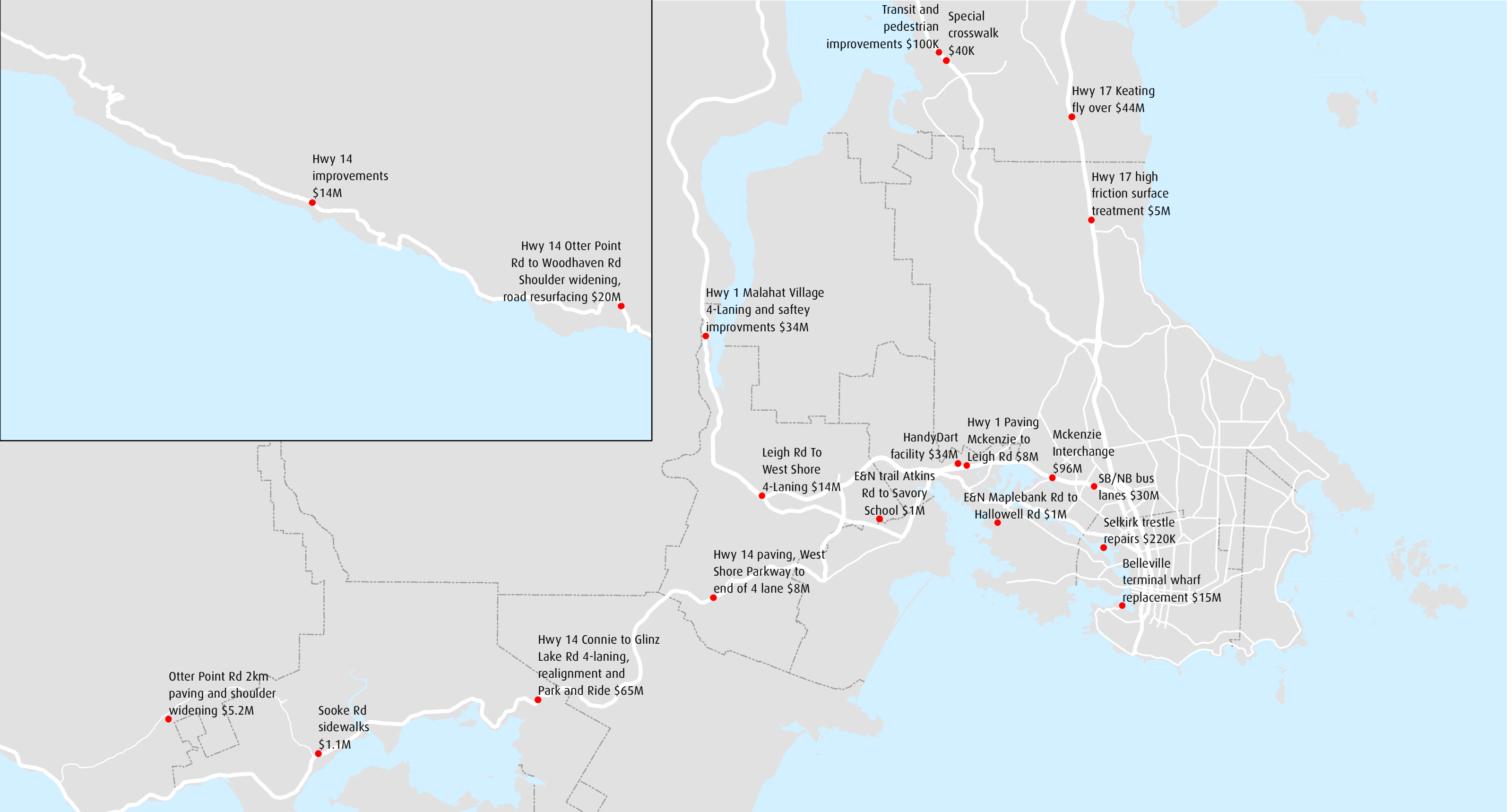
Plans & Policies		Actions & Infrastructure
RTP Outcome Statement	SITS Goal	CRD and Partner Actions
<b>Outcome # 1:</b> Movement between communities, mobility hubs and major destinations is facilitated through a Regional Multi-modal network of transportation corridors.	<b>Goal 1:</b> Ensure Sustainable Multi-Modal Travel Options  <b>Goal 2:</b> Strengthen Inter-Community and Inter-Modal Connections	Staff from MoTI, Saanich and CRD working collaboratively on Uptown Hub Plan and dedicated transit and cycling infrastructure improvements along key corridors.  Inclusion of upgraded active transportation and transit infrastructure on MoTI projects e.g., McKenzie Interchange dedicated busways and active transportation bridges.
<b>Outcome #2:</b> Mobility Hubs align with the RGS and provide people with access to housing, employment, services, amenities and transportation choice.	<b>Goal 1:</b> Ensure Sustainable Multi-Modal Travel Options  <b>Goal 2:</b> Strengthen Inter-Community and Inter-Modal Connections	The RGS identifies a settlement concept of connected nodes along the regional multi-modal network.  Approximately 20% of net new dwelling units are located in areas where 42% of trips involve active transportation or transit. A significant proportion of new growth is concentrated in areas that is not efficiently serviced by transit or active travel.

Plans & Policies		Actions & Infrastructure
RTP Outcome Statement	SITS Goal	CRD and Partner Actions
<b>Outcome #3:</b> Transportation and land use planning tools are integrated at the local and regional levels.	<b>Goal 1:</b> Ensure Sustainable Multi-Modal Travel Options  <b>Goal 2:</b> Strengthen Inter-Community and Inter-Modal Connections	<p>Municipalities have adopted transportation plans that generally align road networks with growth concepts set out in Official Community Plans.</p> <p>Municipalities employ planning tools such as subdivision bylaws to set out requirements for sidewalk and trail design, street trees, lighting, and traffic calming.</p> <p>Recent provincial plans include the Active Transportation Design Guide and BC Transit infrastructure design guidelines.</p>
<b>Outcomes #4 and #5:</b> Walking and cycling are appealing safe, convenient and viable transportation options for residents and visitors of all skill levels.	<b>Goal 1:</b> Ensure Sustainable Multi-Modal Travel Options  <b>Goal 4:</b> Support and Encourage Active Transportation	<p>Many municipalities have created dedicated active transportation plans.</p> <p>Inclusion of upgraded all ages and abilities cycling and pedestrian infrastructure on MoTI projects e.g., McKenzie Interchange and active transportation bridges.</p> <p>Municipalities and the CRD are expanding dedicated all ages and ability cycling and pedestrian infrastructure across the region.</p>
<b>Outcome #6:</b> Public transit is a preferred choice, attracting new riders through comfortable, safe, accessible and convenient service.	<b>Goal 1:</b> Ensure Sustainable Multi-Modal Travel Options  <b>Goal 2:</b> Strengthen Inter-Community and Inter-Modal Connections	<p>Victoria Regional Transit Commission fleet greening to include 80 compressed natural gas busses and planned introduction of 10 electric busses in 2021.</p> <p>Expansion of dedicated bus only lanes.</p>

Plans & Policies		Actions & Infrastructure
RTP Outcome Statement	SITS Goal	CRD and Partner Actions
<b>Outcome #7:</b> Existing regional transportation infrastructure is optimized and enhanced by new technology where appropriate.	<b>Goal 1:</b> Ensure Sustainable Multi-Modal Travel Options	<p>The CRD is modernizing its information and data service including traffic modelling and automobile, cycling and pedestrian counts.</p> <p>Other modernization initiatives include introduction of ride hailing services and a move towards flexible payment options on transit.</p>
<b>Outcome #8:</b> Regional programs and initiatives provide residents and visitors with the tools, confidence and knowledge to use active transportation, transit and trip reduction measures.	<b>Goal 3:</b> Improve Safety and Reliability <b>Goal 4:</b> Support and Encourage Active Transportation	<p>CRD Traffic Safety Commission research and safety campaigns communicate critical information about road safety.</p> <p>Active School Travel Planning and Go by Bike Week celebrations build active transportation capacity within key sectors.</p>

Recent and Planned  
Transportation Projects in the CRD

Appendix C





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## REPORT TO PLANNING, TRANSPORTATION AND PROTECTIVE SERVICES COMMITTEE MEETING OF WEDNESDAY, NOVEMBER 18, 2020

**SUBJECT** Ready Step Roll - Active School Travel Planning Progress Report

### **ISSUE SUMMARY**

To provide a progress report on the first year of the Capital Regional District (CRD) wide Ready Step Roll (RSR) – Active School Travel Planning initiative with the conclusion of the 2019/20 cohort.

### **BACKGROUND**

In 2016-17, the CRD delivered a region-wide Active and Safe Routes to School (ASRS) pilot program to 20 schools across the region with grant funding. From 2017 to 2019, the CRD partnered with the District of Saanich to deliver an ASRS program on a fee-for-service basis with eight schools over two school years. Both the pilot program and fee-for-service delivery model demonstrated value and efficiencies to municipal, school and parent stakeholders. Regional coordination resulted in capacity building at the neighbourhood level and lessons-learned across the region.

In 2019, the CRD Board approved ongoing funding for the development and implementation of the CRD's RSR – Active School Planning initiative, to work with up to five schools per year across the region. 2019/20 was the first cohort of schools to complete the new region-wide program. Based on the Board approved selection criteria, the following schools comprised the 2019/20 program cohort:

School	Local Government	School District	School Neighbourhood Catchment Type
George Jay Elementary	City of Victoria	61	Highly Urban
Lake Hill Elementary	District of Saanich	61	Suburban
Rogers Elementary	District of Saanich	61	Suburban
View Royal Elementary	Town of View Royal	61	Urban / Suburban
Keating Elementary	District of Central Saanich	63	Suburban / Rural

The 2019/20 final Active School Travel Reports for each school are complete and have been posted on the CRD website at [www.crd.bc.ca/ready](http://www.crd.bc.ca/ready), under Active School Travel Reports.

Now entering its second year as a regional initiative, RSR works annually with five school communities and respective local governments to encourage and enable more students to use active travel to get to/from school. The initiative is an 18 month partnership to make school neighbourhoods more walk-able and wheel-able by identifying and addressing safety and social barriers to active travel. Working in partnership, the initiative identifies solutions through equity, evaluation, engineering, enforcement, education and encouragement, known as the “6-E’s approach to active school travel planning”. See Appendix A for more information about the initiative.

## **ALTERNATIVES**

### *Alternative 1*

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That the Ready Step Roll – Active School Travel Planning Progress report be received for information.

### *Alternative 2*

That the Ready Step Roll – Active School Travel Planning Progress report be referred back to staff for additional information based on Committee direction.

## **IMPLICATIONS**

### *Environmental & Climate Implications*

The initiative supports a shift to active travel modes, with the aim to reduce community greenhouse gas emissions related to transportation. The initiative's community-planning based approach, combined with education and encouragement initiatives developed in partnership at the neighbourhood level, align with the CRD's Regional Climate Action Strategy.

### *Intergovernmental Implications*

The success of the initiative relies on participatory partnerships with provincial and local governments, school districts and schools (administration, Parent Advisory Committees [PACs] and students), along with the Insurance Council of British Columbia (ICBC), Island Health Authority, police forces, local businesses, and non-profits.

Through participation in the initiative, local governments benefit by leveraging the consultation process and the final reports that identify and prioritize infrastructure upgrades. Local government partners therefore gain actionable recommendations that can be used as neighbourhood-level inputs into planning processes (e.g., Local Area Plans, Active Transportation Plans) and to support external grant applications. In 2020, four letters of support were requested by three local governments to assist in grant proposals for active travel infrastructure improvements identified through the RSR initiative. Schools also gain actionable recommendations and build capacity to carry on with encouraging active transportation long after the completion of the RSR initiative at the respective school.

The RSR initiative also works in partnership with the Province and non-profit agencies, as follows:

- 1) *Everybody Rides Grades 4 & 5 pilot program*: A Ministry of Transportation and Infrastructure program, this pilot offers free bike skills classes. The 2019/20 RSR schools were invited to participate, as well as eight other schools across the region.
- 2) *Active School Travel pilot project*: Facilitated by BC Healthy Communities, this pilot aims to increase school capacity around the province to develop and implement active school travel planning. CRD staff have provided knowledge, expertise and materials to support the pilot.

### *Social Implications*

This year, the RSR initiative added "*Equity*" as an integral approach to active school travel planning. This will ensure that the program supports solutions that help everyone (school community and individuals) acquire the tools they need to be successful. Specifically, an equity lens enables partners to consider how barriers to active travel may be cultural and economic in nature, resulting in disproportionate impacts to lower income and/or culturally diverse neighbourhoods.

In response to feedback received from past participant schools, this year the program also focused on building capacity within participating schools so that they could continue the active

travel momentum gained through participation in RSR. The [Active Travel Resources for School Communities](#) webpage was developed to provide a variety of resources to complement the final reports.

#### *Service Delivery Implications*

COVID-19 impacts were mitigated where possible by maintaining open communications while being flexible and creative. RSR offered to reschedule in-school delivery to the fall and offered newly created online materials as an alternative. Staff also created new active travel curriculum that could be used at home. A new CRD webpage was created and promoted showcasing these new [Resources for School Communities](#).

At the conclusion of the program, an evaluation was sent out to each participating municipality and school to gauge client satisfaction and to improve program delivery. Positive and constructive feedback was received from schools and municipalities saying that they “would participate in this program again and/or recommend to other municipalities/schools”.

#### *Alignment with Board & Corporate Priorities*

The CRD Board Priorities and Corporate Plan identifies transportation as a key regional priority and envisions that residents have access to convenient, green and affordable multi-modal transportation systems that enhance community well-being. The RSR initiative aligns to Corporate Priority 2b-2 deliver active & safe routes to school planning service.

#### *Alignment with Existing Plans & Strategies*

RSR supports the implementation of the following regional plans and initiatives:

- CRD Regional Transportation Plan (2014)
- CRD Pedestrian & Cycling Master Plan (2015)

The RSR initiative also supports participating local governments to fulfil their role in BC's Active Transportation Strategy.

### **CONCLUSION**

Active school travel planning for the 2019/20 Ready Step Roll cohort is complete. The reports, along with the new 6 E's Approach and Resources for School Communities can be viewed on the CRD website at [www.crd.bc.ca/ready](http://www.crd.bc.ca/ready). Staff are currently working with local government and municipal partners on the 2020/21 cohort, with modifications as-needed for COVID-19. Recruitment for the 2021/22 cohort will begin in December 2020.

### **RECOMMENDATION**

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That the Ready Step Roll – Active School Travel Planning Progress report be received for information.

Submitted by:	Emily Sinclair, MCIP, RPP, Senior Manager, Regional & Strategic Planning
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT(S)**

Appendix A: CRD's Ready Step Roll Initiative - 2019/2020 Cohort

## CRD's Ready Step Roll Initiative 2019/20

The CRD's Ready Step Roll (RSR) – Active School Travel Planning initiative had a successful first year as a region-wide initiative. The partner schools and local governments included:

- ✓ George Jay Elementary / City of Victoria
- ✓ Lake Hill Elementary / District of Saanich
- ✓ Rogers Elementary / District of Saanich
- ✓ View Royal Elementary / Town of View Royal
- ✓ Keating Elementary / District of Central Saanich



The 2019/20 final Active School Travel Reports for each partner school has been posted on the CRD website at [www.crd.bc.ca/ready](http://www.crd.bc.ca/ready), under Active School Travel Reports.

### 2019/20 HIGHLIGHTS

*"I love the new Walking School Bus - because now my Mom gets to work on time."*

- student in 2019/20 RSR school

- ✓ A final report template was created with the goal to be accessible and user friendly with attractive branding. The main section of the report was designed so that figures and images could be used by the municipality and school to support and promote active travel.
- ✓ The addition of "Equity" as a 6<sup>th</sup> E to the standard 5 E's Approach to Active School Travel Planning (*Evaluation, Engineering, Enforcement, Encouragement and Education*) aims to assist the RSR initiative to support solutions that help everyone acquire the tools they need to be successful. Approaching active school travel planning through an *equitable lens* helps build and strengthen community connections while embracing the unique abilities, backgrounds, identities, and experiences of all individuals and families.
- ✓ New online [Resources for School Communities](#) were created to further support the schools during and after participation in the RSR initiative.
- ✓ The RSR initiative partnered with the MoTI's pilot program "Everybody Rides Grades 4 & 5" to offer free bike skills classes to the participating RSR schools, as well as eight other schools in Greater Victoria, totalling 40 classes, facilitated by Greater Victoria Bike to Work Society.



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## Appendices

Appendix A – X School Plan Your Route Map & Student Activity

Appendix B – Action Plan

Appendix C – Consultation Data & Insights Summary

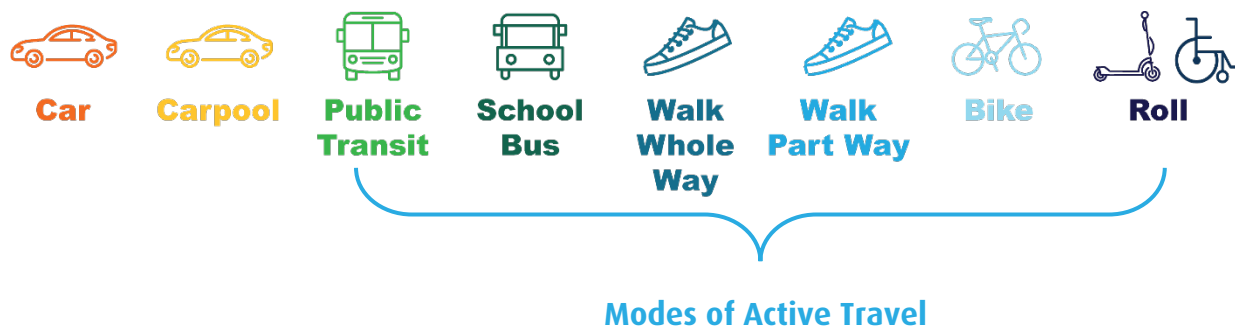
Appendix D – 6 E's of Active School Travel - Online Resources for School Communities

## ACTIVE SCHOOL TRAVEL PLANNING



Active School Travel Planning is a school catchment/neighbourhood-based planning process aimed at increasing rates of walking and wheeling (bike, scooter, rollerblades, skateboard, wheelchair) or bus -- modes of active travel -- part-way or fully to and from school. Active School Travel Planning programs have already been successfully implemented in many communities across Canada and internationally. The “International Best Practices in Regional Planning for School Travel” (Ryerson University, Toronto, April 2016) <https://ontarioactiveschooltravel.ca/wp-content/uploads/2017/08/Best-Practices-Report-Ryerson.pdf>, looks at a number of case studies and key learnings from around the world.

The [Capital Regional District](#) (CRD) [Board Priorities](#) and [Corporate Plan](#) identifies *transportation* as a key regional priority and *envision[s] that residents have access to convenient, green and affordable multi-modal transportation systems that enhance community well-being*. Helping to further this priority through behaviour change and infrastructure improvement at a foundational level, the CRD coordinates the active and safe routes to school planning initiative, known as the CRD’s Ready Step Roll – Active School Travel Planning initiative.



## BENEFITS OF ACTIVE TRAVEL

**Active travel** describes using any form of transportation that relies on human-power to move. This includes **walking and wheeling** (bike, skateboard, rollerblades, scooter, wheelchair).

**Students who walk and wheel to and from school (fully or part way!) can:**



Improve physical and mental health



Arrive alert and ready to learn



Create positive community behavior change



Support and help parents, be more self-reliant, support household schedules/routines



Feel present and connected



Build confidence and capability



Reduce traffic congestion, cleaner air and reduced Green House Gas emissions



Save time and money

## CRD'S READY STEP ROLL INITIATIVE

### What is the Ready Step Roll Program?



Facilitated by the Capital Regional District (CRD), the Ready Step Roll (RSR) - Active School Travel Planning initiative works annually with five school communities and respective local government agencies to encourage and enable more students to use active travel to get to/from school. Students who walk and wheel (bike, scooter, skateboard, wheelchair) to/from their school (or bus stop!) arrive alert and ready to learn, while helping to reduce regional GHG emissions and create safe, connected communities.

The Ready Step Roll initiative is a comprehensive and sustainable approach to making school-neighbourhoods more walk-able and wheel-able, by identifying and addressing safety and social barriers to better support and enable active travel with purpose and confidence. The success of the program relies on participatory partnerships with provincial and local governments, school districts and schools (administration, PACs and students), along with the Insurance Council of British Columbia (ICBC), Island Health Authority, police forces, local businesses, and non-profits. Working together, the partners focus on creating solutions through equity, evaluation, engineering, enforcement, education and encouragement.

### What is the Active Travel Planning Process?

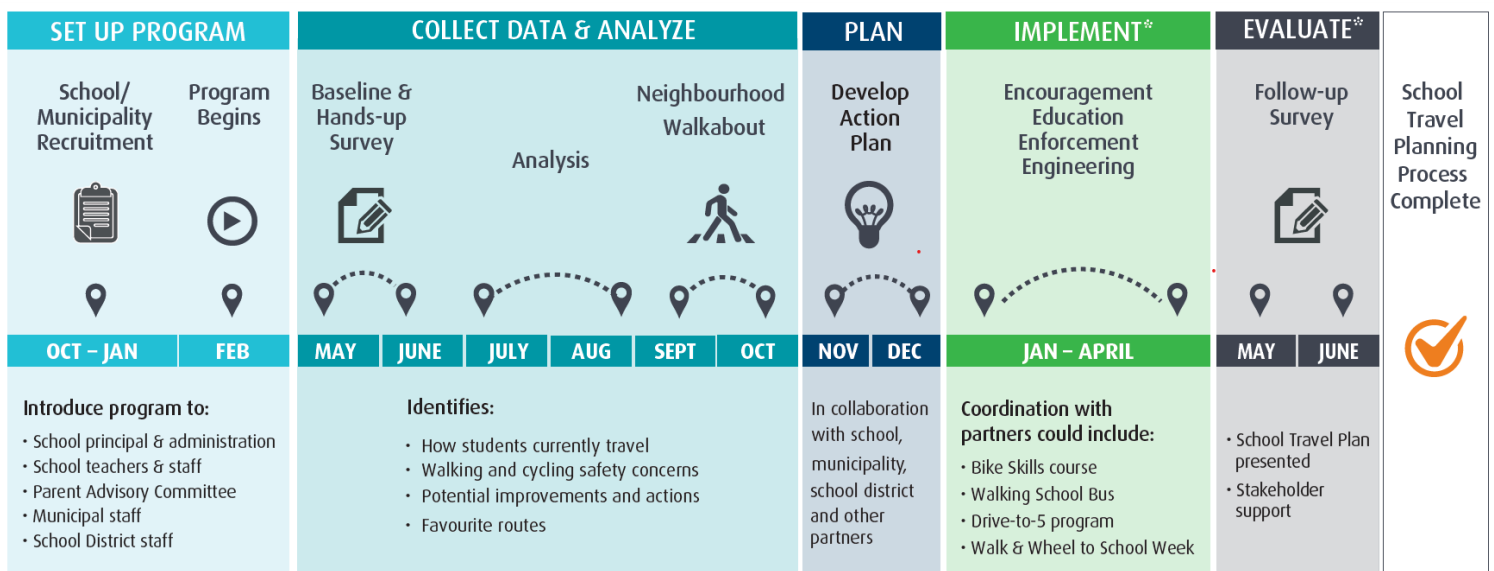
Using the **6 E's Approach to Active School Travel Planning** (*Equity, Evaluation, Engineering, Enforcement, Education and Encouragement*), the CRD coordinates the 18-month RSR initiative to collaboratively partner with local governments and schools to:

1. **Identify** schools and local governments that are **committed to working** together.
2. **Facilitate** the creation and implementation of school-catchment **Active School Travel Report** to further enable and inspire active transportation mode choice. During the program, local active travel safety concerns on common school routes are identified via school travel surveys, a School-Neighbourhood Walkabout, as well as a variety of consultation activities.
3. **Build capacity** of the school for ongoing initiatives that focus on **Education** and **Encouragement**, while supporting **Equity**.

### Who are the Key Partners?

- **CRD** – Facilitator and Project Manager of the Ready Step Roll (RSR) program.
- **Local Government(s)** - Provides local knowledge on street level infrastructure, assists in development of Action Plan, evaluates and considers proposed solutions, supports/undertakes implementation and follow-ups with school regarding safety improvements post RSR program.
- **School Administration and School District** – Provides insight into school sites and bussing, evaluates and considers implementation of proposed solutions on school property, and supports implementation of education and engagement initiatives during and post RSR program.
- **School Community (Parents/Guardians, PACs, and Students)** – Provides perspective on the walk-ability and wheel-ability of the school-neighborhood, identifies constraints and opportunities for improved drop-off/pick-up, contributes to action planning, and supports education and engagement initiatives during and post RSR program.

## What is the Initiative's Timeline?







\*Implementation and evaluation changed due to impacts of Covid-19

## CRD'S READY STEP ROLL

### 6 E'S APPROACH TO ACTIVE SCHOOL TRAVEL PLANNING

The 6 E's approach to Active School Travel Planning aims to be a comprehensive, integrated and sustainable approach to making school-neighbourhoods more walk-able and wheel-able, by identifying and addressing safety and social barriers to better support and enable active travel with purpose and confidence.

	<b>Equity</b> Ensures that the RSR initiative across the capital region is benefiting all demographic groups, with particular attention to ensuring safe, healthy, and fair outcomes for all students of diverse family, cultural, socio-economic backgrounds, abilities and identities.
	<b>Evaluation</b> Collect data and user insights to understand school-neighborhood context, assess which approaches are appropriate, identify opportunities to improve the effectiveness of an approach for a given school community and monitor changes over time.
	<b>Engineering</b> Make physical improvements to the streetscape and built environment to improve the walk-ability and wheel-ability with a focus on the immediate school-neighbourhood, common/high-use routes, and on school property.
	<b>Enforcement</b> Increase awareness and compliance of traffic laws, parking regulations, drop-off/pick-up guidelines and personal safety with a focus on the immediate school-neighbourhood and on school property.
	<b>Education</b> Change perceptions of active travel and support programs to improve safety, reduce conflicts between transportation modes, and build the confidence and skills needed to safely and confidently walk or wheel to and from school.
	<b>Encouragement</b> Promote walking and wheeling as fun, easy, practical, exciting and inclusive ways to get to and from school.



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## **REPORT TO PLANNING, TRANSPORTATION AND PROTECTIVE SERVICES COMMITTEE MEETING OF WEDNESDAY, NOVEMBER 18, 2020**

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**SUBJECT**     Regional Growth Strategy Indicators Report

### **ISSUE SUMMARY**

To receive the Regional Growth Strategy (RGS) Indicators Report.

### **BACKGROUND**

The *Local Government Act (LGA)* section 452 sets out requirements for regional districts with adopted regional growth strategies. Specifically, a regional district must:

- a) establish a program to monitor RGS implementation and the progress made towards its objectives and actions; and
- b) prepare an annual report on that implementation and progress.

The RGS Indicators Report was developed in 2019 to support consistent annual reporting and meet legislative requirements. The report consists of 20 indicators that measure progress towards achieving RGS targets and objectives. Each indicator includes a description of what is being measured, why it is important and a discussion of trends. Over time, the indicators will help identify progress being made toward RGS implementation or alert the region to a need for change if progress is not being seen.

Criteria for selection of indicators included: relevance, data availability, accuracy, cost, and effort. While many indicators use data that is available annually, some indicators rely on Census data that is only available every five years.

For 2020, 14 of the 20 indicators were updated with new data. Please see Appendix A for the report and detailed information about the new data.

The indicators have shown little change since the last report. It is important to note that changes in year-to-year performance do not always equate to a long term trend. It may take several years of data collection to reliably identify a trend. Following receipt by the Board, the information will be posted on the CRD's website.

### **ALTERNATIVES**

#### *Alternative 1*

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That the Regional Growth Strategy Indicator Report be received for information.

#### *Alternative 2*

That the Regional Growth Strategy Indicator Report be referred back to staff for additional information.

### **IMPLICATIONS**

#### *RGS Implications*

Achieving RGS objectives requires collaborative partnerships between local, regional and provincial levels of government, each with specific jurisdictional authorities. The RGS indicators show how we are doing as a region rather than the performance of a specific CRD service. The

region's growth management approach, policies and targets can be reevaluated every five years during the RGS update process if progress toward RGS implementation is not being seen.

Managing and Balancing Growth, Housing and Community and Climate Action are RGS policy areas where the indicators suggest a need to closely watch for progress against RGS objectives.

- 1) From a growth management perspective, the region has not expanded the growth area since RGS adoption in 2018 (1.1b), and has built less than 5% of new dwelling units outside of the growth boundary (1.2a). While not indicative of a trend, we have been less effective in other growth management areas. Regionally, we have seen only 20% of growth in areas with greater than 42% active transportation (1.1a). This would suggest that focusing new dwellings within the growth boundary alone is not sufficient to create compact complete communities.
- 2) From a housing affordability perspective we are making steady progress in adding to the supply of affordable housing in the region, adding 1575 units between 2016 and 2019 (3.2d). However, low rental vacancy rates especially on the low end of the price spectrum indicate a market that is difficult for renters (3.2c). Low vacancy rates are compounded by average rent increases that have outpaced inflation (3.2b).
- 3) From a climate action perspective the region has made a 1.1% reduction in total greenhouse gas emissions since the base year of 2007(7.1a). This trend suggests we are not on track to meet our goal of a 61% reduction in GHG emissions by 2038. While a 1.1% reduction is modest there has been a 14% reduction in per capita emission since the base year which speaks to efforts by the CRD and local governments to reduce GHG emissions.

#### *Alignment with Board & Corporate Priorities*

Annual indicator reporting addresses the Planning and Development Community Need, specifically initiative 11a-3 Report On & Advance RGS Implementation/Indicators.

#### *Service Delivery Implications*

The legislation stipulates that all services undertaken by a regional district after the Board has adopted a regional growth strategy must be consistent with the regional growth strategy. In addition to highlighting regional performance against an outcome, the indicators also could suggest areas where CRD services may need to be adjusted to ensure RGS alignment. The necessary adjustments can be considered through the CRD's established service planning and budgetary processes. Based on current data, there are no items that could require adjustment.

### **CONCLUSION**

The Regional Growth Strategy Indicators Report monitors the region's progress towards the targets outlined in the RGS, and is updated annually. 14 of the 20 indicators were updated with new data in 2020. The RGS Indicator Report will be posted on the CRD website.

### **RECOMMENDATION**

The Planning, Transportation and Protective Services Committee recommends to the Capital Regional District Board:

That the Regional Growth Strategy Indicator Report be received for information.

Submitted by:	Emily Sinclair, MCIP, RPP, Senior Manager, Regional & Strategic Planning
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: Regional Growth Strategy Indicator Report



# Regional Growth Strategy Indicator Report 2020



Making a difference...together



# RGS INDICATORS – AT A GLANCE

## Managing and Balancing Growth

Number of net new dwelling units in areas where more than 42% walk/bike/bus to work (*updated 2020*)



Hectares added to the Urban Containment Policy Area (UCPA) Growth Boundary (*updated 2020*)



Percentage of net new dwellings built outside the UCPA (*updated 2020*)



Net new dwelling units in East Sooke and Otter Point Official Community Plan (OCP) areas (*updated 2020*)



## Environment and Infrastructure

Percentage of Sea-to-Sea Green/Blue Belt acquired (*updated 2020*)



Percentage of the Regional Trail Network completed (*updated 2020*)



Compliance with Source Control Bylaw (*updated 2020*)



Number of discharges with a high public health concern (*updated 2020*)



Waste stream: solid waste disposal (*updated 2020*)



Average water consumption (*updated 2020*)



## Housing and Community

Create safe and complete communities



Reduce core housing need



Average rent for 2-bedroom apartment (*updated 2020*)



Vacancy rate by rental price quartiles (*updated 2020*)



Increase supply of affordable housing (*updated 2020*)



## Transportation

Percentage of total trips made by walking, cycling and transit in the Growth Management Planning Area (GMPA)



## Economic Development

Jobs to population ratio



## Food Systems

Hectares of farmland in the GMPA



Average age of farmer



## Climate Action

Community Greenhouse Gas (GHG) emissions (*updated 2020*)





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## The Regional Growth Strategy

The 2018 Regional Growth Strategy (RGS) is a framework developed by municipalities and the regional district to address how communities will work together to enhance regional quality of life and social well-being over the next 20 years.

The provincial government created the growth strategy legislation to “...promote human settlement that is socially, economically and environmentally healthy and that makes efficient use of public facilities and services, land and other resources”.

The RGS includes policies, actions and targets for the reduction of greenhouse gas emissions. The strategy was developed with significant public and stakeholder involvement and responds to the RGS vision of a livable community that stewards the environment and natural resources with care.

## The RGS Indicator Report

A robust monitoring program helps the region measure progress towards achieving RGS goals and objectives.

Wherever possible, indicators were selected such that data would be available on an annual basis. Unfortunately, for many of the indicators, information is only available through census data and will therefore only be updated every five years.

## How to use this report

For each indicator, four key questions are answered:

- What is being measured?
- Why is the indicator important?
- What is the target/desired trend?
- How are we doing?

Indicator performance is described relative to a baseline year. However, it is important to note that changes in year-to-year performance do not always equate to a long-term trend. While performance in any given year may be positive or negative, it may take many years of data to reliably identify a clear trend. Where possible, trend lines are included in the graphs to help illustrate indicator trends.

The RGS indicators evaluated in this report are shown in the following table.

## 2038 Targets by priority area and objective

PRIORITY AREA	OBJECTIVE	TARGETS BY 2038
1.0 Managing and Balancing Growth	1.1 Keep Urban Settlement Compact 1.2 Protect the Integrity of Rural Communities	<ul style="list-style-type: none"> <li>Accommodate a minimum of 95% of the region's new dwelling units within the Urban Containment Policy Area.</li> </ul>
2.0 Environment and Infrastructure	2.1 Protect, Conserve and Manage Ecosystem Health	<ul style="list-style-type: none"> <li>Acquire 100% of the Sea-to-Sea Green/Blue Belt.</li> <li>Complete 100% of the Regional Trail Network.</li> <li>Reduce contaminants to fresh and marine water bodies.</li> </ul>
	2.2 Deliver Services Consistent with RGS Objectives	<ul style="list-style-type: none"> <li>Prepare long-term capital plans for Capital Regional District utilities and major infrastructure improvements that take into consideration the conservation of land, water and energy resources and the impacts of climate change and natural hazards.</li> </ul>
3.0 Housing and Community	3.1 Create Safe and Complete Communities	<ul style="list-style-type: none"> <li>Municipal targets for the number of people living in complete communities to be identified by municipalities in Regional Context Statements.</li> </ul>
	3.2 Improve Housing Affordability	<ul style="list-style-type: none"> <li>Increase the supply of more affordable housing.</li> <li>Reduce the number of people in core housing need.</li> <li>Reduce the number of people who are homeless.</li> </ul>
4.0 Transportation	4.1 Improve Multi-Modal Connectivity and Mobility	<ul style="list-style-type: none"> <li>Achieve a transportation system that sees 42% of all trips made by walking, cycling and transit.</li> </ul>
5.0 Economic Development	5.1 Realize the Region's Economic Potential	<ul style="list-style-type: none"> <li>Achieve a jobs/population ratio of:               <ul style="list-style-type: none"> <li>0.60 in Core Area</li> <li>0.53 in Saanich Peninsula</li> <li>0.36 in West Shore</li> </ul> </li> </ul>
6.0 Food Systems	6.1 Foster a Resilient Food and Agriculture System	<ul style="list-style-type: none"> <li>Increase the amount of land in crop production for food by 5,000 ha to enhance local food security.</li> <li>Municipal targets to increase the amount of land in crop production for food and to encourage agricultural land to be identified by municipalities in Regional Context Statements.</li> </ul>
7.0 Climate Action	7.1 Significantly reduce community based greenhouse gas emissions	<ul style="list-style-type: none"> <li>Reduce community greenhouse gas emissions by 33% (from 2007 levels) by 2020, and by 61% by 2038.</li> </ul>

### 1.1a Number of net new dwelling units in areas where more than 42% walk/bike/bus to work

#### What is being measured?

This indicator tracks new dwelling units created in census Dissemination Areas (DA) where at least 42% of trips involve active transportation (walking, biking or taking transit).

#### Why is this indicator important?

The RGS aims to keep urban settlement compact and directs new growth to be located where it can be efficiently serviced by transit and active transportation.

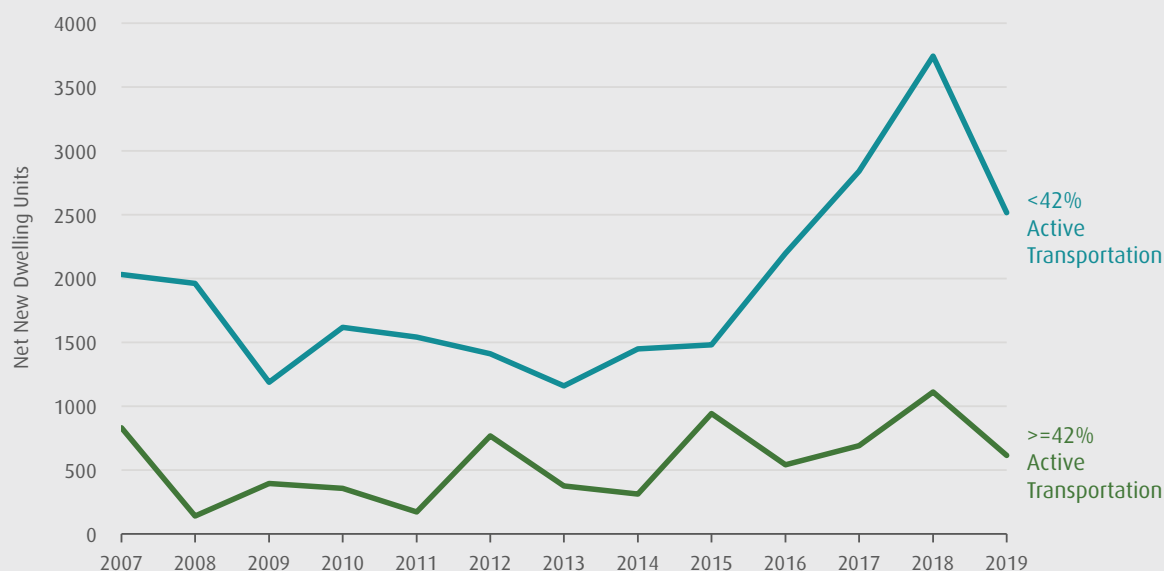
#### Target/Desired Trend

Place growth in areas conducive to walking, cycling and transit.

#### How are we doing?

Currently, we are not meeting the target.

In the Growth Management Planning Area (GMPA) between 2012-2015, we saw as much as 39% of growth in net new dwelling units in areas with greater than 45% active transportation. In the period of 2016-2019 we saw 20% of growth in net new dwelling units in high active transportation areas and high growth of net new units in areas with less active transportation.



Source: CRD Building Permit Database and Statistics Canada Census of Population 2016



### 1.1b Hectares added to the Urban Containment Policy Area growth boundary

#### What is being measured?

This indicator measures the net change in the land area of the Urban Containment Policy Area (UCPA). The UCPA is intended to hold a land supply that will accommodate the region's population and employment growth.

#### Why is this indicator important?

This indicator aligns with the RGS objective to keep urban settlement compact. The Regional Growth Strategy includes a policy that generally permits amendment to the UCPA only as an outcome of a comprehensive 5-year review of the RGS.

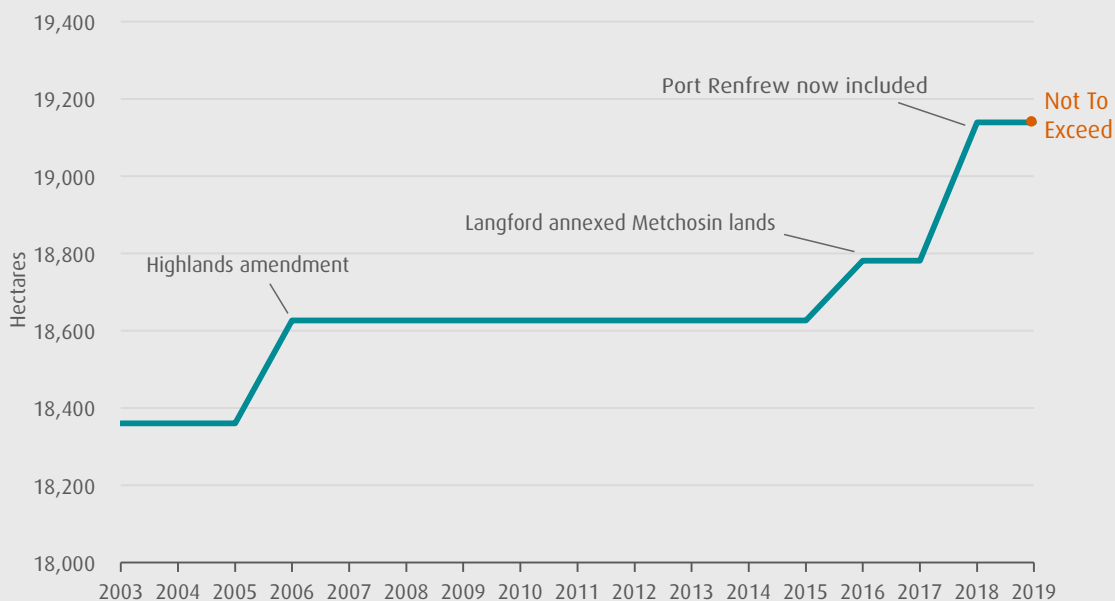
#### Target/Desired Trend

Minimize change to the UCPA from the date of adoption of the 2018 RGS.

#### How are we doing?

We are meeting the target.

Since the March 2018 adoption of the RGS, there have been no changes to the UCPA.



Source: CRD Regional Planning

## 1.2a Percentage of net new dwellings built outside the Urban Containment Policy Area (UCPA)

### What is being measured?

This indicator measures the annual share of net new dwelling units located outside the UCPA.

### Why is this indicator important?

The RGS aims to keep urban settlement compact and protect the integrity of rural communities.

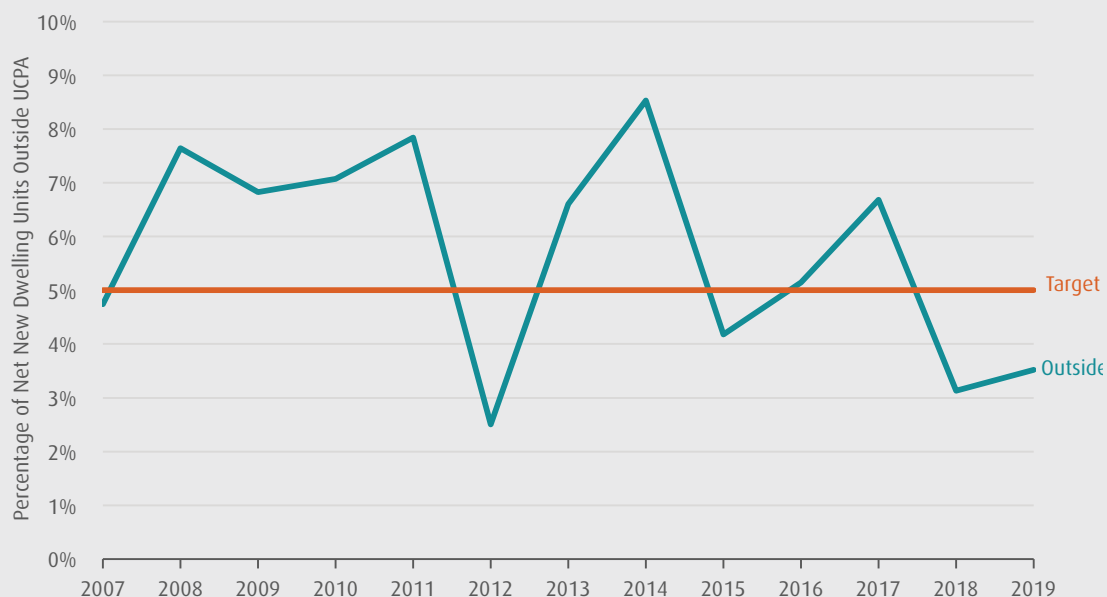
### Target/Desired Trend

Accommodate a maximum of 5% of the region's net new dwelling units outside the UCPA (for a minimum 95% of net new dwelling units within the UCPA, as per RGS target).

### How are we doing?

We have met the target in the last two years.

In the past ten years the average percentage growth outside the UCPA has been 5.6% and the standard deviation was 1.9%.



Source: CRD Building Permit Database

## 1.2b Net new dwelling units in East Sooke and Otter Point Official Community Plan (OCP) areas

### What is being measured?

This indicator measures annual net new dwelling units located in the East Sooke and Otter Point OCP areas of the Juan de Fuca Electoral Area.

### Why is this indicator important?

The RGS aims to protect the integrity of rural communities.

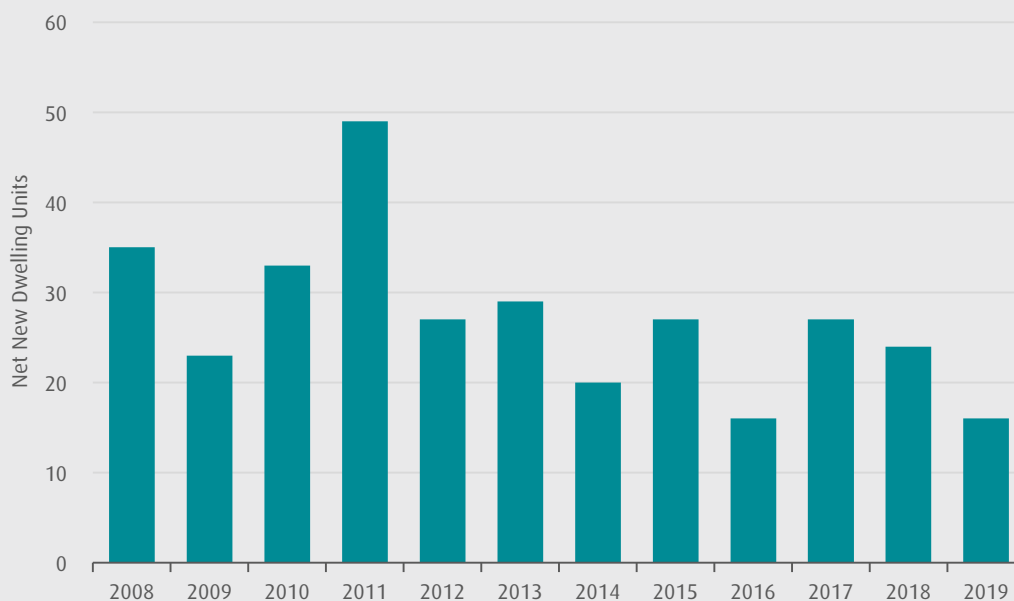
### Target/Desired Trend

The total number of units in East Sooke and Otter Point is not to exceed 3,384 units. This includes both existing and new units.

### How are we doing?

We are meeting the target.

As of 2019 there are 1,633 dwelling units in East Sooke and Otter Point. There has been minimal expansion, with an average of 26 net new units per year over the past 10 years.



Source: CRD Building Permit Database

### 2.1a Percentage of Sea-to-Sea Green/Blue Belt acquired

#### What is being measured?

This indicator tracks the percentage of land within the regional Sea-to-Sea Green/Blue Belt that has been protected. Acquisition of additional land required to meet the target is to be undertaken by CRD and/or other levels of government.

#### Why is this indicator important?

The RGS aims to protect, conserve and manage ecosystem health. The protection of the Sea-to-Sea Green/Blue Belt will provide a continuous connected greenbelt network from Tod Inlet to the Sooke Basin.

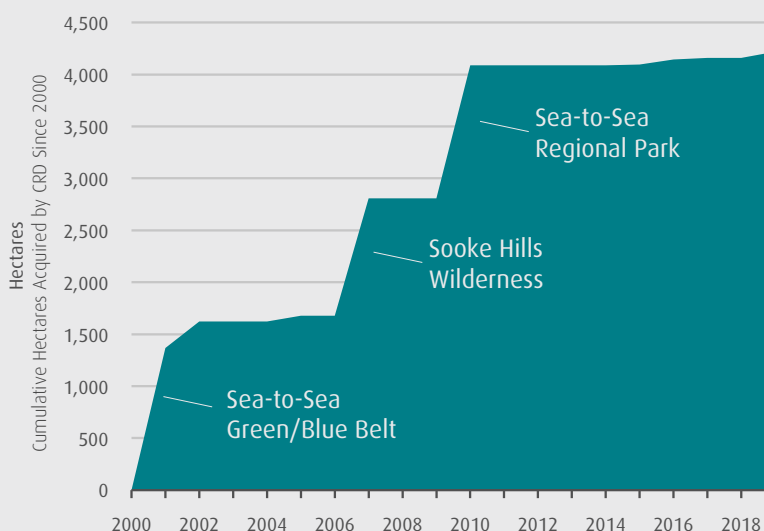
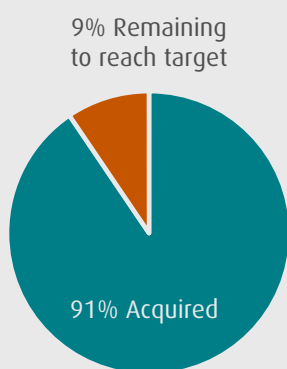
#### Target/Desired Trend

Acquire 100% of the Sea-to-Sea Green/Blue Belt.

#### How are we doing?

We have yet to fully meet the target.

As of September 2018, 91% of the proposed 11,310 hectares has been acquired.



Source: CRD Regional Parks

**2.1b Percentage of the Regional Trail Network completed****What is being measured?**

This indicator measures the percentage of the Regional Trail Network that has been completed.

**Why is this indicator important?**

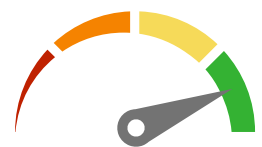
The RGS aims to protect, conserve and manage ecosystem health. The Regional Trail Network represents an integrated trail and linear park system linking urban areas to rural green space and is a key element of the Regional Green/Blue Spaces Strategy.

**Target/Desired Trend**

Complete 100% of the Regional Trail Network as identified in the 2011 CRD Regional Parks Strategic Plan.

**How are we doing?**

We are making progress towards the target. As of October of 2020, 47% of the proposed 390 kilometres of the Regional Trail Network has been completed.



**47%** of Regional Trail Network completed (2020)

Source: CRD Regional Parks

### 2.1c Compliance with Source Control Bylaw

#### What is being measured?

This indicator measures the percentage of businesses in compliance with Source Control Bylaw standards.

#### Why is this indicator important?

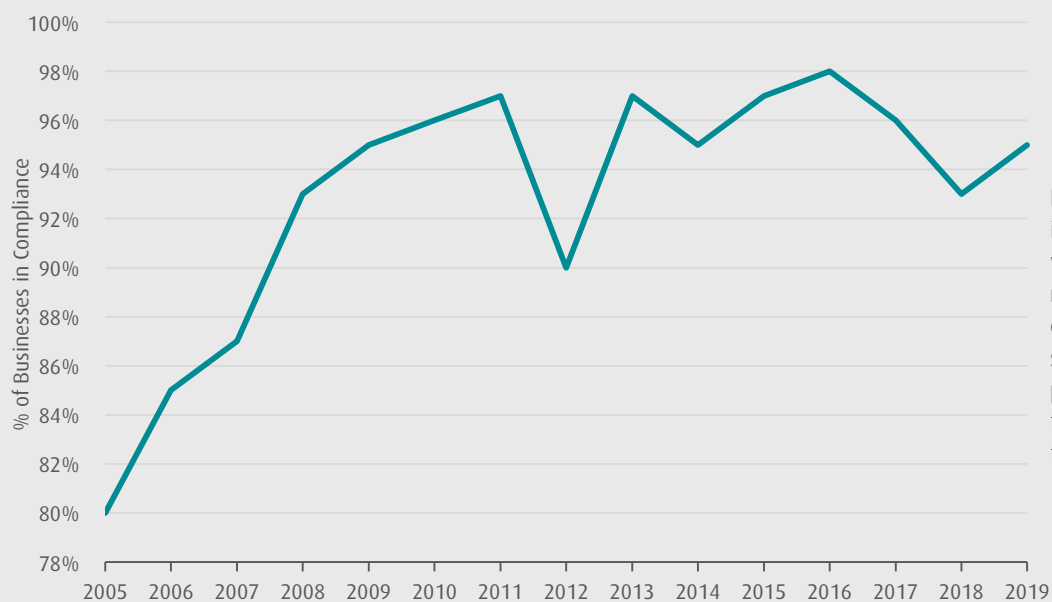
The RGS aims to protect, conserve and manage ecosystem health. A high level of compliance reduces contaminants in fresh and marine regional waterways.

#### Target/Desired Trend

Increase compliance of the standards established in the Source Control Bylaw.

#### How are we doing?

We are seeing consistently high levels of compliance.



NOTE: Prior to 2014, the indicator tracked proper waste treatment. The new measure, overall compliance, is a stricter standard indicating proper waste treatment facilities that are fully functioning.

Source: CRD Environmental Protection

### 2.1d Number of discharges with a high public health concern

#### What is being measured?

This indicator monitors the number of discharges with high public health concern.

#### Why is this indicator important?

The RGS aims to protect, conserve and manage ecosystem health.

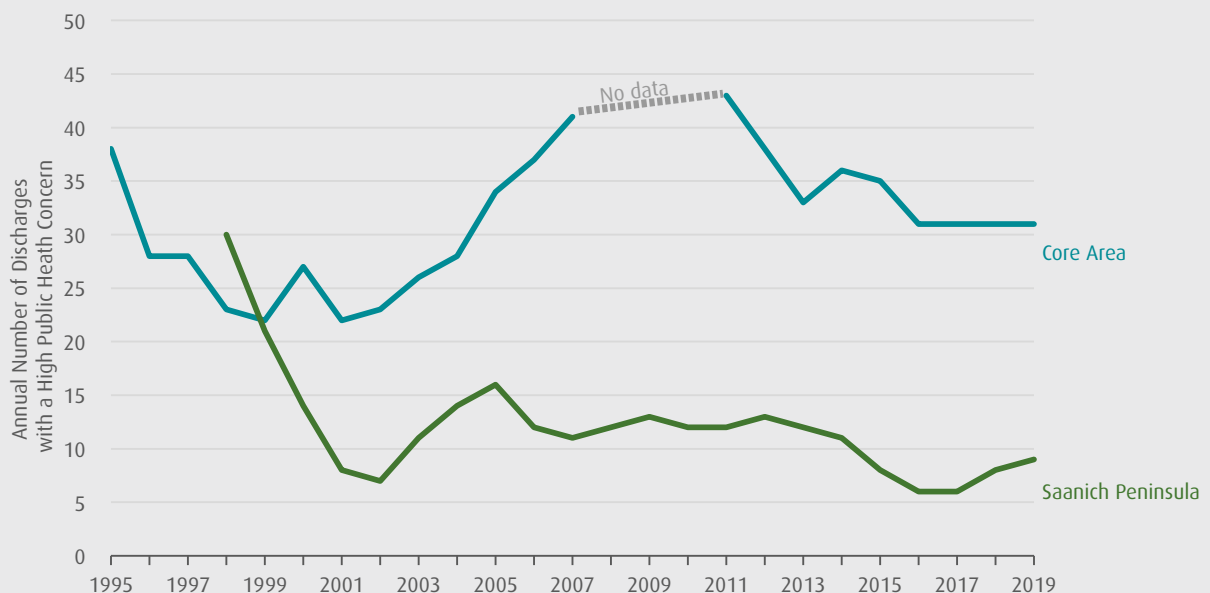
#### Target/Desired Trend

Reduce contaminants to fresh and marine water bodies.

#### How are we doing?

We are meeting the target.

The overall number of discharges with high public health concerns has decreased in the Core Area since 2012 and on the Saanich Peninsula since 2005. However, there were still 31 discharges in the Core Area and 9 in the Saanich Peninsula in 2019.



Source: CRD Environmental Protection

## 2.2a Waste stream: solid waste disposal

### What is being measured?

This indicator measures the per capita amount of solid waste disposed of annually from both residential and non-residential sources.

### Why is this indicator important?

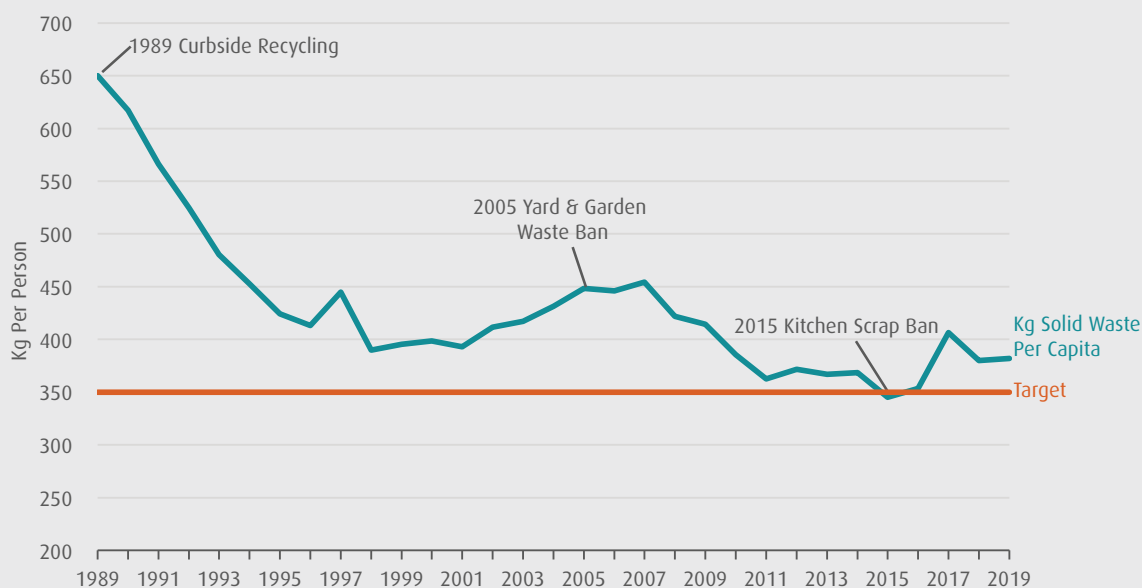
The RGS aims to minimize the consumption of renewable and non-renewable resources through efficient use and responsible management.

### Target/Desired Trend

There are no RGS targets for this indicator, however the BC Government has set a 2020 solid waste disposal target rate of 350 kg/person per year.

### How are we doing?

Currently, we are not meeting the target, however we are at less than the provincial average of 505 kg/person (2018), and the CRD has the second lowest kg/person in the province. Following years of decline, recent economic activity has resulted in a short-term increase in per capita solid waste disposal. Long-term trends show we are on our way to meeting our provincial targets.



Source: CRD Environmental Resource Management



## 2.2b Average water consumption

### What is being measured?

This indicator measures the average daily consumption of potable water per capita for residential uses.

### Why is this indicator important?

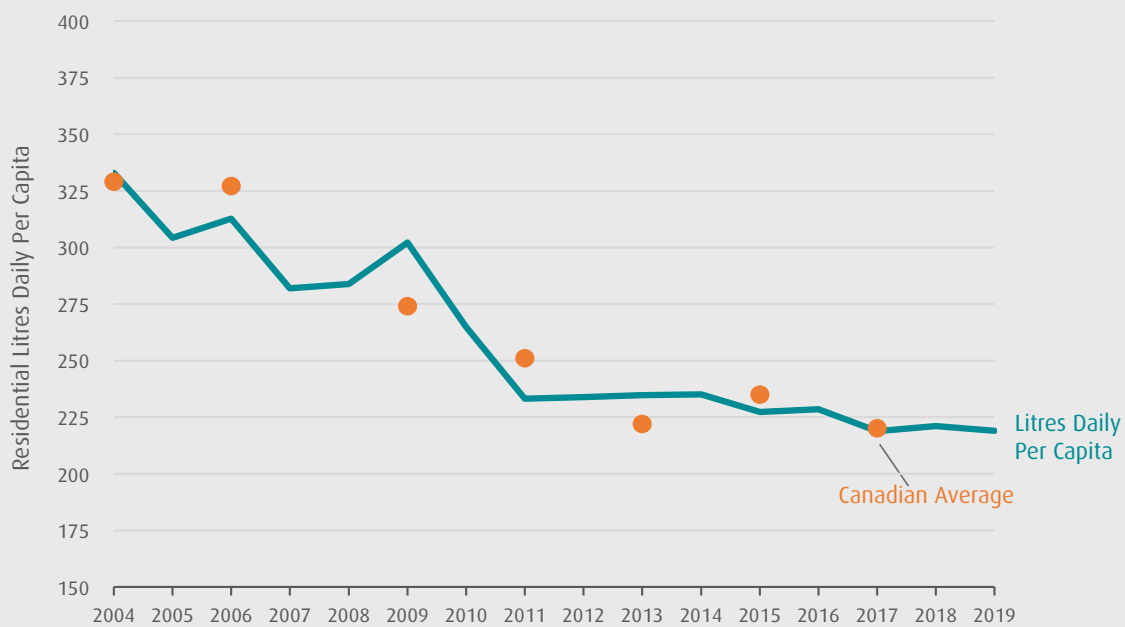
The RGS aims to minimize the consumption of renewable and non-renewable resources through efficient use and responsible management.

### Target/Desired Trend

Decrease per capita consumption of potable water.

### How are we doing?

Following a sizeable reduction in per capita water consumption in the region, rates have stabilized around the Canadian average.



Source: CRD Integrated Water Services, 2004-2009 Environment Canada Municipal Water and Wastewater Survey  
2011-2017 Statistics Canada Survey of Drinking Water Plants

**3.1a Create safe and complete communities****What is being measured?**

This indicator measures the number of people living in complete communities identified by municipalities in their Regional Context Statements.

**Why is this indicator important?**

The RGS supports the development of complete communities that allow residents to undertake many daily activities close to home.

**Target/Desired Trend**

Increase the number of people living in complete communities.

**How are we doing?**

*Data not yet available. Tracking will commence now that all municipalities have submitted Regional Context Statements.*



### 3.2a Reduce core housing need

#### What is being measured?

This indicator measures the percentage of households in core housing need.

A household in core housing need falls below at least one of the housing standards: adequacy (property does not require major repairs); affordability; or suitability (number of bedrooms match household size) *and* it would have to spend 30% or more of its total before-tax income to pay the median rent for housing that is acceptable (meets all three standards).

#### Why is this indicator important?

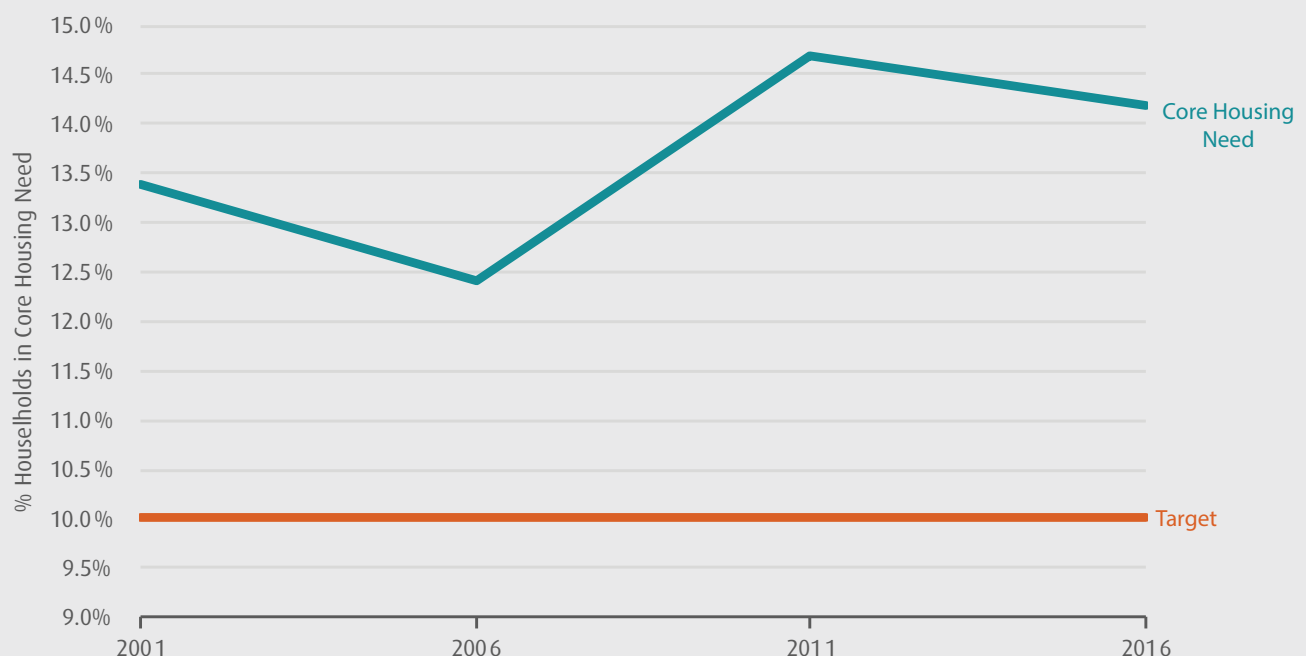
The RGS aims to improve housing affordability.

#### Target/Desired Trend

Reduce core housing need.

#### How are we doing?

Some progress has been made following a large spike in core housing need in 2011, however, we are far from our target.



Source: Statistics Canada, Census of Population, 2001, 2006 and 2016 and National Household Survey, 2011

### 3.2b Average rent for 2-bedroom apartment

#### What is being measured?

This indicator measures the average cost of 2-bedroom rental housing in the Victoria Census Metropolitan Area.

#### Why is this indicator important?

The RGS aims to improve housing affordability.

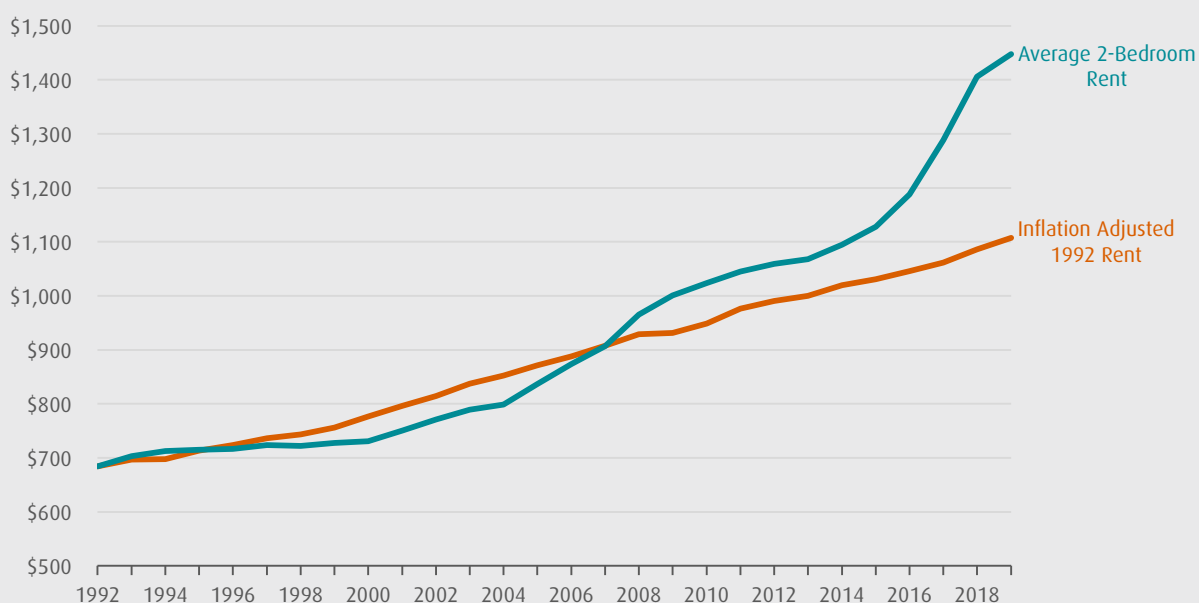
#### Target/Desired Trend

There is no target for the average cost of rental housing, however, cost increases at or below the level of inflation are preferable.

#### How are we doing?

We are currently not meeting this target.

The price of a 2-bedroom rental has outpaced inflation since 2008.



Source: CMHC Rental Market Survey

### 3.2c Vacancy rate by rental price quartiles

#### What is being measured?

This indicator measures the rental vacancy rate by rental price quartiles in the Victoria Census Metropolitan Area (CMA) over time.

#### Why is this indicator important?

The RGS aims to improve housing affordability in the region. The rental vacancy rate by rental price quartiles is an indicator of housing supply and housing affordability in the region. Recommended vacancy rates range between 2-4%.

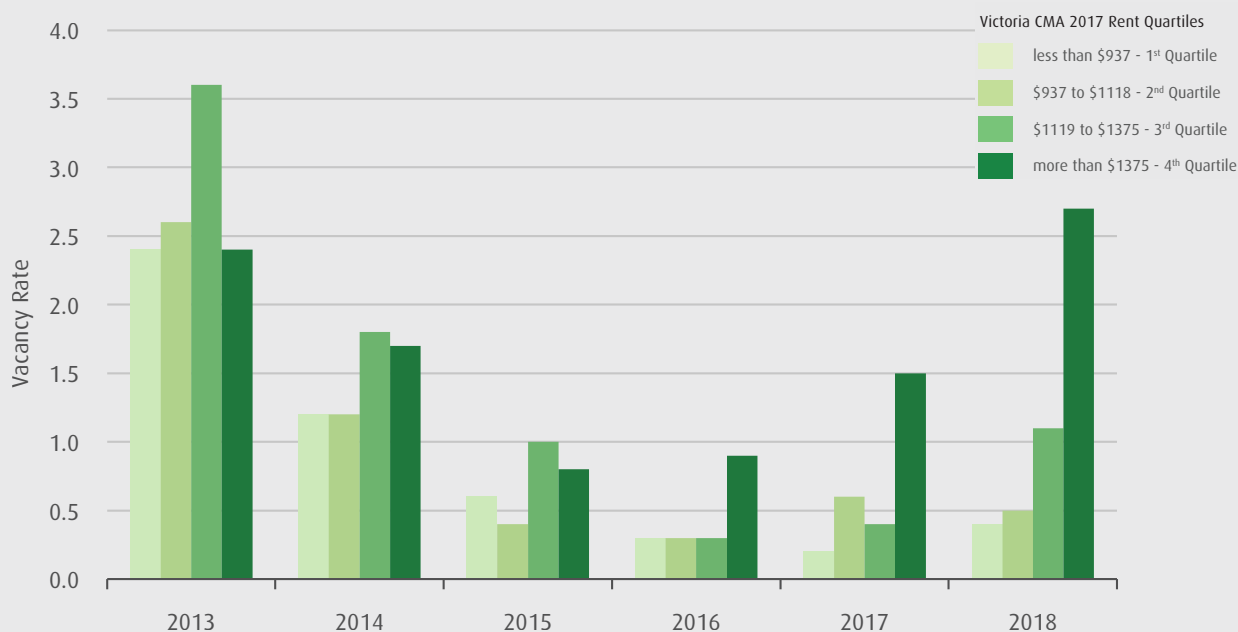
#### Target/Desired Trend

The RGS does not have a specific target for the vacancy rate by rental price quartiles.

Higher vacancy rates across all prices are preferable.

#### How are we doing?

We are currently not meeting this target. There has been a general trend of very low vacancy rates in the region, especially at the lower price quartiles. The most recent data from 2018 shows a marginal increase in vacancies, most significantly in units renting for more than \$1,119.



Source: CMHC Rental Market Survey

### 3.2d Increase supply of affordable housing

#### What is being measured?

This indicator measures the cumulative number of subsidized housing units in the Growth Management Planning Area (GMPA) that have a financial relationship with BC Housing. The units include emergency shelters, housing for the homeless, transitional and supported housing and assisted living, independent social housing and rent assistance in the private market.

#### Why is this indicator important?

The RGS aims to increase the supply of affordable housing and to reduce the number of people who are experiencing homelessness.

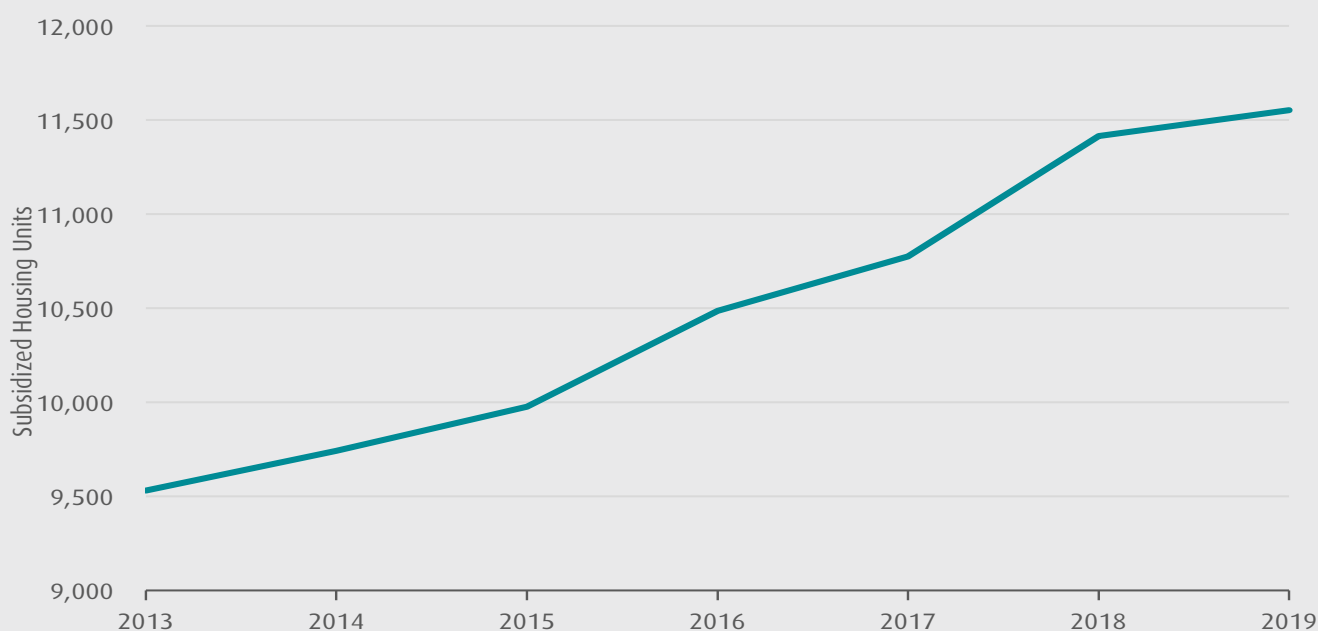
#### Target/Desired Trend

Increase the cumulative number of subsidized housing units that have a financial relationship with BC Housing.

#### How are we doing?

Progress is being made toward the target.

As of March 31, 2019 there were 11,551 subsidized housing units in the GMPA. The GMPA contains 10% of BC's subsidized housing units and 8% of BC's population.



Source: BC Housing's Research & Corporate Planning Department Unit Count Report March 2019

### 4.1a Percentage of total trips made by walking, cycling and transit in the Growth Management Planning Area (GMPA)

#### What is being measured?

This indicator measures the percentage of total trips made by cycling, walking and transit in the RGS GMPA.

#### Why is this indicator important?

The RGS aims to improve multi-modal connectivity and mobility. Mode share percentages provide the necessary data to track transportation choices over time.

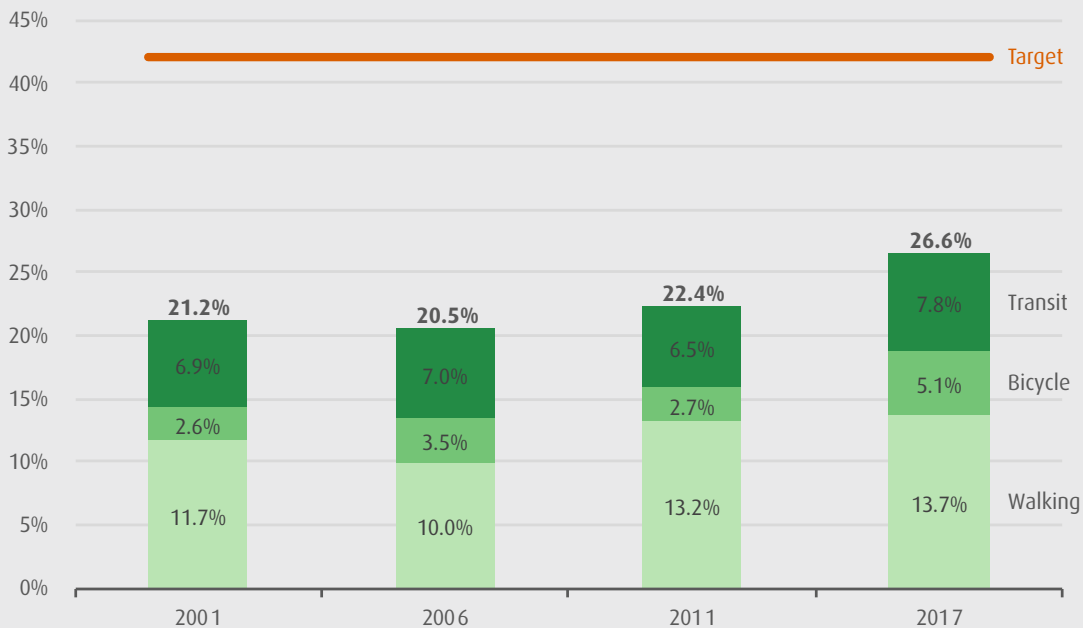
#### Target/Desired Trend

Achieve a transportation system that sees 42% of all trips made by walking, cycling and transit by 2038.

#### How are we doing?

Progress is being made toward this target.

The past three Origin Destination Surveys show steady increases in active transportation and transit mode share over the past decade.



Source: CRD Origin Destination Survey 2001, 2006, 2011, 2017

### 5.1a Jobs to population ratio

#### What is being measured?

This indicator measures the ratio of employment to population in each CRD sub-region.

#### Why is this indicator important?

The RGS aims to realize the region's economic potential. A balanced distribution of employment and jobs indicates economic opportunities spread across the region.

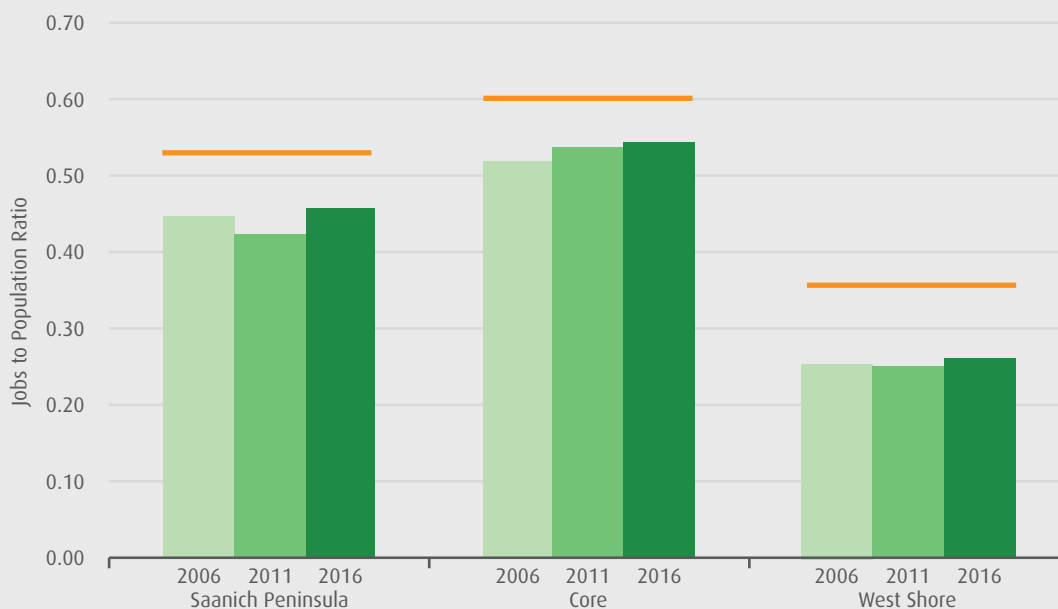
#### Target/Desired Trend

Achieve a jobs to population ratio of:

- 0.60 in the Core Area
- 0.53 in the Saanich Peninsula
- 0.36 in the West Shore

#### How are we doing?

All three sub-regions have made minor progress towards their targets.



Source: Statistics Canada, Census of population, 2006, 2011, 2016, Place of Residence and Place of Work Tables



### 6.1a Hectares of farmland in the Growth Management Planning Area (GMPA)

#### What is being measured?

This indicator measures hectares of farmland in the GMPA.

#### Why is this indicator important?

The RGS aims to foster a resilient food and agricultural system.

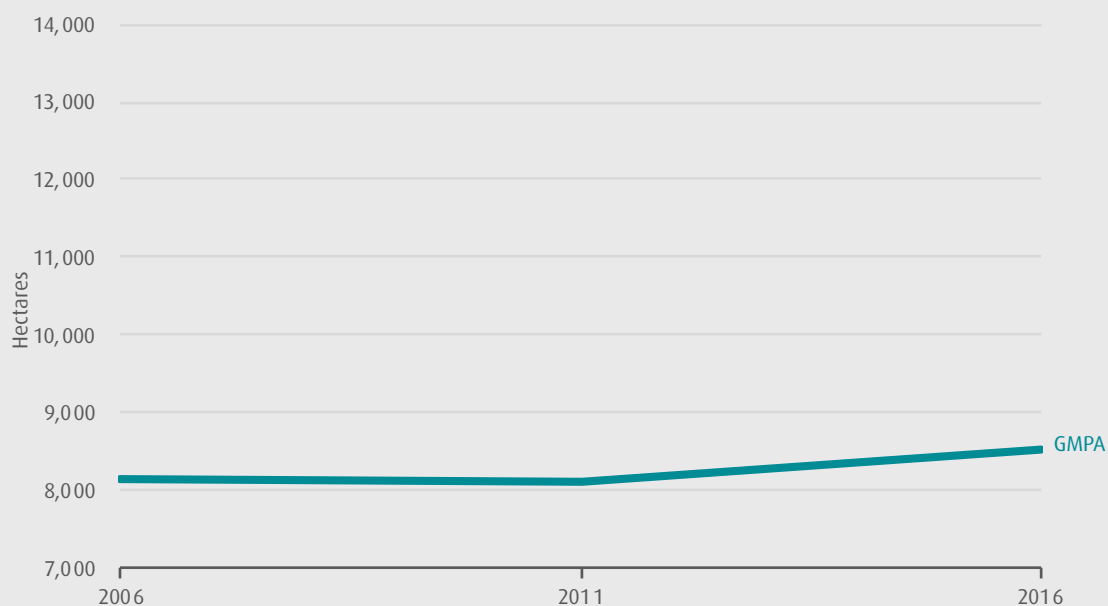
#### Target/Desired Trend

Increase the amount of land in food crop production by 5,000 ha by 2038.

#### How are we doing?

We are making some progress toward this target.

The most recent statistics from 2016 show there has been a slight increase in land being used for farming.



Source: Statistics Canada, custom tabulation of Census of Agriculture 2006, 2011, 2016

### 6.1b Average age of farmer

#### What is being measured?

This indicator measures the average age of farm operators.

#### Why is this indicator important?

The RGS aims to foster a resilient food and agricultural system. A higher average age of farmers represents a warning sign for the future of food production in the CRD.

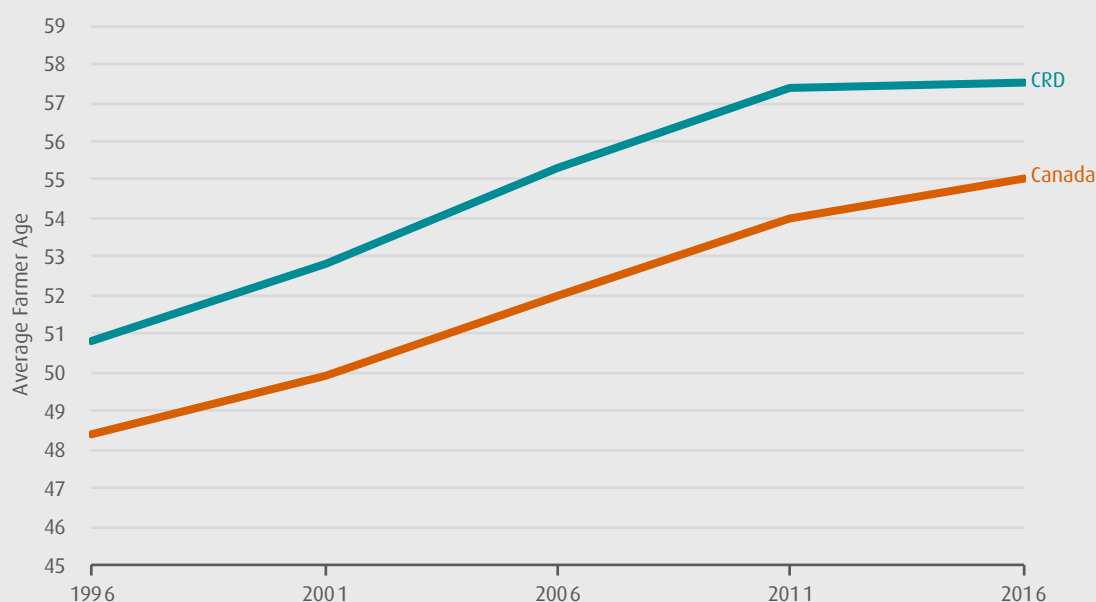
#### Target/Desired Trend

A lower average age of farmers is desirable.

#### How are we doing?

Progress toward this target remains static.

The average age of farmers in the CRD remains higher than the Canadian average but after years of steady increases, in recent years the average age has stabilized.



Source: Statistics Canada, Census of Agriculture 1996, 2001, 2006, 2011, 2016

### 7.1a Community Greenhouse Gas (GHG) emissions

#### What is being measured?

Community GHG emissions.

#### Why is this indicator important?

The RGS aims to significantly reduce community GHG emissions.

#### Target/Desired Trend

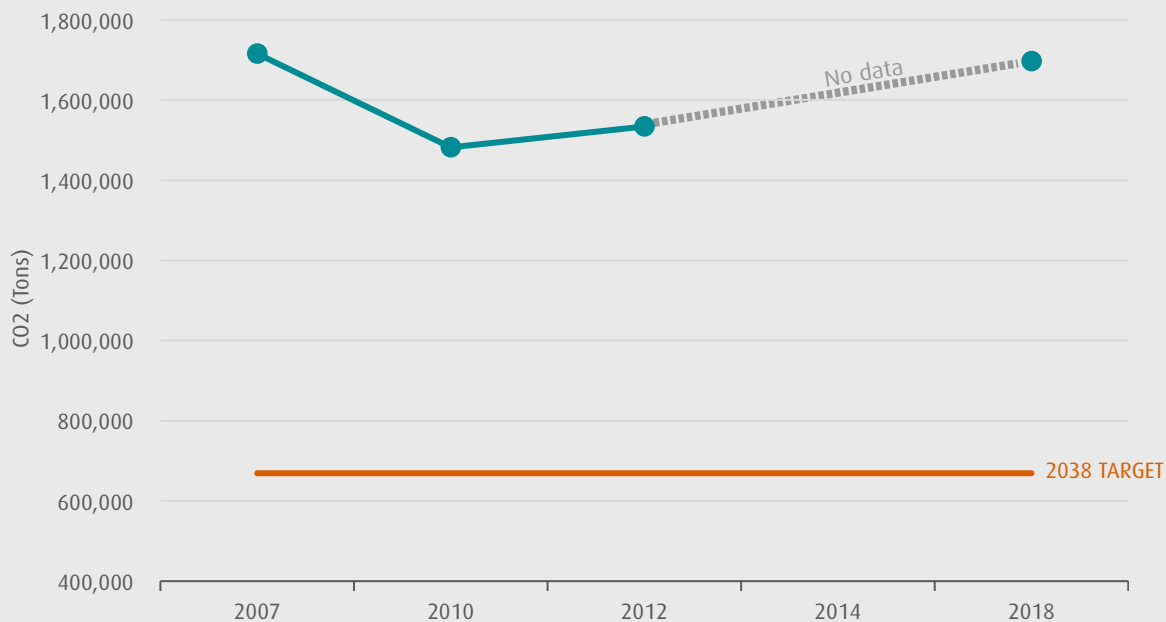
Decrease community GHG emissions by 33% from 2007 levels by 2020 and 61% by 2038.

#### How are we doing?

In 2018, the CRD's annual GHG emissions totaled 1,696,703 tCO<sub>2</sub>.

While this is a small decline of 1.1% from the 2007 base year GHG emissions, it is a decline of 14% on a per capita basis. Between 2007 and 2018, the CRD's population has grown 15% and thus this decline speaks to the efforts by the CRD and CRD local governments to reduce energy consumption and GHG emissions.

However, the current trend suggests that we will not meet the target by 2038 unless greater effort is taken.



Source: Capital Regional District 2018 GPC BASIC+ Community Greenhouse Gas (GHG) Emissions Inventory Report



**REPORT TO REGIONAL PARKS COMMITTEE  
MEETING OF WEDNESDAY, SEPTEMBER 30, 2020**

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**SUBJECT**     **2019-2022 Parks & Natural Resource Management Service Planning**

**ISSUE SUMMARY**

To provide the Regional Parks Committee with an overview of relevant initiatives undertaken by the Regional Parks division to deliver on approved Board Priorities and the Corporate Plan and to consider an increase to the Land Acquisition Fund (LAF).

**BACKGROUND**

The CRD Board completed its strategic planning early in 2019 and approved the CRD Board Strategic Priorities 2019-2022.

The four priorities are:

1. Community Wellbeing – Transportation & Housing;
2. Climate Action & Environmental Stewardship;
3. First Nations Reconciliation; and
4. Advocacy, Governance & Accountability

The priorities were confirmed at the annual check-in on May 13, 2020.

The 2019-2022 CRD Corporate Plan is aligned to the Board direction. It highlights the initiatives the CRD needs to deliver over the Board's four-year term to address the region's most important needs. The Corporate Plan identified 10 initiatives under the Parks & Natural Resource Management, which fall under the Regional Parks Committee's mandate.

Appendix B *Parks & Natural Resource Management - Initiatives Progress Report* provides insights into what has been delivered through the 12 delivery initiatives approved last year, for delivery in 2020. Two initiatives related to environmental protection regarding invasive species and environmental stewardship, are also included.

The Service Planning process gathered information necessary to assemble a provisional budget for Committee and Board review. The purpose of this report is to explain how the Regional Parks divisional program of work connects to the Board Priorities, Corporate Plan and provisional budget.

In addition to the above, the following motion was carried at the CRD Board meeting Wednesday, April 8, 2020:

*That staff report back on options to improve the capacity of the CRD Parks Acquisition Fund, for example, starting in 2021 by \$2.00 per year to reach \$40.00 from its current \$20.00.*

## **ALTERNATIVES**

### *Alternative 1*

The Regional Parks Committee recommends to the Capital Regional District Board:

1. That Appendix A Community Need Summary - Parks & Natural Resource Management be approved as presented and advanced to the October 28, 2020 provisional budget review process.
2. That the Land Acquisition Fund be maintained at the current rate of \$20 per average residential household assessment.

### *Alternative 2*

That Appendix A Community Need Summary - Parks & Natural Resource Management be referred back to staff for additional information.

## **IMPLICATIONS**

### *Financial Implications*

Initiatives identified in the Corporate Plan (including Board Priorities) cannot be undertaken without resourcing. The Board determines resourcing through its annual review and approval of financial plans. To support the Board's decision-making, staff, through the service planning process, provide recommendations on funding, timing and service levels.

Staff will explore a number of strategies to ensure sufficient funding is in place in future years to sustain the Regional Parks service. A revenue strategy is being prepared for fall 2020 that will identify opportunities to fund new assets. Future additional requisition increases may be also be required to fund significant new infrastructure or to address unforeseen failures of existing priority assets.

During this year's service planning process, staff have been mindful of the fiscal challenges facing the region in the months ahead. To that end, any budget increase or other impacts have been mitigated as much as possible.

Staff have not identified any new service delivery initiatives for 2021 that require additional funding. Priority initiatives from 2020, such as hiring a Recreation Specialist and a Cultural Interpreter, have been completed by repurposing existing vacancies. The Regional Parks Strategy update is also a priority and an options analysis is currently being done in-house and a staff report will be presented at a fall 2020 Regional Parks Committee meeting.

Since 2000, Regional Parks has acquired almost 4,800 hectares through the LAF. The fund was established in 2000 for a 10-year period (2000-2009) at a rate of \$10 per average residential household assessment. In 2010, the fund was extended for 10 years (2010-2019), starting at a rate of \$12 per average residential household assessment and increasing by \$2 per year to a maximum of \$20 in 2014, through to 2019. In 2019, the CRD Board renewed the LAF for another 10-year period (2020-2029) at the rate of \$20 per average residential household assessment.

For 2020, the LAF generated approximately \$3.9 million. The LAF increased from 3.75M in 2019 to \$3.86M in 2020, as a result of the addition of new households (property assessment folios) and will continue to grow with the creation of new households in the region.

If the LAF were increased in a similar phased implementation, each \$2 per average household increment would add approximately \$400,000 of available funds annually for land acquisition. A \$2 per average household increase represents a 2.5% increase to the total Regional Parks budget, and less than 0.15% increase to the CRD operating budget. By 2030, the LAF could generate in excess of \$8 million per year, resulting in a net 25% increase compared to the current Regional Parks budget or a 1.5% increase compared to the current CRD operating budget.

### *Service Delivery Implications*

The Community Need Summary provides an overview of all work that needs to be undertaken in order to meet regulatory requirements, satisfy Board direction and meet the needs of the communities we serve.

To date, increased attention has been placed on educating the public on social distancing, staff and public safety and additional signage to increase awareness of prevention activities. This, in some cases, has required limited access or alternative approaches to public access, customer service, public engagement and meetings. It is anticipated that further COVID-19 impacts to service delivery will be realized throughout 2021.

The acquisition of new land often requires additional funds for management, development and operations. These costs are not included in the estimated costs to acquire land identified in the Land Acquisition Strategy. The management and development cost for each acquisition are identified in a report to the Board when it considers acquisition of a specific parcel.

On average, the cost to manage one hectare of CRD regional parkland is \$957/year. Sustainable service delivery needs to consider and plan for the growth of the CRD regional parks system over time. For example, maximizing optimization strategies and revenue generation options would be the priority for long-term system sustainability, as opposed to additional LAF funding.

### *Social Implications*

Regional park visitation statistics indicate an upward growth trend in annual use. Higher visitor use puts utilization pressure on existing infrastructure, creating an increased need for ongoing maintenance or earlier replacement of assets.

Sustainable service delivery needs to consider and plan for the environmental and social carrying capacity of the parks and trails.

Regional parks and trails contribute significantly to the environmental, economic and social sustainability of the region and are a defining ingredient of the region's livability. However, given the social and economic uncertainty associated with the COVID-19 worldwide pandemic and other cost pressures emerging on requisitions across the Capital Regional District service areas at present, it is prudent to maintain the current LAF levy at the current level.

## **CONCLUSION**

Staff have been progressing initiatives and actions identified in the Corporate Plan, including Board Priorities. The Board determines resourcing through its annual review and approval of financial plans. As per previous years, to support the Board's decision-making, staff are providing recommendations on funding, timing and service levels through the service and financial planning processes.

## **RECOMMENDATION**

The Regional Parks Committee recommends to the Capital Regional District Board:

1. That Appendix A, Community Need Summary - Parks & Natural Resource Management be approved as presented and advanced to the October 28, 2020 provisional budget review process.
2. That the Land Acquisition Fund be maintained at the current rate of \$20 per average residential household assessment.

Submitted by:	Jeff Leahy, RPF, Senior Manager, Regional Parks
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

## **ATTACHMENTS**

Appendix A: Community Need Summary - Parks & Natural Resource Management  
Appendix B: Parks & Natural Resource Management – Initiatives Progress Report



# Community Need

2021 Summary



## Parks & Natural Resources Management

### Strategy

#### Target Outcome

We envision additional land acquisitions and increased access to parks and recreational trails

#### Strategic Context

##### Strategies

- [Regional Climate Action Strategy](#)
- [Regional Parks Strategic Plan](#)
- [Land Acquisition Strategy](#)
- [Special Task Force on First Nations Relations](#)
- [Statement of Reconciliation](#)

##### Trends, risks and issues

- Protection of important ecosystems, species and cultural values - With increasing visitor use, protecting park values while offering recreational opportunities is a major challenge. Compliance education is one of the best tools to alleviate these pressures.
- Sustainable Funding into the Future – Resourcing levels may have been adequate in the past, but now, with an expanding land base and higher levels of use, resources for the construction of new assets are not sufficient. A revenue strategy is being prepared for Fall of 2020 that will look at a fair and equitable system of administering Regional Parks and Trails user fees.
- Helping Understand and Fight Climate Change – The CRD continues to work with researchers and academics to collaborate on climate change research in our parks and protected areas.
- Planning for Regional Parks – With new Regional Parks opening and with the public and First Nations increasing their participation in the park planning process, it is more important than ever to ensure preparation of management plans is timely and effective. Management Plans are essential for the protection of values and the management of activities.
- Aging infrastructure continues to be a concern as some critical assets are reaching the end of their serviceable lives and require increased effort and money to renew or replace them.
- Connecting with Nature – Outdoor space and activities play an important role in the lives of residents of the capital region especially during COVID times.
- COVID 19 – 2020 has been typified by the efforts required to manage against the spread of Covid-19.

# Community Need



## 2021 Summary

From remote meetings, to changes in public consultation, from frequency of facility cleaning to the sheer number of people seeking social distancing opportunities in the parks, 2020 has been particularly challenging for staff to find new ways of protecting themselves and others as they manage the public expectation to have outdoor areas in which to recreate.

- Managing for Growth - Population growth and aging of the region's current population will have profound implications for the Regional Parks and Trails as well as their assets.
- Embracing First Nations Relationships through Cultural Connections - Respect for First Nations traditions, culture and communities will be an important part of CRD Regional Parks' future. That future includes more First Nations communities showcasing their heritage and cultural practices as well as offering opportunities for park visitors to learn about indigenous perspectives.

## Services

Core Services Levels	
Service	Levels
<b>Planning, Resource Management &amp; Development</b> Contribute to effective and efficient decision making through plan and policy development, natural and cultural resource management, capital development planning, project management and geographic mapping; development of the Strategic Plan and park management plans. Provide oversight of the land acquisition program. Guide the implementation of scientific and technical work related to environmental management.	<ul style="list-style-type: none"><li>• Manage two Management Plan processes with at least one approval annually; direct and conduct engagement with, on average, three First Nations per plan.</li><li>• Evaluate 20 candidate properties for land acquisition and complete one acquisition per year. Annual budget of \$3.7m. Develop activity reports and strategy documents.</li><li>• Support planning and provide project management where needed for capital facility projects, annual expenditures to \$2m.</li><li>• Manage two contracts per year for technical planning studies or services.</li><li>• Undertake five conservation projects per year and maintain existing formal partnership agreements.</li><li>• Manage asset inventory data and coordinate renewal forecasting asset management and capital project planning</li><li>• Provide spatial and GIS data analysis and collection for a range of purposes, including existing and new digital data sharing</li></ul>

# Community Need



## 2021 Summary

	<p>agreements and up to 200 public and internal cartography products for 34 parks and 100s of sign posts, park facilities, trails, etc.</p> <ul style="list-style-type: none"> <li>• Maintain and develop asset management data.</li> <li>• Respond to around 70 development referrals per year.</li> </ul>
<p><b>Regional Parks Operations</b></p> <p>Responsible for the daily operations and maintenance of regional parks, attending to nature centres, campgrounds, washrooms, trails, beaches, picnic areas, parking lots, bridges, kiosks and signs; implementing restoration projects and overseeing park safety and security, including bylaw enforcement and fire management.</p>	<ul style="list-style-type: none"> <li>• Manage and maintain 400km of park trails, 55 washrooms and 132 garbage containers (most serviced daily)</li> <li>• Undertake 20+ infrastructure and facility replacement and repair projects annually</li> <li>• Every year, prepare or update a Facilities Plan and 33 Operating Plans</li> <li>• Manage three campgrounds; meet target of 65% weekend occupancy rate at Sooke Potholes and Island View Beach (from May to September)</li> <li>• Conduct 5,000 compliance and enforcement patrol hours annually (CRD bylaw enforcement officers and CRD park rangers)</li> </ul>
<p><b>Visitor Services</b></p> <p>Connect people with the natural environment, conduct social science research and planning, provide park volunteer opportunities for residents, cultivate community partnerships and provide administrative services; provide web-based park information and publications to the public, and issue park use permits for group picnic shelters and special events</p>	<ul style="list-style-type: none"> <li>• 580 volunteers delivering 5,700 hours of engagement, parks and trails condition checks, and invasive species removal</li> <li>• Deliver 120 educational programs, 130 nature outings and 10 outreach events annually</li> <li>• Process 240 special events permits annually</li> <li>• Conduct up to eight Visitor Use Surveys annually</li> </ul> <p><i>(subject to COVID-19 health protocols)</i></p>
<p><b>Regional Trails</b></p> <p>Manage Regional Trails system to protect and operate three regional trails that provide a transportation and recreation function and that provide non-motorized trails for active transportation and recreation to connect municipalities, electoral areas and the region with adjacent jurisdictions.</p>	<ul style="list-style-type: none"> <li>• Operate, manage and maintain 95km of multi-use regional trails</li> <li>• Conduct 250km of boom flail vegetation removal annually</li> </ul>

# Community Need



## 2021 Summary

### Support Services

The core services listed rely on the support of several corporate and support divisions to effectively operate on a daily basis. These services are reported on in the Accountability Community Need Summary.

- Services include Human Resources & Corporate Safety, Corporate Communications, Asset Management, Financial Services, Information Technology & GIS, Information Services, Legislative Services, Facility Management, Fleet Management, Legal Services, Risk & Insurance and Real Estate Services.

## Initiatives

Ref	Initiative	Description	Year(s)	Status	2021 impacts
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Regional Parks did not submit IBCs for 2021

### Initiative approved in prior years which have now been delivered or absorbed in Core Services:

- 6a-8 – Capital Reserve and addition of 5 FTEs\*
- 6b-4 – Enhance Parks Operations\*
- 6e-1 – Land Acquisition Fund Renewal
- 6f-1 – Dog Management Policy Framework

## Business Model

### Funding

#### Who contributes

- All 13 Municipalities and 3 Electoral Areas
- Support Services: varies per service

#### Funding Sources

- Requisitions, grants, donations and non-tax revenue

## Reporting Structure

- [Regional Parks Committee](#)

Community Need Key Performance Indicator (KPI)			
Definition and Source	2019 Actual	2020 Forecast	2021 Target
<b>Metric 1: 100% of critical infrastructure in the Regional Parks and Trails system in good or better condition</b> Percentage of critical infrastructure in the Regional Parks and Trails system that is in good or very good condition; data from asset management sustainable report cards.	75%	85%	90%
<b>Metric 2: Maintain a visitor experience satisfaction rate of 85% or better for Regional Parks and Trails</b> Percentage of visitors that described their overall experience with Regional Parks and Trails as 'quite satisfactory' or 'very satisfactory'; data from CRD Regional Parks Resident Survey 2017 (collected every 5 years)	85%*	85%*	85%*
<b>Metric 3: A 25% contribution of land acquisition funding from community partners</b> Percentage of the Land Acquisition Fund contributions annually that comes from community partners; data from Land Acquisition Updates	0%	40%	25%
<b>Metric 4: Maintain a volunteer base of greater than 500 people</b> Number of active volunteers in Regional Parks and Trails; data from volunteer registry	526	350	500
Discussion			
<p><b>Link to Target Outcome</b></p> <ul style="list-style-type: none"> <li>The Land Acquisition Fund provides funding for the purchase of land for regional parks and trails. Tracking community contributions helps demonstrate the sufficient availability of funding and community support for the strategy that has been put in place.</li> <li>Measuring the level of asset renewal investment and condition of parks and recreation trail infrastructure is a good indicator of how well-maintained, and therefore accessible and inclusive, the infrastructure is. This is supplemented by information about visitor satisfaction to ensure that expectations are met and that CRD actions and initiatives are facilitating a good experience for visitors.</li> </ul> <p><b>Discussion</b></p> <ul style="list-style-type: none"> <li><b>Metric 1:</b> Ensuring critical regional park assets are in good or better condition supports active living and recreation in a safe, inclusive outdoor environment. During COVID times increased access to a safe and inclusive regional parks and trails system is essential to personal health and wellness.</li> </ul>			

Community Need Key Performance Indicator (KPI)			
Definition and Source	2019 Actual	2020 Forecast	2021 Target
<ul style="list-style-type: none"> <li> <b>Metric 2:</b> Maintaining visitor experience satisfaction suggests that CRD presence and actions are facilitating more than 7.5M visits where people connect with and embrace the regional parks and trails system. This in turn will generate the support for additional land acquisitions. </li> <li> <b>Metric 3:</b> Since 2000, with the support of partners, the regional parks system has grown by almost 4,800 hectares through a number of land acquisitions valued at \$62.6M. The CRD partners in land acquisitions have contributed almost \$16.8M, or 27% of the overall cost of the purchases. Going forward, the CRD will seek an average of 25% contribution of land acquisition funding from community partners. The data recorded shows the following: <ul style="list-style-type: none"> <li>2019: \$6.5M invested in acquisitions with no partnership/community contribution</li> <li>2020: forecasted invested of \$1.1M for three potential acquisitions, with \$775,000 in partnership/community expenditure</li> </ul> </li> <li> <b>Metric 4:</b> Maintain a volunteer base of greater than 500 people. The number of volunteers in 2020 is lower due to COVID-19 and the cessation of volunteer activities. We expect that the volunteer base will return to pre-COVID-19 levels and we will continue to monitor the volunteer numbers in relation to the ongoing pandemic. </li> </ul>			

# Community Need

## Initiative Progress Report



### Parks & Natural Resource Management

Initiatives approved in 2020 Budget		
Ref	Initiative	Progress to date
6a-1	Regional Parks Strategy Update	<b>Progressing</b> - Regional Parks Committee Staff Report scheduled for early 2021 to present options relating to the Regional Parks Strategy update. Options analysis being done in-house.
6a-5	Recreational Initiatives – Recreational Specialist	<b>Completed</b> - Vacant Regional Parks position repurposed and Outdoor Recreation Specialist hired.
6a-8	Capital Reserve*	<b>Completed</b> - \$925,000 incorporated into regional parks capital reserve fund to help address critical assets that require renewal or replacement.
6b-1	Invasive Species Management	<b>Ongoing - Part of core services</b>
6b-2	Environmental Stewardship Programs	<b>Ongoing - Part of core service</b> – Expanded focus on community environmental stewardship.
6b-4	Enhance Parks Operations*	<b>Completed</b> – Two full-time Park Rangers and three full-time Park Maintenance Workers hired. Vehicles and supplies were acquired for the new positions.
6b-5	Mountain Bike Policy*	<b>Progressing</b> – Mountain Bike Committee in place and meetings are scheduled. Report out to the Parks Committee expected early 2021
6d-1	Engage with First Nations First Nations Liaison position	<b>Completed</b> – Vacant Regional Parks Interpretive position repurposed to a First Nations Cultural Interpreter position.
6e-1	Land Acquisition Fund Renewal	<b>Completed</b> – Approved by CRD Board for another 10 years
6f-1	Dog Management Policy Framework	<b>Completed</b> – Framework approved by the CRD Board. Completed in-house and funded through core budget.
7a-10	Jordan River Dam Breach Siren	<b>Completed</b>
13a-1.2	Recreational Programming and Rates – Regional Parks	<b>Completed</b>

\* New - Initiatives not in the 2019-2022 Corporate Plan

**REPORT TO REGIONAL PARKS COMMITTEE  
MEETING OF WEDNESDAY, OCTOBER 28, 2020**

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**SUBJECT**     **2020 CRD Regional Parks Compliance and Enforcement Program**

**ISSUE SUMMARY**

To update the Regional Parks Committee on the Capital Regional District (CRD) Regional Parks Compliance and Enforcement Program from January to August 2020.

**BACKGROUND**

The CRD Regional Parks Compliance and Enforcement Program has evolved over the past several years. With the continued growth of the regional parks land base and the increasing number of visitors, balancing conservation and multiple recreational interests will continue to be a key focus. A Compliance and Enforcement Program, with a focus on compliance education, is one of the best tools to help alleviate the pressures on regional parks and trails. In 2020, the CRD restructured its Regional Parks Compliance and Enforcement Program by changing its park technician position to a senior ranger and tasking the senior ranger with oversight of the program. In addition to hiring the senior ranger position, the CRD approved the hiring of two new full-time park rangers, bringing the full-time park ranger allocation to 3.5 positions; four auxiliary rangers were also hired for peak season coverage.

Park rangers are the frontline ambassadors in regional parks and on regional trails. They support a broad range of events, activities and issues, such as:

- serving as friendly ambassadors for CRD regional parks and trails, building relationships and assisting park visitors
- deterring negative activities through a uniformed, diplomatic and authoritative presence
- promoting voluntary compliance by educating the public about park regulations, such as smoking, dogs on-leash and, most recently, social distancing associated with COVID-19
- supporting and monitoring permitted events
- working with bylaw enforcement, police, fire and rescue service, BC Ambulance and other departments and agencies on issues found in regional parks and on regional trails
- dealing with homelessness as it impacts regional parks and connecting individuals with support services
- participating in facility and trail maintenance
- conducting compliance and enforcement patrols
- undertaking routine inspections in response to complaints or incidents
- investigating alleged non-compliance with legislation when enforcement action is being contemplated
- providing wildfire support outside of municipal fire districts in the form of wildfire mop-up duties
- educating park visitors on First Nations traditions and culture

The CRD also uses a combination of park rangers and bylaw enforcement officers to provide a regular presence in parks and on regional trails. The Compliance and Enforcement Program supports CRD Board priorities and CRD Regional Parks strategic goals around climate action, environmental stewardship and protecting the natural environment by ensuring park visitors use



regional parks and trails in a way that is safe and consistent with the principles driving those strategic directions.

Conducting compliance and enforcement patrols in regional parks reduces the risks of major incidents, as park rangers and bylaw officers address hazardous behaviors (e.g., cliff jumping, drinking, etc.) before accidents can happen—this reduces the burden on other municipal response agencies. Appendix A provides a summary of compliance and enforcement actions in 2020 within regional parks and trails.

During the core 2020 season (May to August), bylaw officers spent over 670 hours patrolling Thetis Lake Regional Park (60% of their overall patrols), with park rangers spending an additional 166 hours in that park. Municipal resources also provide valuable services in their capacity as first responders and are, on occasion, requested to attend regional parks to deal with matters beyond the capacity of CRD staff. For example, in 2020, Thetis Lake Regional Park, which sees an annual visitation level of 500,000, was identified as an area of concern by View Royal Fire Department due to the volume of call outs. For the past two summers, View Royal Fire Department was called out to Thetis Lake Regional Park 14 times (2019 – 5 times and 2020 – 9 times); medical assist (5), rescue (4), fire (3), assist police (1), and diesel spill in parking lot (1).

In 2020, COVID-19 created increased pressure on the program, as park rangers and bylaw officers were out in the parks and on regional trails educating visitors on social distancing. Overall, visitation to regional parks (excluding regional trails) has increased approximately 22% for the period January to August 2020 compared to the same period in 2019. This is likely the result of a number of other park agencies being closed during COVID-19, along with people recreating locally.

## **CONCLUSION**

In 2020, the CRD restructured its Regional Parks Compliance and Enforcement Program by changing its park technician position to a senior ranger position and tasking the senior ranger with oversight of the program. To date in 2020, regional parks experienced a 22% increase in visits. The CRD Regional Parks Compliance and Enforcement Program will continue to focus on compliance education as one of the best tools to help alleviate the pressures and challenges the system faces.

## **RECOMMENDATION**

The Regional Parks Committee recommends to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Jeff Leahy, RPF, Senior Manager, Regional Parks
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

## **ATTACHMENT**

Appendix A: 2020 Regional Parks Compliance and Enforcement Summary

## 2020 REGIONAL PARKS COMPLIANCE AND ENFORCEMENT SUMMARY

Table 1: 2019-2020 Enforcement Action Summary

	2019 (Jan-Dec)		2020 (Jan-Aug)		2020 YTD
Actions	Park Rangers	Bylaw Officers	Park Rangers	Bylaw Officers	Totals
Patrol hours	2,524 hours	1,228 hours	1,687 hours	1,425 hours	3,112 hours
Non-violation (public relations) engagements	5,505	N/A	6,221	N/A	6,221+
Voluntary compliance	2,571	N/A	2,831	N/A	2,831+
Written warnings	237	566	192	489	681
Evictions	65	N/A	59	N/A	59
MTI's issued	33	89	29	63	92

Note: The focus for bylaw officers is to manage the significant increase in peak seasonal visitation in the parks, ensuring compliance with specific regulations (e.g., possession or consumption of alcohol, dogs on-beach, illegal parking, and failure to obey signs with respect to high risk activities, such as cliff jumping, etc.) and, as such, they don't track non-violations and voluntary compliance interactions. Park rangers interact with the public on a broader approach with the goal of generating voluntary compliance and, as such, track a broader range of public interactions.

Table 2: 2020 Municipal Ticket Informations (MTIs) Issued (January to August)

2020 MTIs Issued (Jan-Aug)				
Section	Offence	MTI	Park Rangers	Bylaw Officers
10(1)	Vehicle off-road	1	1	
10(3)	Illegal parking	36	3	33
4(4)	Possession or consumption of liquor	24	9	15
7(10)	No cycling	1		1
6(4)	No camping	6	6	
4(3)	Failure to obey sign or posted notice	18	6	12
7(5)	Illegal fire	2	2	
8(1)(D)	Dog feces not removed	1	1	
11(1)(B)	Commercial activity without a permit	1	1	
8(1)(A)	Dog not under control	1		1
6(1)(B)	Cause disturbance between 10pm and 7am	1		1
	<b>Total</b>	<b>92</b>	<b>29</b>	<b>63</b>

**REPORT TO REGIONAL WATER SUPPLY COMMISSION  
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

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**SUBJECT**     **Regional Water Supply Strategic Plan – 2020 Progress Report**

**ISSUE SUMMARY**

This report is an assessment of progress made on the Regional Water Supply Strategic Plan.

**BACKGROUND**

The Strategic Plan (the Plan) for Regional Water Supply was renewed in 2017 following public and Water Advisory Committee engagement and approved by the Regional Water Supply Commission (Commission) and the Capital Regional District (CRD) Board in the Fall of 2017. The current plan sets out a 30 year planning horizon to 2050. The Plan centers around three overarching commitments, with strategic priorities and actions to ensure the commitments are upheld over the planning period.

The strategic priorities are based on the need to mitigate or adapt to changing factors affecting the service, while ensuring achievement of long term commitments remains the first priority. The actions focus on tactics including initiatives, projects or studies intended to inform or meet near term objectives and support the strategic priorities. It is expected that the strategic priorities would be reviewed and updated every 5 to 10 years and the actions would be planned, budgeted, and implemented (subject to Commission and Board approval) over the five years following approval of the plan (2018 – 2022).

This report provides a ‘mid-term’ progress report. Good progress is being made on the Plan’s strategic priorities and associated actions, which are summarized in Appendix A. Staff continue to define scope and budget for upcoming actions and initiatives, which are reflected in the annual service plan and budget. Staff also regularly adjust CRD work effort and capacity to achieve progress on the Plan while balancing day-to-day system operations and service delivery and the CRD’s water supply commitments. The Plan’s direction and implementation continue to align with the CRD Board’s Community Need Summary Report which is part of the overall corporate and financial planning process.

It is anticipated that a review of the 2023 – 2027 strategic priorities and actions will be conducted in the Fall of 2022.

**ALTERNATIVES**

*Alternative 1*

That the Regional Water Supply Commission recommends to the Capital Regional District Board:

That the Regional Water Supply Strategic Plan – 2020 Progress Report be received for information and that the strategic priorities and actions planned in 2021-2022 that deliver on the Plan be confirmed.

*Alternative 2*

That the Regional Water Supply Commission recommends to the Capital Regional District Board:

That the Regional Water Supply Strategic Plan – 2020 Progress Report be received for information, and that the strategic priorities and actions planned in 2021-2022 that deliver on the Plan be referred back to staff to be amended as directed by the Commission.

**IMPLICATIONS**

Any significant change in strategic direction will have to be addressed and reflected through the 2021-2025 service and financial planning process, but minor adjustments to actions and initiatives will be managed operationally within the delegated authority of staff, provided they do not have material impacts on service plans and are within the overall approved budget. Likewise, staff can modify the scope of and/or accelerate/decelerate effort on in-stream or planned actions in response to changing conditions, provided they are within the approved budget, as has been the case with the COVID-19 pandemic impacts.

**CONCLUSION**

In 2017, the CRD set out a 30 year plan of renewed commitments, strategic priorities and actions in a *Strategic Plan for Regional Water Supply*. After three years of working under this Plan, good progress has been made on many of the actions and strategic priorities. Staff continue to define scope and budget for upcoming actions and initiatives, which are for the most part, reflected in the annual and five year financial plans.

**RECOMMENDATION**

That the Regional Water Supply Commission recommends to the Capital Regional District Board:

That the Regional Water Supply Strategic Plan – 2020 Progress Report be received for information and that the strategic priorities and actions planned in 2021-2022 that deliver on the Plan be confirmed.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT**

Appendix A: Regional Water Supply Strategic Plan Progress Report Dashboard

# Regional Water Supply Strategic Plan Progress Report

Update No. 1, September 2020

<div> <div></div> On track                     <div></div> Future actions(s) planned                     <div></div> Delayed                     <div></div> No planned action(s)                 </div>					
Commitment	Strategic Priority	Actions	Annual Status (by year)	Progress Made	Progress Pending
Provide high quality, safe drinking water	Manage and protect the Greater Victoria Water Supply Area (GVWSA).	<ul style="list-style-type: none"> <li>Continue to actively protect the GVWSA and water supply infrastructure from unauthorized activities and seek opportunities to acquire ownership and control of the remaining catchment lands and critical adjacent lands to act as a buffer.</li> </ul>	<div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div>	<ul style="list-style-type: none"> <li>Development and adoption of land acquisition priorities for the GVWSA.</li> <li>Remediation of the Weeks Lake gravel pit that was contaminated with lead and hydrocarbons.</li> <li>Training and designation of additional watershed security officers.</li> </ul>	<ul style="list-style-type: none"> <li>Completion of a GVWSA biosecurity strategy for the GVWSA.</li> </ul>
		<ul style="list-style-type: none"> <li>Reduce risk to water supply and ecosystems from contaminants and invasive plants, animals and pathogens by completing a biosecurity risk assessment and implementing biosecurity mitigation measures.</li> </ul>	<div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div>		
		<ul style="list-style-type: none"> <li>Implement the GVWSA climate change adaptation initiatives to reduce the impact of the potential types, magnitude and rate of climate change on GVWSA ecosystems, water quality and infrastructure.</li> </ul>	<div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div>	<ul style="list-style-type: none"> <li>Implementation of climate change actions related to increasing the capacity of stream crossing structures (29 stream crossings upgraded) and upgrade of weather and hydrology monitoring in the GVWSA.</li> <li>Precipitation and Flood studies completed relative to dam safety/infrastructure.</li> <li>Initiation of a collaborative research project with the University of Victoria and Natural Resources Canada to model potential changes to the forests in the GVWSA with climate change and the implications of these changes for wildfire risk.</li> </ul>	

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		<ul style="list-style-type: none"> <li>Assess the need for more active forest management to protect and enhance forest health and resilience.</li> <li>Reduce risk of landscape level wildfire by designing and implementing forest fuel management treatments.</li> </ul>	<div>20182019202020212022</div> <div>20182019202020212022</div>	<ul style="list-style-type: none"> <li>Aerial and airphoto mapping and ground investigation to monitor forest insect and diseases present in the GVWSA.</li> <li>Completion of burn probability mapping for the GVWSA to guide forest fuel management.</li> <li>Completion of forest fuel management treatments by thinning, pruning and removing, chipping or burning woody debris (2 major fuel treatment corridors completed).</li> </ul>	<ul style="list-style-type: none"> <li>Planning for a prescribed burning trial in the Leech WSA.</li> </ul>
	<b>Maintain a multi-barrier approach to drinking water quality protection</b>	<ul style="list-style-type: none"> <li>Continually evaluate the effectiveness of the water treatment processes.</li> <li>Use the Regional Water Supply Service drinking water safety plan in operational and capital project decision making</li> <li>Maintain multiple accreditations to ensure highest quality drinking water testing.</li> </ul>	<div>20182019202020212022</div> <div>20182019202020212022</div> <div>20182019202020212022</div>	<ul style="list-style-type: none"> <li>The water quality monitoring program for the Greater Victoria Drinking Water System uses a combination of online analyzers and daily grab samples to ensure that water treatment is effective and all water quality parameters are in compliance with the regulatory requirements.</li> <li>The Greater Victoria Drinking Water Safety Plan, a comprehensive water quality risk registry, was completed in 2018, and is annually updated to inform operational and capital upgrades.</li> <li>ISO 17025 accreditation (first certified 2017 to ISO 17025:2015, recertified in 2019 to new standard ISO 17025:2017).</li> <li>Reassessed by Canadian Association for Laboratory Accreditation (CALA) every 2 years to maintain accreditation status. Requires</li> </ul>	

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		<ul style="list-style-type: none"> <li>Continue to develop and refine the Utility Operator Training Program and ensure adherence to Environmental Operator Certification Program requirements.</li> <li>Identify and implement progressive and innovative training and development opportunities with respect to utility operations and management for departmental staff.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<p>successful participation in a semi-annual proficiency testing program.</p> <ul style="list-style-type: none"> <li>Certified by Provincial Health Officer (PHO) for water microbiology. Maintenance of approval contingent on thrice yearly successful participation in proficiency testing program and onsite audit every 3 years.</li> <li>Environmental Operator Certification Program (EOCP) Corporate Recognition Award for IWS internal operator program</li> <li>Continued Utility Operator exposure to all utility disciplines, for well-rounded development.</li> <li>Ensure compliance and progression through EOCP certifications as a requirement of the Utility Operator Program.</li> <li>Utilize professional training consultants to expand knowledge of all working environments.</li> </ul>	
	<p><b>Maintain a risk register for the Regional Water Supply System that identifies potential risks to water quality, water supply and water transmission and provide mitigation and adaptation measures.</b></p>	<ul style="list-style-type: none"> <li>Regularly review Regional Water System hazards, risks and vulnerabilities and update the risk register.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<ul style="list-style-type: none"> <li>A Corporate Risk Register has been established by the CRD, managed by the Manager Risk and Insurance which includes Regional Water System risks.</li> <li>A Drinking Water Safety Plan was developed that lists and categorizes risks to the Regional Water Supply and tracks actions to reduce or mitigate those risks.</li> <li>A HRVA study was completed March 2017 and the recommendations are to be included in the RWS Risk Register</li> </ul>	<ul style="list-style-type: none"> <li>The RWS Capital Plan includes a Risk and Resilience study and a Seismic Assessment of Critical Facilities.</li> </ul>

		<ul style="list-style-type: none"><li>Continue the emphasis on wildfire prevention, early detection and suppression capability, preparedness, forest fuel management and post-fire rehabilitation planning to reduce and mitigate the risk of a large-scale wildfire affecting the water supply area and source water quality.</li></ul>	<div><div>2018</div><div>2019</div><div>2020</div><div>2021</div><div>2022</div></div>	<ul style="list-style-type: none"><li>Updated Cross Connection Control and water conservation bylaws to align with building and plumbing codes and operational requirements including the uni-directional flushing program.</li><li>Phase One of the of the PH and Corrosion study for the Regional Water Supply system complete.</li></ul>	<ul style="list-style-type: none"><li>Phase Two of the study will involve tap sampling to determine lead concentrations and sources.</li></ul>
		<ul style="list-style-type: none"><li>Continue to monitor and evaluate the implications of the reliance on unfiltered source water and the absence of a filtration step in the water treatment process.</li></ul>	<div><div>2018</div><div>2019</div><div>2020</div><div>2021</div><div>2022</div></div>	<ul style="list-style-type: none"><li>Wildfire prevention and suppression remains a priority for the GVWSA, an infrared camera to assist with monitoring for wildfire starts has been installed at a high point in the GVWSA, along with a new FTE request for wildfire/security to ensure patrols can be fully staffed.</li></ul>	<ul style="list-style-type: none"><li>Completion of a study on post-wildfire hazards and mitigation options in the Sooke WSA.</li></ul>
		<ul style="list-style-type: none"><li>Conduct specific seismic risk evaluations of critical assets.</li></ul>	<div><div>2018</div><div>2019</div><div>2020</div><div>2021</div><div>2022</div></div>	<ul style="list-style-type: none"><li>A specific Dam Safety Risk Register has been created and includes recommendations from various Dam Safety studies and Dam Safety Reviews.</li><li>The Sooke, Saddle and Deception Dams Emergency Procedures document has been updated along with dam breach scenario inundation mapping.</li></ul>	<ul style="list-style-type: none"><li>This will be considered in the context of the Water Supply Master Plan Update recommendations (2021) and consultation with Island Health.</li></ul>



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Provide an adequate, long-term supply of drinking water	Plan and prepare for future water supply needs to meet demand considering impacts of climate change, population growth, and per-capita demand rates	<ul style="list-style-type: none"> <li>Evaluate climate change impacts and risks on water supply and incorporate mitigation and adaptation recommendations in operating and capital plans.</li> </ul>		<ul style="list-style-type: none"> <li>Completion of planning and progress on the implementation of a hydrology monitoring system in the Leech WSA.</li> <li>Upgrade of hydrology monitoring stations in the Sooke and Goldstream WSAs.</li> <li>Study on the effects of climate change on Sooke Lake Reservoir completed.</li> <li>Installation of long term forest monitoring plots completed.</li> <li>Flood forecasting system to guide operating decisions regarding reservoir operating rules.</li> <li>Consolidated and formalized the Fisheries Water Release Program for the Sooke, Charters and Goldstream Rivers.</li> </ul>	<ul style="list-style-type: none"> <li>Goldstream Water Supply Area Capacity Study</li> <li>Sooke Lake Reservoir – North Basin Water Quality Feasibility Study</li> </ul>
		<ul style="list-style-type: none"> <li>Update service population and service population growth rate forecasts with current census data, considering municipal Official Community Plan land use and population directions, to estimate growth related water demand.</li> </ul>		<ul style="list-style-type: none"> <li>The Capital Plan includes the Master Plan Update that will address the current and future water demand issues.</li> </ul>	
		<ul style="list-style-type: none"> <li>Establish long-term per capita demand rate projections and Demand Management Program objectives to achieve rates and determine annual water demand by sector.</li> </ul>		<ul style="list-style-type: none"> <li>Agricultural Water Demand Model and Land Use Inventory completed.</li> </ul>	<ul style="list-style-type: none"> <li>A Comprehensive “By Sector” water demand report will be presented in 2021.</li> </ul>
		<ul style="list-style-type: none"> <li>Undertake regular monitoring and assessment of the physical, chemical, and biological parameters of the Leech Water Supply Area (WSA) source water and determine a plan to address potential water quality, ecological and ecosystem implications at Sooke Lake Reservoir resulting from diversion of Leech WSA source water (Leech River water) to</li> </ul>		<ul style="list-style-type: none"> <li>Completion of planning and implementation of a hydrology monitoring system in the Leech WSA.</li> </ul>	

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		<p>Sooke Lake Reservoir (ie. combining source waters).</p> <ul style="list-style-type: none"> <li>Develop a plan to undertake more 'intensive' monitoring of Leech River water quality to inform treatability recommendations and long term treatment strategy.</li> <li>Determine conceptual 'hard' capital infrastructure plan to design and construct the necessary infrastructure to divert Leech WSA flows to Sooke Lake Reservoir.</li> <li>Conduct a feasibility study to explore the design and construction of supply and transmission infrastructure at Sooke Lake Reservoir to provide increased resiliency, including consideration of a deep northern intake and a secondary transmission pipe between the reservoir and the treatment facilities.</li> <li>Undertake biannual Supply System hydraulic modelling to confirm system capacity.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<ul style="list-style-type: none"> <li>Water quality sampling and testing in the Leech WSA began in 2020 and will continue through 2022.</li> <li>The Capital Plan includes the Master Plan Update that will address the concept of diverting the Leech watershed water to the system.</li> <li>The Capital Plan includes the Master Plan Update that will address the supply and transmission infrastructure resiliency and long term capacity and treatment requirements.</li> </ul>	
	<p><b>Develop a higher level of public understanding of the drinking water supply system and value of water through education and engagement</b></p>	<ul style="list-style-type: none"> <li>Continue to improve Regional Water Supply service and system information available to the public through a variety of media streams, to raise awareness around specific topics including water supply and conservation, and supply infrastructure investment.</li> <li>Continue to promote the value of the drinking water resource through Water Supply Area public and school tours and other outreach.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<ul style="list-style-type: none"> <li>Increased use of CRD social media streams (Twitter and Facebook)</li> <li>Continue to prepare the Daily, Weekly and Monthly Water Watch and include information on the CRD webpage.</li> <li>Expansion of public and school tours of the GVWSA facilitated by a 0.5 FTE approved in 2019 (exception: no tours in 2020 due to COVID-19).</li> <li>The Water Advisory Committee (WAC) has formally considered and provided advice on:</li> </ul>	<ul style="list-style-type: none"> <li>The Capital Plan includes the Hydraulic Capacity study of the transmission system.</li> </ul>

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		<ul style="list-style-type: none"> <li>Continue to have two-way dialogue with the Water Advisory Committee regarding water supply matters.</li> <li>Explore opportunities for mutually beneficial collaborative partnerships to carry out research and monitoring initiatives in the water supply area and across the system.</li> </ul>	<div>2018 2019 2020 2021 2022</div> <div>2018 2019 2020 2021 2022</div>	<ul style="list-style-type: none"> <li>Post Disaster Water Supply and Distribution Plan</li> <li>Water Supply Area Land Acquisition Study</li> <li>Impacts of Malahat Detour Route Proposal</li> <li>Health Canada change in Lead Guidelines for Drinking Water and CRD Actions.</li> <li>Successful research partnerships with University of Victoria, NSERC forWater network, Canadian Forest Service in the areas of: wildfire fuel and burn modelling; paleo-ecological record of large wildfires and forest changes; hydrology of the Leech WSA.</li> </ul>	
Provide a reliable and efficient drinking water transmission system	Maintain a capital planning process and appropriate investment in water supply infrastructure to ensure reliable system performance	<ul style="list-style-type: none"> <li>Complete a short term (annual and 5-year), medium term (5-10 year), long term (10-20 year) and long range (20-50 year) asset management plan – informed by asset condition and remaining service life assessment, water operation and maintenance history, water audit, changing regulatory requirements, Hazard, Risk and Vulnerability Assessment (HRVA) recommendations, and system capacity requirements.</li> </ul>	<div>2018 2019 2020 2021 2022</div>	<ul style="list-style-type: none"> <li>Completed Regional Water Supply Water Audit</li> <li>The Capital Plan includes the Asset Management Planning, which will address many topics including Level-of-Service, asset inventory, valuation, condition assessment, utilization, failure modes analysis, asset life expectancy, actions to extend useful life, business risk exposure, consequences of failure, O&amp;M strategies, utility protection, etc.</li> <li>2018-2020 Capital Investment value has been \$15,000,000, focused on Infrastructure Renewal and Resiliency including: <ul style="list-style-type: none"> <li>Goldstream Water Treatment Plant Upgrades</li> <li>Lubbe Dam No. 4 Replacement</li> </ul> </li> </ul>	

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		<ul style="list-style-type: none"> <li>Explore Regional Water Development Cost Charges to fund future growth related supply system infrastructure improvements.</li> <li>In collaboration with municipal and First Nations water purveyors, establish water supply service agreements.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<ul style="list-style-type: none"> <li>Sooke Lake Reservoir Intake Screen Replacement</li> <li>Draft Water Supply Service Agreements with some of the First Nations in the region and water rate discussion continue.</li> </ul>	<ul style="list-style-type: none"> <li>The Capital Plan includes the study of creating a Development Cost Charge Program.</li> </ul>
	<p><b>Continually review cost effectiveness of service respecting operations and maintenance and capital investment decisions.</b></p>	<ul style="list-style-type: none"> <li>Continue to review reactive, preventive and predictive operations and maintenance history and confirm operation and maintenance service levels for the Regional Water Supply Service that consider best practices and reliability centered maintenance approach.</li> <li>Consider life cycle costs with new infrastructure design and asset replacement.</li> <li>In asset replacement decisions, balance maximizing infrastructure service life with infrastructure reliability.</li> <li>Optimize capital investment taking into consideration priority, annual and long term budget and water rate impacts and resource availability to deliver the projects.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div> <div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<ul style="list-style-type: none"> <li>Completed a Water Operations Review project in 2018 with a focus of reviewing the operational and maintenance teams for cost effectiveness and efficiency in service delivery. Have completed several phases of implementation and optimization based on the outcomes of the 2018 Review project.</li> <li>Ongoing as part of annual Capital Plan development.</li> <li>Ongoing as part of Capital Plan; Asset Management Planning and Master Planning.</li> <li>Ongoing as part of Capital Plan and output of the Corporate and RWS Risk Registers.</li> </ul>	<ul style="list-style-type: none"> <li>Continual improvement in terms of operational and maintenance optimization is required with a focused review over the next 5 years and the development of a sustainable approach going forward.</li> <li>Agricultural water rate review and options study.</li> </ul>
	<p><b>Develop and manage emergency bulk drinking water supply systems for Greater Victoria</b></p>	<ul style="list-style-type: none"> <li>Establish emergency and post-disaster water supply protocols and obtain necessary supplies, materials and equipment to implement protocols. Establish water purveyor support roles and responsibilities in emergency water supply and distribution.</li> </ul>	<div> <div>2018</div> <div>2019</div> <div>2020</div> <div>2021</div> <div>2022</div> </div>	<ul style="list-style-type: none"> <li>Resilient Hydrants: For use as a water distribution point during an emergency. Currently five hydrants are in place throughout the region and an additional five more will be installed by the end of 2020. These hydrants are a point of connection</li> </ul>	<ul style="list-style-type: none"> <li>Construction of a critical equipment storage building. This structure will be used to store critical equipment and spare parts required for an emergency response related to the water supply systems.</li> </ul>

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	<b>Continue to focus on retaining and recruiting experienced and professional employees responsible for the Regional Water Supply System engineering, system operation and maintenance, and management of the water supply area.</b>	<ul style="list-style-type: none"><li>• Develop a succession plan to ensure key positions are backfilled by experienced and knowledgeable employees, and that system knowledge is preserved.</li><li>• In alignment with CRD organizational development initiatives, provide learning and development opportunities for employees.</li></ul>	<div>20182019202020212022</div>					<ul style="list-style-type: none"><li>• Staff hiring is ongoing to replace experienced staff who retire. Cross over training is required for each departing staff member.</li><li>• Efforts continue to be made to ensure knowledge is carried forward in procedures and practices such as standard operating procedures, emergency response procedures and system drawings to reduce the risk when staff retire.</li><li>• Staff are required and fully supported to obtain continuing education credits so as to maintain their professional status whether it be as an engineer, technician, operator or other.</li></ul>
			<div>20182019202020212022</div>					

**REPORT TO REGIONAL WATER SUPPLY COMMISSION  
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

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**SUBJECT     Regional Water Supply Service - 2021 Operating and Capital Budget**

**ISSUE SUMMARY**

To provide an overview of the draft 2021 Regional Water Supply Service budget, highlighting the changes from the 2020 budget and the proposed 2021 budget figures. The report generally follows the information provided in the attached draft budget document (Appendix A).

**BACKGROUND**

The draft 2021 Regional Water Supply Service budget has been prepared for the Regional Water Supply Commission's (Commission) consideration. The Commission will make budget recommendations to the Capital Regional District (CRD) Board in order to establish the wholesale water rate and approve the rate by year end through adopting a rate bylaw. As in previous years, the draft 2021 Regional Water Supply Service budget has been prepared considering the CRD Board's 2021 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential synergies or efficiencies between departments and services, reviewing service levels and adjustments related to regulatory compliance, undertaking infrastructure improvements and upgrades to maintain service levels within the region including incremental ongoing operational and maintenance requirements. The following sets out the key components of the budget.

**2020 Year End Financial Projections**

Year end revenue and expenditure projections have been established and estimated variances are summarized as follows:

Budget Item	Variance (\$)	Variance (%)
Supply System operating expenditures	-\$719,914	-4.9%
Agricultural water rate funding	\$0	0%
Capital fund transfers	\$130,239	1.4%
Debt servicing - principal and interest expenditures	\$0	0%
Revenue	-\$589,675	-1.7%

The lower than budgeted operating expenditures were primarily due to labour costs associated with delays/deferrals of filling new staff positions and backfilling vacant staff positions during the early phase of the pandemic. The revenue shortfall is explained later in the report.

## **2021 Budget**

### **Rate Base**

The rate base for 2021 has increased by \$1,585,880 from 2020. This increase relates to physical plant additions, including the final capitalization of the Japan Gulch (Goldstream) Treatment Plant upgrades and the Lubbe Dam improvements. The changes in physical plant and work in progress are listed on page 4 of the budget document and are used to project the 2020 year end total physical plant value and determine the 2021 rate base.

### **Revenue Requirement**

The revenue requirement for 2021 has increased by \$862,755. This is resulting from an increase in operational expenses of \$786,079, an increase in depreciation expenses of \$450,776, net of expired depreciation on existing assets, offset by a decrease in the return on the rate base of \$374,100. Although the asset base continues to grow, the decrease in the return on the rate base for 2021 occurs due to lower debt levels in the service.

### **Operating Budget**

The 2021 operating budget reflects an inflationary increase in non-discretionary expenses such as negotiated wage/salary increases, departmental support service allocation increases, and other operating expense adjustments such as chemical and electricity costs. The net core 2021 operating budget increase is \$122,083, plus additional budget requests for one-time and on-going expenditures in the amounts of \$275,000 and \$289,000 respectively. These requests are summarized as follows:

- \$25,000 one-time funding (year four of five) to support the on-going National Science and Engineering Research Council (NSERC) watershed research
- \$150,000 one-time funding for field sampling/consulting services to establish baseline water quality and hydrology data in the Leech River
- \$100,000 one-time funding for the agricultural water rate review and options study
- \$55,000 labour budget increase for 0.4 FTE (full time equivalent staff position) – water sampling technician to support Leech River and supplementary North Basin to establish baseline water quality data
- \$190,000 labour budget increase for 1.0 FTE – water operator position, necessary to support increasing confined space entry and dam safety requirements
- \$44,000 labour budget increase for 1.0 FTE – (net budget adjustment after a \$81,000 decrease in auxiliary labour budget) watershed security position, necessary to provide regular scheduled wildfire and security patrols on alternate shift (including weekends and holidays), replacing auxiliary patrol shifts

The budgets for drinking water quality sampling, testing and reporting, as well as the cross connection control and demand management programs for the Regional Water Supply Service are included in the overall operating budget.

Operating budget forecasts for 2022-2025 have been presented for information.



### Capital Budget

There are a number of capital projects planned for 2021 with a total value of \$22,748,350, including \$11,861,350 in carry forward projects, most of which are in-stream, multi-year projects such as the Butchart Dam No. 5 project with a \$2,900,000 budget carried forward from 2020, which has been delayed due to the delay in the completion of the Lubbe Dam No. 4 project. Approximately \$4,000,000 in dam safety related capital work is on-going including instrumentation integration and upgrades. There is also \$1,570,000 in projects cost-shared with the Juan de Fuca Water Distribution Service (pages 10-54 of the budget document). The major projects in 2021 aside from the carry forward projects include replacing the gatehouse at the Goldstream entrance to the water supply area, bulk supply meter replacements at the Alderley, Holland and Maplewood chambers, and catchment land acquisition.

A five year capital plan has been presented for information. The value of the five-year (2021-2025) capital plan is currently \$124,828,350, plus \$3,860,000 in projects cost-shared with the Juan de Fuca Water Distribution Service. A significant portion of the capital plan budget is attributed to the project to replace vulnerable sections of the No. 4 Transmission Main. As the Commission is aware, an application has been submitted under Infrastructure Canada's Disaster Mitigation and Adaptation Fund, which if successful, would provide approximately \$23,600,000 (Regional Water Supply Service share) in grant funding towards this project; the application also included Saanich Peninsula Water Service and First Nations funding components. If the project proceeds, financing will be required in order to fund the service's funding share and a new loan authorization would be required in 2021. If unsuccessful, staff will be seeking a capital plan amendment in 2021 and continue with a phased approach to the No. 4 Transmission Main replacement, beginning with the Goldstream Avenue segment.

Other major projects over the next five years include replacement of segments of the No. 3 Transmission Main, construction of a new watershed field operations centre, replacement of the ultraviolet disinfection units at the Japan Gulch (Goldstream) facility, and the potential need for a pH adjustment facility.

### Capital and Debt Expenditures

The 2021 capital expenditures will be partially funded through a transfer to the water capital fund budgeted at \$9,297,180, with the balance funded existing cash reserves and borrowed funds and new debt. See pages 9-10 of the budget document for the funding source summary. 2021 debt expenditures for existing and new debt servicing are budgeted to be \$8,333,667. Debt servicing expenditures will decrease by \$129,537 over 2020.

The last loan that could be borrowed under the current loan authorization was undertaken in 2018; the loan authorization is now expired. The loan authorization was for \$12,500,000, but only \$9,500,000 was borrowed as the balance was funded through budgeted capital contributions and water sales revenue surpluses over the past five years. The upcoming debt retirements on existing borrowings are summarized as follows:

Loan Number	Retirement Date	Loan Amount
LA3419-103	April 2023	\$7,000,000
LA3451-103	April 2023	\$60,000,000
LA3419-104	November 2023	\$8,000,000
LA3419-105	June 2024	\$9,000,000
LA3419-106	October 2024	\$1,000,000
LA3661-112	October 2025	\$6,500,000
LA3661-116	April 2026	\$1,500,000
LA3661-118	April 2027	\$4,500,000
LA3661-124	April 2028	\$1,700,000
LA3902-131	April 2030	\$3,000,000
LA3902-137	April 2031	\$1,500,000
LA3902-145	April 2033	\$5,000,000

A new loan authorization in the amount of \$46,000,000 is proposed to allow continued partial funding of the five year capital plan. The loan authorization bylaw and approval process is addressed under a separate staff report. The long term debt obligations are summarized on the attached graphs (Appendix B).

The recently incurred debt and proposed future debt will change the funding make-up of the capital plan. When assessing key financial health indicators, the service maintains an affordable level of debt over the next five years. The percentage of revenue dedicated to debt costs is forecast to be between 14-24%, which is less than an annual benchmark rate of 25%, albeit close to the upper recommended limit until the Leech Water Supply Area land acquisition debt is retired in 2023. The debt funding for capital investment is around 50% for two of the next five years. This allows the potential to leverage grant funding to address Transmission Main replacements as noted previously, while three other larger loans are retired between 2023-2025. A summary indicator table is provided below:

Year	% Revenue for Debt	Capital Funded by Debt
2021	23.9%	7.9%
2022	24.3%	52.5%
2023	24.2%	49.4%
2024	13.5%	34.5%
2025	15.4%	0.0%

A \$297,540 transfer to the vehicle/equipment replacement fund is planned in 2021. The reserve fund balance is estimated at \$2,049,161 at year end 2020 (See reserve schedule – Page 55 of the budget document).

#### Agricultural Water Rate Funding

The total budget for the agricultural water rate funding has been increased by \$100,000 to \$1,600,000. The 2021 agricultural water rate has been maintained at the 2020 rate of \$0.2105

per cubic metre. The Regional Water Supply agricultural water rate budget funds the difference between the municipal retail water rate and the CRD agricultural water rate. As directed by the Commission, an agricultural water rate review and options study is planned for 2021. A summary of the agricultural water volumes and agricultural water rate payments for 2011 to 2019 is attached for information (Appendix C).

### Water Demand

Although total water demand across the Region has generally continued to increase year over year recently due to the continued rate of development and growth, the total 2020 year end demand is projected to be 47,100,000 cubic metres which is 900,000 cubic metres under budget.

The cooler than normal temperatures and above average precipitation in June (140% of the monthly average precipitation), did significantly affect total daily demand in June which can often be a high demand month. In addition, staff have analyzed the impact of the COVID-19 pandemic on local water demand, particularly across the residential and business sectors. Overall, the Regional Water Supply System experienced a net reduction of 6% in total water demand over the March – August 2020 period compared to the previous three year average over the same period. This equates to a reduction in consumption of 624,000 cubic metres of water across the Region for these six months alone. At the Regional level, May demand was down 12.9% and June demand was down 17.7% compared to 2019 demand. These reductions are primarily tied to school, office, restaurant and hotel closures, and virtually no tourism. In summary, the pandemic health directives and public response have had a negative impact on water demand across all water service areas.

The recommended 2021 water rate has been calculated using a budget demand of 48,000,000 cubic metres (Page 6 of the budget document), which is the same volume used in the 2020 budget.

### Proposed 2021 Wholesale Water Rate

The recommended wholesale water rate has taken into consideration the revenue required to meet operating and capital expenditures, including debt obligations and the budget demand volume established for 2021. The proposed 2021 wholesale rate is \$0.7148 per cubic metre, a 2.58% increase over the 2020 rate. The increase in annual bulk water cost for the average household using 235 cubic metres per year would be \$4.23 (Page 7 of the budget document).

### Wholesale Water Rate History and Projection

The wholesale water rate history and projection is attached (Appendix D). The rates may be adjusted in the future to reflect actual revenue and expenditure circumstances and water demand volumes.

## **ALTERNATIVES**

### *Alternative 1*

That the Regional Water Supply Commission recommends that the Capital Regional District Board:

1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2021 wholesale water rate of \$0.7148 per cubic metre;
3. Approve the 2021 agricultural water rate of \$0.2105 per cubic metre;
4. Direct staff to balance the 2020 actual revenue and expense on the transfer to the water capital fund; and
5. Direct staff to amend the Water Rates Bylaw accordingly.

#### *Alternative 2*

That the Regional Water Supply Commission recommends that the Capital Regional District Board:

1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan as amended;
2. Approve the 2021 wholesale water rate as amended (amended rate);
3. Approve the 2021 agricultural water rate of \$0.2105 per cubic metre;
4. Direct staff to balance the 2020 actual revenue and expense on the transfer to the water capital fund; and
5. Direct staff to amend the Water Rates Bylaw accordingly.

#### **IMPLICATIONS**

If the proposed budget is amended, the implications could vary depending on how the budget is amended and the impact on specific initiatives (i.e. new initiatives), on-going operations, or the capital work program. 'One-time' reductions in reserve fund contributions could be considered by the Commission to help mitigate the budget and rate increases, but additional capital financing could result in the longer term. Staff have not recommended amending the agricultural water rate based on previous Commission direction and the rate review planned for 2021. Any changes in the recommended wholesale water rate would have to be incorporated in the Juan de Fuca Water Distribution Service and Saanich Peninsula Water Service budgets and rates; both service Commissions have approved their proposed 2021 budgets and rates.

#### **CONCLUSION**

The draft 2021 Regional Water Supply Service budget has been prepared for the Regional Water Supply Commission's consideration. The budget has been prepared considering the Commission and CRD Board's 2021 service planning and financial expectations. A proposed increase in operating and capital funding combined with a conservative revenue budget, is resulting in a recommended wholesale water rate of \$0.7148, a 2.58% increase over the 2020 rate.

#### **RECOMMENDATION**

That the Regional Water Supply Commission recommends that the Capital Regional District Board:

1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2021 wholesale water rate of \$0.7148 per cubic metre;
3. Approve the 2021 agricultural water rate of \$0.2105 per cubic metre;
4. Direct staff to balance the 2020 actual revenue and expense on the transfer to the water capital fund; and
5. Direct staff to amend the Water Rates Bylaw accordingly.

Submitted by:	Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

## **ATTACHMENTS**

Appendix A: 2021 Regional Water Supply Service Budget

Appendix B: Long Term Debt Obligations Summary

Appendix C: Agricultural Water Volumes and Rate Payments for 2011 – 2019

Appendix D: Wholesale Water Rate History and Projection

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **Regional Water Supply**

#### **COMMISSION REVIEW**

OCTOBER 2020

**Service:** 2.670 Regional Water Supply

**Commission:** Regional Water Supply

#### DEFINITION:

To finance, install, operate and maintain a water supply local service in the Capital Regional District, as per the Water Supply Local Service Establishment Bylaw No. 2537.

The establishment and operation of a Regional Water Supply Commission is done by Bylaw No. 2539.

#### SERVICE DESCRIPTION:

Regional Water Supply is responsible for the water supply, treatment and transmission system for the Greater Victoria region, providing wholesale water to municipalities that operate municipal distribution systems. The service administration and operation is provided by the Integrated Water Services Department.

#### PARTICIPATION:

City of Victoria  
District of Oak Bay  
District of Saanich  
Township of Esquimalt  
District of Central Saanich

Town of Sidney  
District of North Saanich  
Town of View Royal  
City of Colwood  
City of Langford

District of Metchosin  
District of Sooke  
Juan de Fuca Electoral Area  
District of Highlands

#### MAXIMUM LEVY:

No stated limit in establishment bylaw and no ability to requisition.

#### MAXIMUM CAPITAL DEBT:

Authorized:	\$137,700,000	Pre - (Consolidated MFA Loan Authorizations - Regional Water Supply Water Works Facilities)
Borrowed:	\$91,400,000	Pre - (Consolidated amounts borrowed - Regional Water Supply Water Works Facilities)
Expired:	\$46,300,000	

Authorized:	\$60,000,000	(MFA Bylaw No. 3451 - Regional Water Supply Land Acquisition)
Borrowed:	\$60,000,000	(MFA Bylaw No. 3451 - Regional Water Supply Land Acquisition)

Authorized:	\$12,500,000	2014 - (MFA Bylaw No. 3902 - Regional Water Supply Water Works Facilities)
Borrowed:	\$9,500,000	
Expired:	\$3,000,000	

#### FUNDING:

Costs are recovered through the sale of bulk water.

### Rate Base for 2021 Revenue Year

	<u>2019</u> <u>Application</u>	<u>2020</u> <u>Application</u>	<u>End of 2020</u> <u>for '21 Applic.</u>	<u>Change</u>	
<b>Wholesale System</b>					
Physical Plant	\$ 232,755,867	\$ 231,437,695	\$ 231,156,835	\$ (280,860)	Note 1
Construction Work In Progress	4,667,513	6,285,937	8,055,763	1,769,827	Note 1
Cash Working Capital	1,840,531	1,991,738	2,088,652	96,914	
Inventory	<u>225,000</u>	<u>225,000</u>	<u>225,000</u>	<u>-</u>	
Total Wholesale Rate Base	\$ 239,488,911	\$ 239,940,370	<b>\$ 241,526,250</b>	\$ 1,585,880	

Note 1: Refer to the Schedule of Change in Physical Plant & work in Progress for details.



### Revenue Requirements for 2021 Year

	2019 Application	2020 Application	2021 Application	Change
<b>Wholesale</b>				
Operations & maintenance	\$ 14,928,749	\$ 16,155,207	\$ 16,941,286	\$ 786,079
Depreciation	6,207,713	6,243,311	6,694,087	\$ 450,776
Return on rate base	<u>10,948,000</u>	<u>11,626,400</u>	<u>11,252,300</u>	\$ (374,100) Note 1
Subtotal of above	\$ 32,084,462	\$ 34,024,918	\$ 34,887,673	\$ 862,755
Non-rate revenue including unaccounted water revenue	<u>(582,060)</u>	<u>(582,060)</u>	<u>(582,060)</u>	\$ -
Total wholesale	\$ 31,502,402	\$ 33,442,858	\$ 34,305,613	\$ 862,755

Note 1: Return on rate base is calculated with reference to the long term Canada bond rate & the average debt rate.

## Schedule of Change in Physical Plant & Work In Progress

### Wholesale

Projected Asset Additions	Projected Assets Capitalized
Japan Gulch Treatment Plant Upgrades	\$ 3,135,023
Lubbe Dam Safety Improvements	2,952,346
Kapoor Tunnel Repairs	500,000
Dam Actuators	373,497
Goldream River Bridge Replacement	324,736
Watershed Culvert Replacement	315,000
Water Supply Eqpt Upgrades	270,000
Sooke Dam Safety Improvements	200,000
Gravel Crushing	200,000
Reservoir Log Boom Replacement	200,000
Post Disaster Emergency Water Supply	200,000
Dam Improvements	180,000
Major Main Repairs	170,000
Stelly's Pump Station Assessment	158,843
Sooke Spillway Gate Standby Power	150,000
Meter Replacement	109,432
Building Modification	101,799
SCDA Repairs and Equipment Replacement	100,000
Valve Chamber Upgrades	100,000
Leech River Restoration	95,000
Computer upgrades	85,000
Parkdale Meter Decommissioning	80,000
Leech Tunnel Intake Stop Log Replacement	75,763
Generator for Pump Station	75,000
Forrest Fuel Management Roads	75,000
Leech Watershed Lake Assessment	75,000
Meter Station Backflow Installation	70,000
Transmission System Component Replacement	65,000
SRR Disinfection Facility component upgrades	64,163
Cathodic Protection Program	52,161
Humpback Overflow Channel Assessment	48,000
Other Projects (24 minor projects under \$50k)	503,754
Total projected assets capitalized	\$ 11,104,516
Less: current years depreciation	(6,162,783)
Less: change in prior year forecast addition estimates, & disposals.	(5,222,593)
Change in Physical Plant	<u>\$ (280,860)</u>

### Projected Construction Work In Progress (CWIP)

Sooke Intake Screens Condition Assessment/Replacement	\$ 2,936,485
Meter Replacement	497,289
Butchart Dam #5 Remediation	479,963
Post Disaster Emergency Water Supply	466,609
Sooke Dam Safety Improvements	435,246
Weeks Lake Pit Assessment	302,858
SCDA Repairs and Equipment Replacement	280,112
Dam Safety Review	251,833
Lab Information Management System	200,000
Strategic Asset Management Plan	169,249
Wildlife Habitat Assessment	125,984
Water Quality Main Lab Renovation	117,469
Dam Decommissioning	107,839
Cathodic Protection Program	105,360
Critical Equip Storage Building	103,146
Hydraulic Capacity Assessment	100,058
High Level Output Valve Replacement	100,000
Large Equipment Storage	95,250
Leech River Restoration	95,000
Dam Emergency Plan & Manual Updates	83,541
Asset Reconciliation/Transfer agreement study	77,708
Transmission system component upgrades	76,191
Supply System Vulnerability Assessment	75,464
Goldstream Field Operations Centre	75,000
Watershed Facilities Upgrade	62,392
Leech River Hydromet	55,427
Main No.3 Replacement	53,765
Water Quality Database Upgrade	52,022
Other Projects (25 minor projects under \$50k)	474,503
Projected CWIP	\$ 8,055,763
Less Prior years projected CWIP	(6,285,937)
Change in CWIP	<u>\$ 1,769,827</u>

**Change in Budget 2020 to 2021**  
**Service: 2.670 Regional Water Supply**

**Total Expenditure**

**Comments**

**2020 Budget**

**34,055,398**

**Change in Salaries:**

Change in Labour	188,241	Labour charges (Salaries and overhead, including corporate allocations)
0.4 FTE Water Sampling Technician	55,000	IBC 10d-2 Leech River Water Quality Operations
1.0 FTE Water Utility Operator	190,000	IBC 10a-2.1 Water Infrastructure Resilience
1.0 FTE Watershed Operator	125,000	IBC 10a-0.1 Watershed Security Position
Auxiliary staff	(81,000)	Reduction in auxiliary budget to offset 1.0 FTE Watershed Operator IBC 10a-0.1
Total Change in Salaries	477,241	

**Other Changes:**

Contract for Services	(25,000)	2020 NSERC funding
Contract for Services	25,000	2021 NSERC funding
Contract for Services	(150,000)	IBC 10d-3 2020 Watershed Hydrology Monitoring
Contract for Services	150,000	IBC 10d-3 2021 Watershed Hydrology Monitoring
Contract for Services	100,000	Agricultural Water Rate Review and Options Study
Chemical Supplies	145,257	
Transfer to Capital Fund	209,342	
Principal & Interest Payments	(129,537)	
Agriculture Water Rate Funding	100,000	
Other Costs	(36,418)	
Total Other Changes	388,644	

**2021 Budget**

**34,921,283**

% expense increase from 2020:

**2.5%**

% Requisition increase from 2020 (if applicable):

**n/a**

Requisition funding is (x)% of service revenue

**SAP**

**Overall 2020 Budget Performance**

(expected variance to budget and surplus treatment)

*There is a one time favourable operating variance of \$720,000 (4.9%) due to reduced staffing costs from vacant positions, reduced overtime, and reduced Demand Management allocation. Revenue has decreased by \$590,000 (1.7%) from budget due to lower than budgeted water sales. The net surplus of \$130,000 will be transferred to the services' Water Capital Fund.*

## 2021 Demand Estimate

### Wholesale Demand

Years	Actual Demand cu.metre	Budgeted Demand cu.metre
2016	47,602,170	43,152,000
2017	46,515,000	45,000,000
2018	48,300,036	45,000,000
2019	47,734,121	46,500,000
2020	47,100,000*	48,000,000

### 2021 Demand Estimate

**48,000,000**

\* *Projected consumption for 2020*

### Summary of Wholesale Water Rates

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>
<b>Wholesale water rate</b>						
Unit cost per cu.m.	\$0.6375	\$0.6644	\$0.6775	\$0.6968	\$0.7148	\$0.0180

### Wholesale Water Rate Increase Impact on Residential Water Bill

Average Annual Consumption : 235.0 cubic metres

<u>Charge for Twelve Months Consumption</u>		<u>Annual Charge</u>	<u>2020 Annual Change \$</u>
Average Consumption	2020 Year	\$ 163.75	
	2021	\$ 167.98	\$ 4.23
Half Average Consumption	2020 Year	\$ 81.87	
	2021	\$ 83.99	\$ 2.12
Twice Average Consumption	2020 Year	\$ 327.50	
	2021	\$ 335.96	\$ 8.46

## CAPITAL REGIONAL DISTRICT

Program Group: CRD-Regional Water Supply

**SUMMARY**

Program Group: CRD-Regional Water Supply	2021 BUDGET REQUEST						FUTURE PROJECTIONS			
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	TOTAL (COL 4, 5 & 6)	2022	2023	2024	2025
	2	3	4	5	6	7	8	9	10	11
1										
<b><u>GENERAL PROGRAM EXPENDITURES:</u></b>										
WATERSHED PROTECTION	5,458,878	5,179,839	5,349,054	44,000	175,000	5,568,054	5,500,915	5,610,933	5,723,152	5,837,615
WATER MANAGEMENT	5,223,517	5,075,428	5,420,530	190,000	-	5,610,530	5,711,860	5,827,345	5,944,992	6,054,070
WATER QUALITY	1,611,591	1,634,545	1,775,256	55,000	-	1,830,256	1,843,700	1,882,386	1,921,900	1,962,233
CROSS CONNECTION	744,787	740,854	737,690	-	-	737,690	752,465	767,519	782,865	798,503
DEMAND MANAGEMENT	813,710	673,034	686,034	-	-	686,034	694,708	708,581	722,745	737,187
INFRASTRUCTURE ENGINEERING	494,110	491,110	486,900	-	-	486,900	496,640	506,570	516,710	527,040
FLEET OPERATION & MAINTENANCE	(299,295)	(287,024)	(297,540)	-	-	(297,540)	(303,491)	(309,561)	(315,751)	(322,067)
CUSTOMER TECHNICAL SERVICES & GM SUPPORT *	607,905	427,503	619,362	-	100,000	719,362	624,871	637,936	651,275	656,063
<b>TOTAL OPERATING EXPENDITURES</b>	14,655,203	13,935,289	14,777,286	289,000	275,000	15,341,286	15,321,669	15,631,708	15,947,888	16,250,644
<i>Percentage increase over prior year's board budget</i>			0.83%			4.68%	-0.13%	2.02%	2.02%	1.90%
<b>AGRICULTURAL WATER RATE FUNDING</b>	1,500,000	1,500,000	1,600,000	-	-	1,600,000	1,650,000	1,700,000	1,750,000	1,800,000
			6.67%			6.67%	3.13%	3.03%	2.94%	2.86%
<b><u>CAPITAL EXPENDITURES &amp; TRANSFERS</u></b>										
TRANSFER TO WATER CAPITAL FUND	9,107,214	9,237,453	9,297,180	-	-	9,297,180	9,500,000	10,200,000	14,652,000	15,873,204
TRANSFER TO EQUIPMENT REPLACEMENT FUND	299,294	299,294	297,540	-	-	297,540	303,491	309,561	315,751	322,066
TRANSFER TO DEBT RESERVE FUND	30,480	30,480	51,610	-	-	51,610	192,610	205,610	264,610	33,610
<b>TOTAL CAPITAL EXPENDITURES &amp; TRANSFERS</b>	9,436,988	9,567,227	9,646,330	-	-	9,646,330	9,996,101	10,715,171	15,232,361	16,228,880
<b><u>DEBT</u></b>										
DEBT - INTEREST AND PRINCIPAL	8,463,204	8,463,204	8,333,667	-	-	8,333,667	8,658,848	8,944,560	5,152,302	5,196,255
<b>TOTAL DEBT EXPENDITURES</b>	8,463,204	8,463,204	8,333,667	-	-	8,333,667	8,658,848	8,944,560	5,152,302	5,196,255
<b><u>DEFICIT TRANSFERRED TO FOLLOWING YR</u></b>										
TRANSFER TO FOLLOWING YEAR DEFICIT CARRY FORWARD										
<b>TOTAL EXPENDITURES</b>	34,055,395	33,465,720	34,357,283	289,000	275,000	34,921,283	35,626,618	36,991,439	38,082,551	39,475,779
<b><u>SOURCES OF FUNDING</u></b>										
REVENUE - SALES	(33,442,855)	(32,819,280)	(33,741,613)	(289,000)	(275,000)	(34,305,613)	(35,010,948)	(36,375,769)	(37,466,881)	(38,860,109)
REVENUE - OTHER	(612,540)	(646,440)	(615,670)	-	-	(615,670)	(615,670)	(615,670)	(615,670)	(615,670)
<b>TOTAL SOURCE OF FUNDING FROM OPERATIONS</b>	(34,055,395)	(33,465,720)	(34,357,283)	(289,000)	(275,000)	(34,921,283)	(35,626,618)	(36,991,439)	(38,082,551)	(39,475,779)
TRANSFER FROM PRIOR YEAR	-	-	-	-	-	-	-	-	-	-
TRANSFER TO FOLLOWING YEAR SURPLUS CARRY FORWARD										
<b>TOTAL SOURCES OF FUNDING</b>	(34,055,395)	(33,465,720)	(34,357,283)	(289,000)	(275,000)	(34,921,283)	(35,626,618)	(36,991,439)	(38,082,551)	(39,475,779)
<i>Percentage increase over prior year's board budget</i>			0.89%			2.54%	2.02%	3.83%	2.95%	3.66%

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

<b>Service No.</b>	<b>2.670 Regional Water Supply</b>	<b>Carry Forward from 2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>
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**EXPENDITURE**

Buildings	\$410,000	\$400,000	\$2,155,000	\$2,130,000	\$0	\$0	\$4,685,000
Equipment	\$2,360,000	\$3,965,000	\$5,295,000	\$2,635,000	\$895,000	\$705,000	\$13,495,000
Land	\$275,350	\$1,615,350	\$845,000	\$730,000	\$500,000	\$400,000	\$4,090,350
Engineered Structures	\$8,648,000	\$16,248,000	\$21,775,000	\$29,025,000	\$30,500,000	\$3,450,000	\$100,998,000
Vehicles	\$168,000	\$520,000	\$215,000	\$265,000	\$280,000	\$280,000	\$1,560,000

<b>\$11,861,350</b>	<b>\$22,748,350</b>	<b>\$30,285,000</b>	<b>\$34,785,000</b>	<b>\$32,175,000</b>	<b>\$4,835,000</b>	<b>\$124,828,350</b>
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**SOURCE OF FUNDS**

Capital Funds on Hand	\$11,773,350	\$19,438,350	\$8,970,000	\$9,720,000	\$11,795,000	\$3,955,000	\$53,878,350
Debenture Debt (New Debt Only)	\$0	\$1,800,000	\$15,900,000	\$17,200,000	\$11,100,000	\$0	\$46,000,000
Equipment Replacement Fund	\$88,000	\$310,000	\$215,000	\$265,000	\$280,000	\$280,000	\$1,350,000
Grants (Federal, Provincial)	\$0	\$1,200,000	\$5,200,000	\$7,600,000	\$9,000,000	\$600,000	\$23,600,000
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<b>\$11,861,350</b>	<b>\$22,748,350</b>	<b>\$30,285,000</b>	<b>\$34,785,000</b>	<b>\$32,175,000</b>	<b>\$4,835,000</b>	<b>\$124,828,350</b>
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**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

<b>Service No.</b>	<b>2.670/2.680</b>							
	<b>Regional Water Supply &amp; JDF Water Distribution Combo</b>							
		<b>Carry Forward from 2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>

**EXPENDITURE**

Buildings	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
Equipment	\$500,000	\$1,490,000	\$980,000	\$330,000	\$330,000	\$330,000	\$3,460,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<b>\$500,000</b>	<b>\$1,570,000</b>	<b>\$1,060,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$3,860,000</b>
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**SOURCE OF FUNDS**

Capital Funds on Hand	\$500,000	\$1,570,000	\$1,060,000	\$410,000	\$410,000	\$410,000	\$3,860,000
Debenture Debt (New Debt Only)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Replacement Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<b>\$500,000</b>	<b>\$1,570,000</b>	<b>\$1,060,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$3,860,000</b>
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CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM  
2021 & Forecast 2022 to 2025

Service #:

2.670

Service Name:

Regional Water Supply

**Proj. No.**  
The first two digits represent first year the project was in the capital plan.

**Capital Exp. Type**  
**Study** - Expenditure for feasibility and business case report.  
**New** - Expenditure for new asset only  
**Renewal** - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service  
**Replacement** - Expenditure replaces an existing asset

**Funding Source Codes**  
Debt = Debenture Debt (new debt only)  
ERF = Equipment Replacement Fund  
Grant = Grants (Federal, Provincial)  
Cap = Capital Funds on Hand  
Other = Donations / Third Party Funding

**Funding Source Codes (con't)**  
Res = Reserve Fund  
STLoan = Short Term Loans  
WU = Water Utility

**Asset Class**  
L - Land  
S - Engineering Structure  
B - Buildings  
V - Vehicles  
E - Equipment

**Capital Project Title**  
Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

**Capital Project Description**  
Briefly describe project scope and service benefits.  
For example: *"Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".*

**Total Project Budget**  
This column represents the total project budget not only within the 5-year window.

FINANCIAL PLAN													
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
WATERSHED PROTECTION													
Planning													
17-01	Renewal	Repair of Historic Goldstream Powerhouse Building	Repairs of historic Goldstream Powerhouse building	\$90,000	B	WU	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
17-04	New	Water Supply Area - Fish Stream Assessments	Inventory and assessment of fish, fish habitat, and stream channel stability in priority streams in the GVWSA.	\$325,000	L	WU	\$93,350	\$93,350	\$0	\$0	\$0	\$0	\$93,350
18-01	New	Post-Wildfire Debris Flow Modelling	Site specific modelling of the potential impact to Sooke Lake Reservoir and infrastructure of a significant wildfire in the Sooke WSA.	\$150,000	L	WU	\$55,000	\$55,000	\$0	\$0	\$0	\$0	\$55,000
18-10	Study	Species-at-Risk Wildlife Habitat	An assessment (office and field) and plan for managing wildlife habitat, in particular species-at-risk habitat, in the GVWSA.	\$135,000	L	WU	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
19-30	Study	Leech WSA Lakes/Tributaries Assessment	An assessment of the physical, chemical and biological parameters of the lakes in the Leech WSA.	\$75,000	L	WU	\$20,000	\$20,000	\$0	\$0	\$0	\$0	\$20,000
20-05	Renewal	Leech WSA Terrestrial Ecosystem Mapping & Wetland Classification/Mapping	Classification and mapping of terrestrial ecosystems and wetlands and integration with Sooke and Goldstream data.	\$180,000	L	WU	\$0	\$0	\$180,000	\$0	\$0	\$0	\$180,000
20-06	Study	Addressing mining in Leech WSA (impacts, agreements)	Funding to support work to reduce the impact of mining claims in the Leech WSA	\$30,000	L	WU	\$15,000	\$30,000	\$0	\$0	\$0	\$0	\$30,000
20-27	Study	GVWSA Forest Resilience - wildfire/forest modelling and forest management field trials	Modelling forest and wildfire risk under climate change scenarios & forest/fuel management field trials.	\$260,000	L	WU	\$0	\$85,000	\$70,000	\$50,000	\$0	\$0	\$205,000
20-28	Study	GVWSA Forest Resilience - Assessments of forest health and resilience	Field assessments to better understand current forest health and resilience.	\$230,000	L	WU	\$75,000	\$75,000	\$95,000	\$60,000	\$0	\$0	\$230,000
21-19	Study	Lakes Assessment Sooke and Goldstream WSAs	An assessment of the physical, chemical and biological parameters of the natural lakes in Sooke and Goldstream WSAs	\$75,000	L	WU	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000
21-20	Study	West Leech Road	Plan for future construction of a road to access the western portion of the Leech WSA.	\$20,000	L	WU	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000
22-03	Study	GVWSA Land Exchange/Acquisition	Land surveys, appraisals to support decisions regarding land exchange to increase catchment area or buffer water supply areas.	\$300,000	L	WU	\$0	\$0	\$100,000	\$100,000	\$100,000	\$0	\$300,000

23-02	Renewal	GVWSA LiDAR Mapping	Detailed contour mapping of ground, vegetation and tree cover (3D scanning)	\$120,000	L	WU	\$0	\$0	\$0	\$120,000	\$0	\$0	\$120,000
Capital													
09-01	Renewal	Leech River Watershed Restoration	A 17 year project to restore the Leech WSA lands for water supply.	\$5,756,000	L	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
16-01	Renewal	Replace Gatehouse at Goldstream Entrance	The GVWSA entry gatehouse at Goldstream is past end of life and is to be replaced with a purpose built structure with improved vehicle flow and security oversight.	\$600,000	B	WU	\$190,000	\$395,000	\$200,000	\$0	\$0	\$0	\$595,000
16-06	Renewal	Goldstream IWS Field Office	Renewal of Water Quality field office, lab and equipment and supplies storage and Watershed Protection office, training, emergency response, storage and interpretation space at Goldstream entrance, replacing temporary trailers.	\$4,050,000	B	WU	\$215,000	\$0	\$1,915,000	\$2,000,000	\$0	\$0	\$3,915,000
17-02	New	Leech River HydroMet System	Installation of a network of hydrometeorological stations to collect water quantity and quality information for the Leech WSA.	\$480,000	E	WU	\$100,000	\$125,000	\$0	\$0	\$0	\$0	\$125,000
17-06	New	Weeks Lake Area Environmental Assessment and Remediation	Assessment and remediation of the Weeks Lake gravel pit (lead from firearms) and Weeks Lake (metals and hydrocarbons from dumping).	\$365,000	L	WU	\$17,000	\$67,000	\$0	\$0	\$0	\$0	\$67,000
17-09	Renewal	Goldstream Gate Upgrade	The main entrance autogate in Goldstream is past end of life and requires replacement with lifting in/out gates along with project 16-01.	\$75,000	S	WU	\$68,000	\$68,000	\$0	\$0	\$0	\$0	\$68,000
18-05	New	GVWSA Forest Fuel Management/FireSmart Activities	Implementation of forest fuel management and FireSmart actions in strategic locations for wildfire risk management in the GVWSA.	\$750,000	L	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
18-11	New	Large Equipment Storage (Field Operations Centre)	Two additional bays are to be added to the existing fire/spill equipment warehouse at the FOC to shelter large water supply infrastructure equipment.	\$100,000	B	WU	\$5,000	\$5,000	\$0	\$0	\$0	\$0	\$5,000
19-02	New	Whiskey Creek Bridge Replacement (Sooke WSA)	Replacement of the existing undersized bridge with a longer and higher concrete structure.	\$300,000	S	WU	\$0	\$0	\$0	\$300,000	\$0	\$0	\$300,000
19-19	New	Hydromet Upgrades Sooke and Goldstream	Install additional hydrology monitoring sites on Sooke Lake Reservoir inflow streams and increase instrumentation on meteorological stations in Sooke and Goldstream watersheds.	\$170,000	E	WU	\$140,000	\$140,000	\$0	\$0	\$0	\$0	\$140,000
20-01	Replacement	Kapoor Main Mile 1 Bridge and Asphalt Upgrade	Replacement of the existing undersized culvert with a large bridge as well as nearby asphalt repair or replacement.	\$450,000	S	WU	\$0	\$0	\$450,000	\$0	\$0	\$0	\$450,000
20-29	Renewal	Gravel crushing 14G and 10S quarry (Sooke and Goldstream WSA)	Production of gravel at existing quarries in Sooke and Goldstream WSAs.	\$350,000	S	WU	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
21-01	New	31N Bridge to Replace Undersized Culvert (Goldstream WSA)	Replacement of the existing undersized and failing culvert with a bridge structure.	\$325,000	S	WU	\$0	\$325,000	\$0	\$0	\$0	\$0	\$325,000
21-26	New	Road Deactivation/Rehabilitation in the GVWSA	Deactivate or rehabilitate unneeded roads in the Sooke and Goldstream WSAs.	\$420,000	L	WU	\$0	\$20,000	\$100,000	\$100,000	\$100,000	\$100,000	\$420,000
21-27	New	Autogate Installations on Primary Access Routes	Install autogates on the main access routes where the Sooke Hills Wilderness Trail and E&N rail line cross to improve security	\$250,000	S	WU	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000
21-28	New	GVWSA Land Acquisition Priorities	Acquisition of priority GVWSA catchment and buffer lands.	\$750,000	L	WU	\$0	\$750,000	\$0	\$0	\$0	\$0	\$750,000
22-02	New	Muckpile Bridge Supply and Install (Deception)	Replacement of undersized culverts with bridge which will allow for fish and western toad migration.	\$325,000	S	WU	\$0	\$0	\$0	\$0	\$325,000	\$0	\$325,000
23-03	New	Air curtain burner for fuel management	A transportable burner that provides more effective and rapid burning of woody debris with reduced smoke emissions.	\$40,000	E	WU	\$0	\$40,000	\$0	\$0	\$0	\$0	\$40,000
23-04	Renewal	17S/Sooke Main Bridge Replacement	Undersized bridge replacement	\$300,000	S	WU	\$0	\$0	\$0	\$0	\$0	\$300,000	\$300,000
24-01	Renewal	6M/Judge Creek Culvert Replacement (Sooke WSA)	Undersized culvert replacement	\$200,000	S	WU	\$0	\$0	\$0	\$0	\$200,000	\$0	\$200,000
WaterShed Protection Sub-Total				\$18,046,000			\$993,350	\$3,113,350	\$3,410,000	\$3,080,000	\$1,025,000	\$700,000	\$11,328,350

INFRASTRUCTURE ENGINEERING AND OPERATIONS													
Planning													
16-10	New	Post Disaster Emergency Water Supply	Identify and procure emergency systems for post disaster preparedness.	\$1,300,000	S	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
17-13	New	Asset Management Plan	Development of a plan to inform future areas of study and highlight critical infrastructure improvements.	\$300,000	S	WU	\$100,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
19-04	New	Seismic Assessment of Critical Facilities	Identified as a priority from Strategic Plan, a seismic assessment of critical facilities and a supply system resilience feasibility study will be undertaken.	\$255,000	S	WU	\$55,000	\$255,000	\$0	\$0	\$0	\$0	\$255,000
19-15	New	Hydraulic Capacity Assessment and Transient Pressure Analysis	Determine the existing level-of-service for the RWSC transmission system and conduct a transient pressure analysis	\$300,000	S	WU	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
19-28	Study	Goldstream System Hydraulic Analysis	Analysis and documentation of hydraulics of the Goldstream system.	\$50,000	S	WU	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$50,000
20-02	New	Supply System Resilience Feasibility Study	Identified as a priority from the Strategic Plan, a study of water supply system's resilience and high level measures to make important assets resilient will be undertaken	\$200,000	S	WU	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
20-07	Study	Deep Northern Intake & Transmission Pipeline Study	A technical and business case analysis will be carried out with possible expansion and filtration study upstream of the head tank - this is to replace 2016-09	\$250,000	S	WU	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
20-08	Study	Regional Water DCC Program	Design of a Regional DCC Program	\$200,000	S	WU	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$150,000
20-10	Study	Condition & Vulnerability Assessment	Conduct a condition assessment of critical supply infrastructure and assess its possibility of risk.	\$200,000	S	WU	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
20-11	Study	Develop Master Plan	Develop a long term strategic plan to anticipate water demand, water treatment, and future siting of facilities.	\$500,000	S	WU	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000
21-05	Study	Level of Service Agreement	From #19-15 & #20-11, develop level-of-service agreements for participating municipalities to address hydraulic capacity of infrastructure.	\$150,000	S	WU	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
Capital													
15-03	Renewal	Sooke Intake Screens Condition Assessment & Replacement	Renewal of the aging Sooke Intake Tower and equipment to maintain water supply.	\$2,205,000	S	WU	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
18-07	New	Replacement of UV System	Replacement of the UV system at the Goldstream Water Treatment Plant	\$5,400,000	E	WU	\$0	\$400,000	\$3,000,000	\$1,800,000	\$0	\$0	\$5,200,000
18-08	Replacement	Bulk Supply Meter Replacement Program	Planned replacement of aging bulk meter replacement based upon a condition assessment and water audit.	\$2,200,000	E	WU	\$450,000	\$450,000	\$200,000	\$200,000	\$200,000	\$150,000	\$1,200,000
18-15	Renewal	Corrosion Protection Program	Study deficiencies in the current material protection and implement recommendations.	\$750,000	S	WU	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
18-18	Replacement	Main No.3 Segment Replacement	Replacement of segments of Main No. 3 based upon previous studies.	\$15,090,000	S	WU	\$100,000	\$350,000	\$4,900,000	\$4,900,000	\$4,900,000	\$0	\$15,050,000
19-05	Renewal	Repairs - Kapoor Shutdown	Repair items such as defects in the Kapoor tunnel, replacement of critical valves, intake exterior inspection and actuator replacement while the Kapoor tunnel is shutdown.	\$500,000	S	WU	\$100,000	\$100,000	\$0	\$0	\$100,000	\$0	\$200,000
19-23	New	Critical Spare Equipment Storage & Pipe Yard	Plan, design and construct a critical equipment storage building.	\$400,000	S	WU	\$300,000	\$300,000	\$0	\$0	\$0	\$0	\$300,000
20-13	New	Electrical Isolation Audit	Inspection audit of facilities to ensure that there is sufficient electrical separation and isolation for safety.	\$50,000	S	WU	\$20,000	\$20,000	\$0	\$0	\$0	\$0	\$20,000
20-16	Replacement	Cecelia Meter Replacement	Replacement of the Cecelia billing meter as well as its enclosure.	\$1,000,000	S	WU	\$0	\$100,000	\$450,000	\$450,000	\$0	\$0	\$1,000,000
20-17	Replacement	Decommission Smith Hill Site	Plan and decommission the abandoned Smith Hill reservoir site.	\$650,000	S	WU	\$0	\$0	\$150,000	\$0	\$500,000	\$0	\$650,000
20-18	Replacement	Goldstream Main #4 Replacement	Plan and replacement of the concrete pipe portion of Main #4.	\$200,000	S	WU	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$150,000
20-32	New	pH Adjustment Facility	Design and construct a pH adjustment facility based upon the results of the pH and corrosion study.	\$2,500,000	S	WU	\$0	\$0	\$500,000	\$2,000,000	\$0	\$0	\$2,500,000
20-33	Replacement	Sooke Intake Screens Replacement	Emergency replacement of the Sooke Intake screens.	\$1,800,000	E	WU	\$800,000	\$800,000	\$0	\$0	\$0	\$0	\$800,000
21-06	Replacement	Sooke Lake Dam Spillway Hoist Replacement	Replacement of the sluice gate spillway hoist at Sooke Lake Dam.	\$275,000	E	WU	\$0	\$75,000	\$200,000	\$0	\$0	\$0	\$275,000

21-07	Replacement	Goldstream Water Treatment Plant Communications Upgrade	Increase reliability and resilience of data and voice communications between the UV Plant, Sodium Hypochlorite Building, Ammonia Building.	\$250,000	S	WU	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000
21-08	New	Goldstream Water Treatment Plant Emergency Automation	Installation of automatic valves and controls to safeguard chemicals in the event of dosing line breaks	\$145,000	E	WU	\$0	\$145,000	\$0	\$0	\$0	\$0	\$145,000
21-09	New	Goldstream Water Treatment Plant Demolition	Plan and construct provisions demolition.	\$200,000	S	WU	\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000
21-10	Replacement	SCADA Upgrades	Update the SCADA Master Plan in conjunction with the Juan de Fuca Water Distribution, Saanich Peninsula Water and Wastewater, and Core Area Wastewater Services.	\$650,000	E	WU	\$0	\$200,000	\$450,000	\$0	\$0	\$0	\$650,000
21-11	Replacement	RWS Supply Main No. 4 Upgrade	Upgrade vulnerable sections of the RWS Supply Main No. 4 to a resilient system to better able to withstand a seismic event. Vulnerable sections are Concrete Cylinder pipe material which is susceptible to failure during a seismic event. This is part of partially grant funded project partnered with the Saanich Peninsula Water system.	\$35,400,000	S	WU	\$0	\$1,800,000	\$7,800,000	\$11,400,000	\$13,500,000	\$900,000	\$35,400,000
21-11	Replacement	RWS Supply Main No. 4 Upgrade	Upgrade vulnerable sections of the RWS Supply Main No. 4 to a resilient system to better able to withstand a seismic event. Vulnerable sections are Concrete Cylinder pipe material which is susceptible to failure during a seismic event. This is part of partially grant funded project partnered with the Saanich Peninsula Water system.	\$23,600,000	S	Grant	\$0	\$1,200,000	\$5,200,000	\$7,600,000	\$9,000,000	\$600,000	\$23,600,000
21-12	New	SR RDF Upgrade	Increased water flows in the Sooke region have resulted in an additional sodium hypochlorite dosing pump and automation for summer flows.	\$75,000	E	WU	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000
Sub-Total Infrastructure Engineering and Operations				\$97,045,000			\$2,975,000	\$9,020,000	\$23,200,000	\$28,700,000	\$28,550,000	\$2,000,000	\$91,470,000
DAM SAFETY PROGRAM				Database)									
16-16	Renewal	Implications from Goldstream Dam Safety Review	Conduct dam improvements at the Goldstream dams that resulted for the Dam Safety Review and routine inspections (refer to the Dam Safety Database).	\$705,000	S	WU	\$300,000	\$300,000	\$75,000	\$75,000	\$75,000	\$0	\$525,000
16-17	Renewal	Butchart Dam No. 5 Remediation	Phase 1 Rehabilitation (grouting) of Butchart Dam No. 5 and planning for Phase 2.	\$3,550,000	S	WU	\$2,900,000	\$2,900,000	\$0	\$0	\$0	\$0	\$2,900,000
17-25	Renewal	Implications from Sooke Lake Dam Safety Review	Conduct dam improvments at the Sookel Lake Dam that resulted from the Dam Safety Review and routine inspections (refer to the Dam Safety Database)	\$1,350,000	S	WU	\$900,000	\$900,000	\$0	\$0	\$0	\$0	\$900,000
18-19	New	Sooke Lake Dam - Instrumentation System Improvements	Complete dam performance instrumentation system/surveillance improvements for the Sooke Lake Dam.	\$1,300,000	S	WU	\$700,000	\$900,000	\$100,000	\$100,000	\$100,000	\$0	\$1,200,000
18-20	New	Sooke Lake Dam - Breach Risk Reduction Measures	Implement measures to reduce Sooke Lake Dam breach implications in the unlikely event of dam failure (refer to the NHC Consulting study).	\$600,000	S	WU	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$500,000
19-07	New	Integrate Dam Performance and Hydromet to SCADA	Integrate the dam safety instrumentation/surveillance (i.e. piezometers and weirs) and HydroMet stations to report to WIO through the existing SCADA system.	\$1,100,000	E	WU	\$500,000	\$500,000	\$500,000	\$0	\$0	\$0	\$1,000,000
19-08	New	Charters Dam Decommissioning	Charters Dam has been retired from drinking water service, no other interested owners, plan to decommission.	\$450,000	S	WU	\$100,000	\$100,000	\$200,000	\$0	\$0	\$0	\$300,000
19-09	New	Cabin Pond Dams Decommissioning	The Cabin Pond Dams (x2) have been retired from drinking water service, plan to decommission.	\$600,000	S	WU	\$600,000	\$600,000	\$0	\$0	\$0	\$0	\$600,000
19-12	New	Goldstream Dams Instrumentation Improvements	Conduct dam safety instrumentation/surveillance improvements (refer to report from Thurber Engineering).	\$600,000	S	WU	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$500,000

19-13	New	Dam Safety Instrumentation - Hydromet	The existing dam safety instrumentation/surveillance equipment is getting older and will need to be replaced/rehabilitated (does not include pending SCADA effort).	\$250,000	E	WU	\$50,000	\$100,000	\$50,000	\$50,000	\$50,000	\$0	\$250,000
20-19	Replacement	Goldstream System High Level Outlet Valve Replacements	The Goldstream and Butchart high level outlet valves have been identified as requiring replacement.	\$200,000	S	WU	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
20-20	Replacement	Saddle Dam Piezometer Installation	Dam safety instrumentation/surveillance installations (i.e. piezometers) are required to monitor the Saddle Dam to monitor the performance of Saddle Dam and for future stability assessments.	\$250,000	S	WU	\$0	\$125,000	\$0	\$0	\$0	\$0	\$125,000
21-03	New	Deception Dam - Dam Safety Review 2021 & Improvements	Conduct a Dam Safety Review and some improvements for the Deception Dam.	\$300,000	S	WU	\$100,000	\$200,000	\$100,000	\$0	\$0	\$0	\$300,000
21-04	New	Saddle Dam - Dam Safety Review 2021 & Improvements	Conduct a Dam Safety Review and some improvements for the Saddle Dam.	\$200,000	S	WU	\$100,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
21-21	Replacement	Goldstream Dams - Gate Improvements	logistics planning in 2021, installation in 2022	\$150,000	S	WU	\$0	\$50,000	\$100,000	\$0	\$0	\$0	\$150,000
21-22	Study	Charters Dam - Dam Safety Review 2021	Legislated obligation to conduct Dam Safety Review, contingent on outcome of the Decommissioning plan and DSO expectations (relates to Item 19-08)	\$250,000	S	WU	\$0	\$150,000	\$100,000	\$0	\$0	\$0	\$250,000
22-08	New	Deception Dam Surveillance Improvements	Replace and supplement the Dam Safety Instrumentation at Deception Dam.	\$450,000	S	WU	\$0	\$0	\$150,000	\$300,000	\$0	\$0	\$450,000
23-01	New	Sooke Lake Dam Update Seismic Assessment	Conduct a seismic assessment of the Sooke Lake Dam as per the previous Dam Safety Reiviews.	\$150,000	E	WU	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000
23-07	New	Sooke Lake Dam Seismic Retrofits	Detail and construct seismic retrofits for the existing structures initially focusing on the spillway and gates structures.	\$450,000	S	WU	\$0	\$0	\$0	\$150,000	\$300,000	\$0	\$450,000
23-08	Study	Regional Watershed Dams – Flood Forecasting System	Update the existing flood forecasting system (WD4Cast) to a modern version including Standard Operating Procedures and training for staff.	\$300,000	S	WU	\$0	\$0	\$0	\$150,000	\$150,000	\$0	\$300,000
23-09	Study	Sooke Lake Dam - Dam Safety Review 2023	Conduct a Dam Safety Review	\$200,000	S	WU	\$0	\$0	\$0	\$200,000	\$0	\$0	\$200,000
25-01	Study	Goldstream Dams - Dam Safety Review 2025	Conduct a Dam Safety Review	\$150,000	S	WU	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000
25-02	Study	Probable Maximum Flood and Inflow Design Flood Updates	Update the previous edition from 2015 (recommended 10 year review cycle).	\$150,000	S	WU	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000
Sub-Total Dam Safety Program				\$13,705,000			\$7,350,000	\$8,125,000	\$1,525,000	\$1,025,000	\$675,000	\$300,000	\$11,650,000
WATER QUALITY													
19-29	Study	Leech River Water Quality Monitoring	Monitor water quality from the Leech River for 2 years	\$100,000	S	WU	\$15,000	\$15,000	\$0	\$0	\$0	\$0	\$15,000
20-03	Study	Leech River Watershed - Implications for Supply Management	Review data of Leech Monitoring Project and report on implications of adding Leech to water supply	\$40,000	S	WU	\$40,000	\$40,000	\$0	\$0	\$0	\$0	\$40,000
20-04	New	Sooke Lake HyDy Model Development	Critical data collection, model building+calibration, model utilization for 3 different scenarios	\$340,000	E	WU	\$320,000	\$80,000	\$180,000	\$30,000	\$30,000	\$0	\$320,000
21-13	New	Flowcam Imaging System	Utilize semi-automated algal analysis to meet increased demands without increasing FTEs	\$150,000	E	WU	\$0	\$140,000	\$10,000	\$0	\$0	\$0	\$150,000
21-14	Renewal	Sooke Lake Sampling Boat Repair	Refurbishment of structural boat parts (floor)	\$10,000	E	WU	\$0	\$10,000	\$0	\$0	\$0	\$0	\$10,000
21-29	Renewal	Microbiological plate pourer	Automation of manual process to increase capacity/worker safety	\$30,000	E	WU	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
22-05	New	WQ Lab Capital Improvements	Building improvements in the lab	\$40,000	B	WU	\$0	\$0	\$40,000	\$0	\$0	\$0	\$40,000
22-06	Study	Sooke Lake Food Web Study	Assess the aquatic food web structure and create an inventory of fish and invertebrate species and distribution in Sooke Lake Reservoir - to be used as indicators of stream health	\$100,000	S	WU	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
22-07	Study	Bulk-Water Connection Backflow Protection Study	Investigate all bulk-water connections to CRD or municipal systems and identify the need for backflow protection	\$50,000	S	WU	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000
23-05	Renewal	Renovation of Samplers Hut (2955 Sooke Lk Road)	Building exterior paint, roof, gutters, flooring, bathroom	\$80,000	B	WU	\$0	\$0	\$0	\$80,000	\$0	\$0	\$80,000

23-06	Study	GVDWS Nitrification Study	Investigate nitrification occurrence and potential impacts on drinking water quality	\$50,000	S	WU	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000	
24-02	Replacement	Boat Motor Replacement with Electric Outboards (Sooke and Goldstream Boats)	50hp and 15hp motor replacement due to age and water quality concerns, large electric outboards are already available from Torqeedo for instance	\$60,000	E	WU	\$0	\$0	\$0	\$0	\$60,000	\$0	\$60,000	
Water Quality Sub-Total				\$1,050,000			\$375,000	\$315,000	\$380,000	\$160,000	\$90,000	\$0	\$945,000	
ANNUAL PROVISIONAL														
17-27	Replacement	Watershed Bridge and Culvert Replacement	Replacement of small culverts and bridges throughout the GVWSA.	\$1,000,000	S	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
17-28	Replacement	Watershed Security Infrastructure Upgrade and Replacement	New, upgrade and replacement of security infrastructure in the GVWSA.	\$425,000	E	WU	\$0	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$425,000
17-29	Replacement	Water Supply Area Equipment Replacement	Hydrometeorological, fireweather and wildfire suppression equipment replacement.	\$650,000	E	WU	\$0	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$130,000	\$650,000
17-30	Replacement	Transmission Main Repairs	Emergency repairs to the transmission mains.	\$1,000,000	S	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
17-31	Replacement	Transmission System Components Replacement	Replacement and repair of transmission components.	\$400,000	S	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-33	Replacement	Disinfection Equipment Parts Replacement	Replacement of incidental equipment and parts associated with the disinfection system.	\$600,000	E	WU	\$0	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$600,000
17-34	Renewal	Supply System Computer Model Update	Annual update of the regional hydraulic model.	\$100,000	S	WU	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
19-16	Replacement	Dam Improvements	Items not covered by Dam Safety Reviews, but brought up in Dam Safety Inspections and Dam Safety Reviews	\$1,300,000	S	WU	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
19-22	Replacement	SCADA Repairs & Equipment Replacement	Items not covered by the SCADA Replacement and SCADA Master Plan, but integral in maintaining the SCADA System and revenue meter system.	\$750,000	E	WU	\$0	\$250,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$850,000
21-15	Replacement	Corrosion Protection	Replace corrosion protection assets, such as coatings, for the transmission system when identified.	\$250,000	S	WU	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
21-16	Replacement	Valve Chamber Upgrades	Replace failing valves and appurtenances along the RWS supply system.	\$1,000,000	S	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
21-17	Replacement	Water Quality Equipment Replacement	Replacement of water quality equipment for the water quality lab and water quality operations	\$250,000	E	WU	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
21-18	Renewal	LIMS support	Support for LIMS database	\$100,000	E	WU	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
Annual Provisional Sub-Total				\$7,825,000			\$0	\$1,655,000	\$1,555,000	\$1,555,000	\$1,555,000	\$1,555,000	\$1,555,000	\$7,875,000
CUSTOMER AND TECHNICAL SERVICES														
17-35	Replacement	Vehicle & Equipment Replacement (Funding from Replacement Fund)	This is for replacement of vehicles and equipment used by CRD Water Services for the day-to-day operation and maintenance of the supply system.	\$2,495,000	V	ERF	\$88,000	\$310,000	\$215,000	\$265,000	\$280,000	\$280,000	\$1,350,000	
20-22	New	Vehicle for the Dam Safety Program	New pick up	\$35,000	V	WU	\$35,000	\$35,000	\$0	\$0	\$0	\$0	\$35,000	
20-23	New	Vehicle for the CSE Support Program	New Transit Van	\$45,000	V	WU	\$45,000	\$45,000	\$0	\$0	\$0	\$0	\$45,000	
21-30	New	Vehicle for Warehouse Operations	New pick up	\$35,000	V	WU		\$35,000	\$0	\$0	\$0	\$0	\$35,000	
21-24	Replacement	ATV with Tracks (replace Gator)	Vehicle to access weather stations during snow conditions	\$20,000	V	WU	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000	
21-25	Replacement	UV Plant Safety Audit and Equipment Replacement	Carry out an audit of the occupied office area of the UV Plant and carry out upgrades	\$75,000	V	WU	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000	
Customer and Technical Services Sub-Total				\$2,705,000			\$168,000	\$520,000	\$215,000	\$265,000	\$280,000	\$280,000	\$1,560,000	
GRAND TOTAL				\$140,376,000				\$11,861,350	\$22,748,350	\$30,285,000	\$34,785,000	\$32,175,000	\$4,835,000	\$124,828,350

## CAPITAL REGIONAL DISTRICT CAPITAL PLAN

<b>CAPITAL BUDGET FORM</b> <b>2021 &amp; Forecast 2022 to 2025</b>				<b>Service #:</b> 2.670/2.680		<b>Service Name:</b> Regional Water Supply & JDF Water Distribution Combo	
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<b>Proj. No.</b> The first two digits represent first year the project was in the capital plan.	<b>Capital Exp. Type</b> <b>Study</b> - Expenditure for feasibility and business case report. <b>New</b> - Expenditure for new asset only <b>Renewal</b> - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service <b>Replacement</b> - Expenditure replaces an existing asset	<b>Funding Source Codes</b> Debt = Debenture Debt (new debt only) ERF = Equipment Replacement Fund Grant = Grants (Federal, Provincial) Cap = Capital Funds on Hand Other = Donations / Third Party Funding	<b>Funding Source Codes (cont)</b> Res = Reserve Fund STLoan = Short Term Loans WU = Water Utility	<b>Asset Class</b> <b>L</b> - Land <b>S</b> - Engineering Structure <b>B</b> - Buildings <b>V</b> - Vehicles
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<b>Capital Project Title</b> Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".	<b>Capital Project Description</b> Briefly describe project scope and service benefits. For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".	<b>Total Project Budget</b> This column represents the total project budget not only within the 5-year window.
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FIVE YEAR FINANCIAL PLAN													
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
<b>SYSTEM REPLACEMENT AND UPGRADES THAT BENEFIT REGIONAL WATER SUPPLY AND JUAN DE FUCA DISTRIBUTION</b>													\$0
16-01	Renewal	Upgrades to Buildings at 479 Island Highway	Maintenance and changes to buildings and office layouts.	\$400,000	B	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-01	Renewal	Voice Radio Upgrade	Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.	\$1,560,000	E	WU	\$0	\$640,000	\$650,000	\$0	\$0	\$0	\$1,290,000
20-01	New	Portable Pump Station	Portable pump station to provide backup when a pump station is offline, in construction or to bypass a section of pipe.	\$500,000	E	WU	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$500,000
21-01	New	Storage Container for vehicle and equipment Tires	Tires removed from vehicles are stored on site outside of the Fleet office. They need to be stored in a more safe and secured area.	\$20,000	E	WU	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000
<b>Sub-Total System Replacement and Upgrades That Benefit Regional Water Supply and Juan de Fuca Distribution</b>				\$2,480,000			\$500,000	\$1,240,000	\$730,000	\$80,000	\$80,000	\$80,000	\$2,210,000
<b>ANNUAL PROVISIONAL CAPITAL ITEMS</b>													
17-03	Replacement	Office Equipment, Upgrades and Replacements	Upgrade and replacement of office equipment as required.	\$225,000	E	WU	\$0	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$225,000
17-04	Replacement	Computer Upgrades	Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.	\$850,000	E	WU	\$0	\$170,000	\$170,000	\$170,000	\$170,000	\$170,000	\$850,000
17-05	New	Development of the Maintenance Management Systems	Develop maintenance management system.	\$100,000	E	WU	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
17-06	Replacement	Small Equipment & Tool Replacement (Water Operations)	Replacement of tools and small equipment for Water Operations as required.	\$400,000	E	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-07	Replacement	Small Equipment & Tool Replacement (Corporate Fleet)	Replacement of tools and small equipment for Fleet as required.	\$75,000	E	WU	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
<b>Sub-Total for Annual Provisional Capital Items</b>				\$ 1,650,000			\$ -	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	\$ 330,000	\$1,650,000
<b>GRAND TOTAL</b>				<b>\$4,130,000</b>			<b>\$500,000</b>	<b>\$1,570,000</b>	<b>\$1,060,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$410,000</b>	<b>\$3,860,000</b>

Service: 2.670

## Regional Water Supply

Proj. No.	17-01	Capital Project Title	Repair of Historic Goldstream Powerhouse Building	Capital Project Description	Repairs of historic Goldstream Powerhouse building
Asset Class	B	Board Priority Area	No Alignment	Corporate Priority Area	No Alignment
Project Rationale	<p>Located near the Japan Gulch Treatment Plant and the Great Trail (Trans Canada Trail), is an 1897 brick hydroelectric powerplant that served Victoria (notably the streetcars) for approx. 60 years. The Powerhouse has its own Wikipedia entry: <a href="http://en.wikipedia.org/wiki/Lubbe_Powerhouse">http://en.wikipedia.org/wiki/Lubbe_Powerhouse</a> and has captured public interest as a unique structure in BC history. An engineering condition assessment including engineered drawings, site plan and approximate cost of repairs was conducted in 2017. A major repair in the masonry on the north side of the building was completed in 2018. Funds are required in 2019 (\$10,000) to repair a smaller hole in the masonry on the south side. Funds to repair the roof envelope (\$50,000) are planned for 2023. Grant funding opportunities to conserve the building and its history will continue to be sought.</p>				

Proj. No.	17-04	Capital Project Title	Water Supply Area - Fish Stream Assessments	Capital Project Description	Inventory and assessment of fish, fish habitat, and stream channel stability in priority streams in the GVWSA.
Asset Class	L	Board Priority Area	No Alignment	Corporate Priority Area	Water
Project Rationale	<p>Presence or absence of fish as well as fish habitat information has only been collected in the Water Supply Areas on an as-needed basis related to specific road projects. In order to adequately plan and manage for fish habitat and water quality a systematic inventory and assessment of fish habitat, stream channel stability, and the hydrological condition of stream corridors will be conducted over three field seasons. The funding for 2019 is insufficient to conduct fish stream assessments in the entire Leech Water Supply Area. An additional \$100,000 in 2020 will allow for fish stream surveys to be carried out in the western and northern portions of the Leech which cannot be completed in 2019.</p>				

Proj. No.	18-01	Capital Project Title	Post-Wildfire Debris Flow Modelling	Capital Project Description	Site specific modelling of the potential impact to Sooke Lake Reservoir and infrastructure of a significant wildfire in the Sooke WSA.
Asset Class	L	Board Priority Area	No Alignment	Corporate Priority Area	Water
Project Rationale	<p>Erosion and debris flows from areas burned by wildfire in the Greater Victoria Water Supply Area could pose a major threat to the quality of water in source reservoirs. A pilot project was completed in 2014-15 to model post-wildfire erosion and debris flow for two drainages close to the intake of Sooke Lake Reservoir. The results were then used to develop an emergency rehabilitation plan for these two drainages. A larger modelling project for all areas draining directly into Sooke Lake Reservoir is proposed for 2019 in order to develop further site specific emergency rehabilitation plans.</p>				



<b>Service: 2.670</b> <b>Regional Water Supply</b>			
<b>Proj. No.</b> 18-10	<b>Capital Project Title</b> Species-at-Risk Wildlife Habitat	<b>Capital Project Description</b>	An assessment (office and field) and plan for managing wildlife habitat, in particular species-at-risk habitat, in the GVWSA.
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> <i>An assessment (office and field) and conservation plan for managing wildlife habitat, in particular species-at-risk habitat, in the GVWSA. Funds in 2018 (\$35,000) will be used for compilation of existing knowledge of species, distribution, habitat, research. Funds in 2019 and 2020 (\$50,000 each) will be used to field verify species, critical habitat and movement corridors. Funds added in 2021 (\$25,000) are to develop a GVWSA specific conservation plan based on the office and field investigations.</i>			
<b>Proj. No.</b> 19-30	<b>Capital Project Title</b> Leech WSA Lakes/Tributaries Assessment	<b>Capital Project Description</b>	An assessment of the physical, chemical and biological parameters of the lakes in the Leech WSA.
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> <i>To assess restoration of the Leech Water Supply Area and prepare for use of Leech River water to supplement Sooke Lake Reservoir, baseline monitoring of the hydrological, physical, chemical and biological parameters of the main Leech WSA source waterbodies will be conducted. The work will be undertaken in conjunction with the Water Quality division. (Action from the 2017 Strategic Plan for Regional Water Supply). The funding for this project has been moved forward to balance staff resources.</i>			
<b>Proj. No.</b> 20-05	<b>Capital Project Title</b> Leech WSA Terrestrial Ecosystem Mapping & Wetland Classification/Mapping	<b>Capital Project Description</b>	Classification and mapping of terrestrial ecosystems and wetlands and integration with Sooke and Goldstream data.
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> <i>The existing Leech WSA terrestrial ecosystem mapping received from the previous landowner is not consistent with that of Sooke and Goldstream WSAs. The project is to renew the ecosystem mapping to a standard that matches Sooke and Goldstream for consistent data and analysis. There has been no detailed mapping of Leech WSA wetlands. The project is to conduct detailed wetland mapping in the Leech WSA to a standard that matches Sooke and Goldstream for consistent data and analysis. The projects have been combined (ecosystem mapping (20-05) and wetland mapping (20-06) and moved forward from 2020 to 2021. The project has been further moved forward from 2021 to 2022.</i>			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 20-06	<b>Capital Project Title</b> Addressing mining in Leech WSA (impacts, agreements)	<b>Capital Project Description</b> Funding to support work to reduce the impact of mining claims in the Leech WSA	
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> Assessment and/or studies to determine and mitigate impacts from mining activities in the Leech Water Supply Area.			
<b>Proj. No.</b> 20-27	<b>Capital Project Title</b> GVWSA Forest Resilience - wildfire/forest modelling and forest management field trials	<b>Capital Project Description</b> Modelling forest and wildfire risk under climate change scenarios & forest/fuel management field trials.	
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> Projects to: a). model impact of climate change on forests, forest fuel types, and associated wildfire behavior and probability and potential effects of management options; and b). trial forest and fuel management treatments that reduce wildfire risk, such as prescribed fire and stand diversification, in the Leech WSA prior to considering those treatment options in Sooke or Goldstream WSAs.			
<b>Proj. No.</b> 20-28	<b>Capital Project Title</b> GVWSA Forest Resilience - Assessments of forest health and resilience	<b>Capital Project Description</b> Field assessments to better understand current forest health and resilience.	
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> Field assessments to better understand current forest health and resilience including: increasing pine mortality, increase in bark beetle killed trees, existing advance regeneration in the understory, sedimentation sources from roads. <b>The project funding for 2021 and 2022 is moved forward by one year to 2022 and 2023.</b>			
<b>Proj. No.</b> 21-19	<b>Capital Project Title</b> Lakes Assessment Sooke and Goldstream WSAs	<b>Capital Project Description</b> An assessment of the physical, chemical and biological parameters of the natural lakes in Sooke and Goldstream WSAs	
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> Small lakes in the Sooke and Goldstream WSAs influence both watershed hydrology and water quality in downstream creeks and supply reservoirs. While basic water quality sampling has been undertaken in some of these water bodies, there is a need to map the bathymetry, calculate water volumes, and conduct more comprehensive sampling of the chemical and biological parameters and aquatic vegetation of these lakes. This will facilitate comparisons of these parameters with lakes in the Leech WSA and water quality in existing and future water supply lands.			

Service: 2.670 Regional Water Supply			
Proj. No.	21-20	Capital Project Title	West Leech Road
Capital Project Description	Plan for future construction of a road to access the western portion of the Leech WSA.		
Asset Class	L	Board Priority Area	No Alignment
Corporate Priority Area	Water		
Project Rationale	A large portion of the western Leech WSA currently has overgrown unassessed roads. Brushing, upgrade, re-surfacing and some new road construction is required to provide access to this area for wildfire response, security patrols and forest management.		
Proj. No.	22-03	Capital Project Title	GVWSA Land Exchange/Acquisition
Capital Project Description	Land surveys, appraisals to support decisions regarding land exchange to increase catchment area or buffer water supply areas.		
Asset Class	L	Board Priority Area	No Alignment
Corporate Priority Area	Water		
Project Rationale	There are opportunities to increase the catchment area of Sooke, Goldstream and the Leech WSA by purchase or land exchange with surrounding land owners. Funds would be used to undertake appraisals, legal surveys, and legal fees for work to develop agreements to purchase or exchange lands.		
Proj. No.	23-02	Capital Project Title	GVWSA LiDAR Mapping
Capital Project Description	Detailed contour mapping of ground, vegetation and tree cover (3D scanning)		
Asset Class	L	Board Priority Area	No Alignment
Corporate Priority Area	Water		
Project Rationale	LiDAR (which stands for Light Detection and Ranging) uses light in the form of a pulsed laser to measure ranges (distances). LiDAR can be acquired when orthophotography or other data is collected from the air. LiDAR provides three-dimensional information about the forest stand structure which can be used by GIS (Geographic Information Systems).		

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 09-01	<b>Capital Project Title</b> Leech River Watershed Restoration	<b>Capital Project Description</b>	A 17 year project to restore the Leech WSA lands for water supply.
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> A 17 year project to 2025 to restore the Leech WSA lands for water supply. An update of projects completed and planned was provided in June 2019 (RWSC Report #19-13). Annual funding has been increased during this 5 year plan from \$150,000 to \$200,000 per year in order to match the overall project budget of \$5,756,000 in the last 7 years of the project. <b>The proposed final year of funding in 2025 has been added to the plan.</b>			
<b>Proj. No.</b> 16-01	<b>Capital Project Title</b> Replace Gatehouse at Goldstream Entrance	<b>Capital Project Description</b>	The GVWSA entry gatehouse at Goldstream is past end of life and is to be replaced with a purpose built structure with improved vehicle flow and security
<b>Asset Class</b> B	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> Enhanced security is required at the Goldstream entrance to the Water Supply Area. The existing gatehouse/first aid trailer has reached end of life and is unsuitable and located inside the secured area. <b>A site design and purpose built facility with in/out roads, fencing and upgraded autogates (17-09) is planned requiring funding consistent with the project. The scope and scale of this project has increased since the current location is no longer considered feasible/advantageous for the upgrade.</b>			
<b>Proj. No.</b> 16-06	<b>Capital Project Title</b> Goldstream IWS Field Office	<b>Capital Project Description</b>	Renewal of Water Quality field office, lab and equipment and supplies storage and Watershed Protection office, training, emergency response, storage and interpretation space at Goldstream entrance, replacing temporary trailers.
<b>Asset Class</b> B	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> Watershed Protection staff (26 FTE and 6 seasonal auxiliaries) are currently located in 2 trailers and a house at the Goldstream Gate entrance to the water supply area, and in office space at the Integrated Water Services office in View Royal. The ATCO trailers were considered temporary office space since their implementation over 10 years ago. The trailers are old, prone to leaks and a concern for mold. Water Quality field staff are located in another converted facility in the Goldstream area. The separation of staff between various Goldstream facilities and the View Royal location causes inefficiencies and organizational difficulties. In addition, there are insufficient facilities for training, equipment storage, emergency management and public education. An initial investment in 2016 was used to develop a needs assessment for the building and surrounding Goldstream entrance area. Funds in 2020 will be used to develop a design with building and site construction planned for 2021 and 2022. <b>Funding has been moved forward by one year.</b>			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 17-02	<b>Capital Project Title</b> Leech River HydroMet System	<b>Capital Project Description</b>	Installation of a network of hydrometeorological stations to collect water quantity and quality information for the Leech WSA.
<b>Asset Class</b> E	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> A 17 year \$ 5.756 M capital plan is being carried out to restore the Leech Water Supply Area (Project #09-01) to prepare for future water needs. Currently only one hydrological measuring station is capturing flow and turbidity measurements 3.8 km downstream of the future water intake on the Leech River. In order to understand and predict the effect of precipitation, storm events and various restoration management measures on Leech River water quality and quantity, a network of hydrological measuring stations is needed further upstream in the Leech River watershed. This capital project first funded a design study of the most effective and efficient monitoring system that could be implemented (\$10,000) prior to funding implementation beginning in 2018 (\$80,000). Additional funding requests of \$30,000 in 2020 (new total \$100,000) and \$10,000 in 2021 (new total \$25,000) to provide assistance in accessing and addressing safety issues at new weather and hydrology monitoring sites and installing the equipment. Funding requests reflect difficult terrain and access to reach monitoring locations.			
<b>Proj. No.</b> 17-06	<b>Capital Project Title</b> Weeks Lake Area Environmental Assessment and Remediation	<b>Capital Project Description</b>	Assessment and remediation of the Weeks Lake gravel pit (lead from firearms) and Weeks Lake (metals and hydrocarbons from dumping).
<b>Asset Class</b> L	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> Weeks Lake and the surrounding area are suspected to be contaminated by historic use of the area for unregulated public activities. An assessment for lead contamination in the Weeks Lake gravel pit from firearms use began in 2017 with remediation works planned for 2019. The assessment completed in 2018 found surficial soil contamination in the top 15 cm throughout most of the northern half of the gravel pit. A remediation plan (2019) estimated a cost of \$250,000 to remove and dispose of the contaminated soil (classed as hazardous waste). Additional funding of \$145,000 has been added to the original 2020 request to adequately fund the gravel pit remediation work. Funds in 2021 are estimated for further sampling and possible remediation of Weeks Lake which was found to have minor contamination in the lake sediment.			
<b>Proj. No.</b> 17-09	<b>Capital Project Title</b> Goldstream Gate Upgrade	<b>Capital Project Description</b>	The main entrance autogate in Goldstream is past end of life and requires replacement with lifting in/out gates along with project 16-01.
<b>Asset Class</b> S	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> The security autogates are past end of life and are to be replaced with more effective security infrastructure. This project has been delayed in order to coordinate with construction of a replacement Gatehouse at the Goldstream entrance (16-01).			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 18-05	<b>Capital Project Title</b>	GVWSA Forest Fuel Management/FireSmart Activities	<b>Capital Project Description</b>
			Implementation of forest fuel management and FireSmart actions in strategic locations for wildfire risk management in the GVWSA.
<b>Asset Class</b> L	<b>Board Priority Area</b>	No Alignment	<b>Corporate Priority Area</b> Water
<b>Project Rationale</b> Wildfire is the greatest threat to water quality in the GVWSA. In 2014 - 2018 CRD staff completed two new fuel reduction corridor projects. Funding to tender contract projects is required in order to complete priority fuel management projects over and above existing staff effort which will be focused on maintenance of existing fuel managed sites. A requested increase from \$75,000 to \$100,000 annually reflects costs experienced in the first year of tendering fuel management work. The need for fuel management to address priority areas will be ongoing and funding is required annually for the 5 year period. An additional year of funding is added in 2025.			
<b>Proj. No.</b> 18-11	<b>Capital Project Title</b>	Large Equipment Storage (Field Operations Centre)	<b>Capital Project Description</b>
			Two additional bays are to be added to the existing fire/spill equipment warehouse at the FOC to shelter large water supply infrastructure equipment.
<b>Asset Class</b> B	<b>Board Priority Area</b>	No Alignment	<b>Corporate Priority Area</b> Water
<b>Project Rationale</b> Increased protected storage is required for IWS equipment at the Field Operations Centre in Goldstream. The existing Fire and Spill Equipment Warehouse and adjacent covered storage is sound and fully utilised. Funds are for additional covered storage bays to accommodate additional large IWS equipment. The upgrade was recommended in the Building Needs Assessment for the Watershed Protection Operations Centre (16-06).			
<b>Proj. No.</b> 19-02	<b>Capital Project Title</b>	Whiskey Creek Bridge Replacement (Sooke WSA)	<b>Capital Project Description</b>
			Replacement of the existing undersized bridge with a longer and higher concrete structure.
<b>Asset Class</b> S	<b>Board Priority Area</b>	No Alignment	<b>Corporate Priority Area</b> Water
<b>Project Rationale</b> Whiskey Creek bridge is located on the Leechtown Main Road, one of the main access routes to Sooke Lake Dam and other critical IWS infrastructure. Whiskey Creek requires a larger bridge as it has been overtopped by storm events in the past and this poses water quality, environmental and safety risks. The project has been moved forward from 2022 to 2023 to allow higher priorities to be addressed first.			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 19-19	<b>Capital Project Title</b> Hydromet Upgrades Sooke and Goldstream	<b>Capital Project Description</b>	Install additional hydrology monitoring sites on Sooke Lake Reservoir inflow streams and increase instrumentation on meteorological stations in Sooke and Goldstream watersheds.
<b>Asset Class</b> E	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> Only the main tributary inflows into Sooke Lake Reservoir are monitored. To better understand the hydrology of the Sooke watershed, additional hydrology monitoring sites are required. The existing meteorological stations in Sooke and Goldstream watersheds have only basic instrumentation and would benefit from additional sensors and upgrades to improve the quality of the meteorological data. The proposed funds for 2020 have been increased by \$20,000 to cover the costs associated with site preparation, addressing site safety issues and assistance with station installation.			
<b>Proj. No.</b> 20-01	<b>Capital Project Title</b> Kapoor Main Mile 1 Bridge and Asphalt Upgrade	<b>Capital Project Description</b>	Replacement of the existing undersized culvert with a large bridge as well as nearby asphalt repair or replacement.
<b>Asset Class</b> S	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> The existing culvert at Mile 1 on Kapoor Main is undersized, has evidence of buried organics in the fill material and has oversteepened, unstable banks. The culvert will be removed and a bridge installed to improve water carrying capacity at peak flows, fish passage and bank stability. The asphalt section uphill of the bridge will also be repaired or replaced as a component of the project. <b>The project has been moved forward from 2021 to 2022 to allow higher priorities to be addressed first.</b>			
<b>Proj. No.</b> 20-29	<b>Capital Project Title</b> Gravel crushing 14G and 10S quarry (Sooke and Goldstream WSA)	<b>Capital Project Description</b>	Production of gravel at existing quarries in Sooke and Goldstream WSAs.
<b>Asset Class</b> S	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> The current supply of 19 mm road surfacing gravel needs to be replenished. A tender was let in 2020 to further develop both quarries. Based on the bids received, funds were only sufficient to proceed with one quarry and the 10S quarry was prioritized for gravel production. The additional funds requested in 2021 will allow gravel to be produced at 14G.			
<b>Proj. No.</b> 21-01	<b>Capital Project Title</b> 31N Bridge to Replace Undersized Culvert (Goldstream WSA)	<b>Capital Project Description</b>	Replacement of the existing undersized and failing culvert with a bridge structure.
<b>Asset Class</b> S	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b>	Water
<b>Project Rationale</b> The undersized and failing culvert on the 31N Road in the Goldstream Water Supply Area requires replacement with a bridge structure in 2021. <b>Funding has been increased to reflect an estimated cost for bridge supply and install of \$325,000.</b>			

Service: 2.670 Regional Water Supply			
Proj. No.	21-26	Capital Project Title	Road Deactivation/Rehabilitation in the GVWSA
Capital Project Description	Deactivate or rehabilitate unneeded roads in the Sooke and Goldstream WSAs.		
Asset Class	L	Board Priority Area	No Alignment
Corporate Priority Area	Water		
Project Rationale	A review was undertaken to identify roads in the Sooke and Goldstream WSAs that could be rehabilitated and removed from the road network without undue impact to operations, wildfire response and security. Funding is required over the 5 year period to make progress on the roads identified to be deactivated/rehabilitated.		
Proj. No.	21-27	Capital Project Title	Autogate Installations on Primary Access Routes
Capital Project Description	Install autogates on the main access routes where the Sooke Hills Wilderness Trail and E&N rail line cross to improve		
Asset Class	S	Board Priority Area	No Alignment
Corporate Priority Area	Water		
Project Rationale	Continued residential growth and corresponding increasing recreational pressure bring the public close to critical works (Goldstream Treatment Plant, and Ammonia Injection building). Recreational use of the Sooke Hills Wilderness Trail and Park also generate trespass into the GVWSA, and Drinking Water Protection Zone. The proposed autogates improve security by 24 hour recorded keycard access operation and improved location to increase security where the Sooke Hills Wilderness Trail crosses the primary GVWSA access road.		
Proj. No.	21-28	Capital Project Title	GVWSA Land Acquisition Priorities
Capital Project Description	Acquisition of priority GVWSA catchment and buffer lands.		
Asset Class	L	Board Priority Area	No Alignment
Corporate Priority Area	Water		
Project Rationale	Funding to support acquisition of priority GVWSA catchment and buffer lands to meet Regional Water Supply Strategic Plan goals.		



Service: <b>2.670</b> <b>Regional Water Supply</b>			
Proj. No. 22-02	Capital Project Title	Muckpile Bridge Supply and Install (Deception)	Capital Project Description
Asset Class S	Board Priority Area	No Alignment	Corporate Priority Area
Project Rationale Replacement of undersized culverts with a concrete deck L100 bridge which will also improve fish passage and western toad migration.			
Proj. No. 23-03	Capital Project Title	Air curtain burner for fuel management	Capital Project Description
Asset Class E	Board Priority Area	Climate Action & Environmental	Corporate Priority Area
Project Rationale In order to prevent forest fuels from accumulating from clearing and forest fuel management projects, the woody debris is chipped and dispersed as possible, and the remainder is piled and burned. Opening burning of woody debris is restricted by the Open Burning Smoke Control Regulation, which restricts the days and conditions under which woody debris can be burned in order to reduce the amount and dispersion of smoke generated, especially near urban areas. This limits the timing of burning in the GVWSA to few opportunities and may not allow all required burning to be completed in a given year. An air curtain burner can be transported to a site, fed with woody debris, and very little if any smoke is generated as the fuel is burned quickly by feeding it with air and an "air curtain" contains the smoke within the burner. <b>The project budget has been moved ahead to 2021 and reduced due to shared funding with CRD Regional Parks and Environmental Protection programs.</b>			
Proj. No. 23-04	Capital Project Title	17S/Sooke Main Bridge Replacement	Capital Project Description
Asset Class S	Board Priority Area	No Alignment	Corporate Priority Area
Project Rationale The current structure (3 concrete culverts side-by-side with a concrete deck) does not allow adequate room to pass potential storm debris. The most recent engineering inspection stated this recycled structure is in fair shape, with spalling of the concrete. The structure is planned to be replaced with a free span concrete bridge. <b>The project has been moved forward from 2023 to 2025 to allow higher priorities to be addressed first.</b>			

Service: 2.670		Regional Water Supply			
Proj. No.	24-01	Capital Project Title	6M/Judge Creek Culvert Replacement (Sooke WSA)	Capital Project Description	Undersized culvert replacement
Asset Class	S	Board Priority Area	No Alignment	Corporate Priority Area	Water
Project Rationale	This culvert is very undersized on a slow moving section of creek, which seasonally can be overtopped and unpassable for vehicles. This culvert with be replaced with a larger, fish-friendly structure.				

Proj. No.	16-10	Capital Project Title	Post Disaster Emergency Water Supply	Capital Project Description	Identify and procure emergency systems for post disaster preparedness.
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
Project Rationale	In the event of a disaster, it is proposed to have in place the ability to source, treat (if required) and distribute drinking water during the initial and sustained response and recovery phases to the public. This item will see the study of the issue in 2016 and 2017 with the anticipated purchase of one or more emergency distribution systems in 2017.Initial investigation has highlighted areas, such as having hardened hydrants/standpipes that the CRD should be investing in. Additional funds are required to start implementing these additional works.				

Proj. No.	17-13	Capital Project Title	Asset Management Plan	Capital Project Description	Development of a plan to inform future areas of study and highlight critical infrastructure improvements.
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
Project Rationale	This plan will bring various components together from items 14-01, 16-07, 16-08, 16-09, 16-10 and 16-11 and form a strategic plan that will identify future study and construction requirements with capital replacement budgets and schedules.Additional funds are required to complete additional investigations highlighted in the 2017 study.				

Proj. No.	19-04	Capital Project Title	Seismic Assessment of Critical Facilities	Capital Project Description	Identified as a priority from Strategic Plan, a seismic assessment of critical facilities and a supply system resilience feasibility study will be undertaken.
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
Project Rationale	A Water Supply System Strategic Plan update occurred in 2017. Seismically assessing critical facilities and ensuring water supply is resilient has been highlighted as a priority to ensure a functioning water supply system after a seismic event. With the exception of dams, all critical facilities including the Japan Gulch and Sooke River Road Disinfection facility will be seismically assessed in a desktop study and confirmed through field inspections to determine if they meet current post-disaster requirements. Additionally, a feasibility study of critical infrastructure will identify and assess whether plans, procedures and necessary infrastructure are in place in the event key infrastructure fails. The results of the assessment will inform future investigation and capital improvements if required. Funds are required to retain a consulant to seismically asses critical facilities within the water supply system.				

<b>Service: 2.670</b> <b>Regional Water Supply</b>			
<b>Proj. No.</b> 19-15	<b>Capital Project Title</b> Hydraulic Capacity Assessment and Transient Pressure Analysis	<b>Capital Project Description</b> Determine the existing level-of-service for the RWSC transmission system and conduct a transient pressure analysis	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The RWSC transmission is complex with all the connection points to it. Funding is required to determine the available pressures and flows throughout the transmission system and whether it is susceptible to transient pressure waves.			
<b>Proj. No.</b> 19-28	<b>Capital Project Title</b> Goldstream System Hydraulic Analysis	<b>Capital Project Description</b> Analysis and documentation of hydraulics of the Goldstream system.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> A study to quantify the volume and available flow rate from the Goldstream system is required to qualify the operational conditions in the event it is used as an emergency backup for the Sooke Lake system.			
<b>Proj. No.</b> 20-02	<b>Capital Project Title</b> Supply System Resilience Feasibility Study	<b>Capital Project Description</b> Identified as a priority from the Strategic Plan, a study of water supply system's resilience and high level measures to	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The RWSC currently has one primary water supply and one backup water supply with single feeds from each system. Funding is required to assess the water supply system's resilience and outline high level measures to make important assets resilient.			
<b>Proj. No.</b> 20-07	<b>Capital Project Title</b> Deep Northern Intake & Transmission Pipeline Study	<b>Capital Project Description</b> A technical and business case analysis will be carried out with possible expansion and filtration study upstream of the head tank - this is to replace 2016-09	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> A technical and business case analysis will be carried out on an additional intake from the deeper, northern area of the Sooke Lake Reservoir. Additionally, a filtration siting study will be undertaken due to the interconnectedness of the two works.			

<b>Service:</b> 2.670			<b>Regional Water Supply</b>		
<b>Proj. No.</b>	20-08	<b>Capital Project Title</b>	Regional Water DCC Program	<b>Capital Project Description</b>	Design of a Regional DCC Program
<b>Asset Class</b>	S	<b>Board Priority Area</b>	0	<b>Corporate Priority Area</b>	0
<b>Project Rationale</b> <i>The municipalities are developing and growing and may result in upgrades to maintain the level of service due to development. Funds are required to design a Regional Water Development Cost Charge program.</i>					
<b>Proj. No.</b>	20-10	<b>Capital Project Title</b>	Condition & Vulnerability Assessment	<b>Capital Project Description</b>	Conduct a condition assessment of critical supply infrastructure and assess its possibility of risk.
<b>Asset Class</b>	S	<b>Board Priority Area</b>	0	<b>Corporate Priority Area</b>	0
<b>Project Rationale</b> <i>The RWSC is a large system with infrastructure of various ages and condition. Funding is required to conduct a condition assessment of critical infrastructure, such as Humpback PRV, and assess their risk of failure and provide a high level timeline for replacement/renewal.</i>					
<b>Proj. No.</b>	20-11	<b>Capital Project Title</b>	Develop Master Plan	<b>Capital Project Description</b>	Develop a long term strategic plan to anticipate water demand, water treatment, and future siting of facilities.
<b>Asset Class</b>	S	<b>Board Priority Area</b>	0	<b>Corporate Priority Area</b>	0
<b>Project Rationale</b> <i>The RWSC is providing water to an increasing population in the CRD. Due to the size and complexity of the supply system, improvements to increase capacity has to be identified and planned out well in advance of the need for the additional water. Funding is required to assess water demand vs available</i>					
<b>Proj. No.</b>	21-05	<b>Capital Project Title</b>	Level of Service Agreement	<b>Capital Project Description</b>	From #19-15 & #20-11, develop level-of-service agreements for participating municipalities to address hydraulic capacity of infrastructure.
<b>Asset Class</b>	S	<b>Board Priority Area</b>	0	<b>Corporate Priority Area</b>	0
<b>Project Rationale</b> <i>The RWSC supplies water directly and indirectly to 12 municipalities. Based upon Capital Projects #19-15 and #20-11, level-of-service agreements for participating municipalities will be developed to address hydraulic capacity of infrastructure.</i>					

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 15-03	<b>Capital Project Title</b> Sooke Intake Screens Condition Assessment & Replacement	<b>Capital Project Description</b> Renewal of the aging Sooke Intake Tower and equipment to maintain water supply.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>The Intake Tower is an integral part of the Regional Water System and is the primary raw water feed to Japan Gulch and Sooke River Road Water Treatment Plants. Currently there is no redundancy within the structure in the event of mechanical failure. In 2016 Stantec Consulting Ltd. completed an assessment of the overall structure including major components consisting of: Travelling Screen, Sluice Gates/Actuators, and Electrical System. The assessment identified required remedial works to the major components that will be carried out over 2017 and 2018. In 2016 a Seismic Structural Analysis will be completed to assess the vulnerability of this structure and identify options of upgrades or replacement of the structure to meet current seismic codes. In 2017 Stantec had provided renewal and replacement options for the Intake Tower, additional funds are required to renew the Intake Tower to ensure proper functioning screens, sluice gates/actuators and electrical system.</i>			
<b>Proj. No.</b> 18-07	<b>Capital Project Title</b> Replacement of UV System	<b>Capital Project Description</b> Replacement of the UV system at the Goldstream Water Treatment Plant	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>Two 24" UV disinfection units that were decommissioned from the old Charters Creek plant are required to be installed at the JG plant along with electrical and control connections. Inlet and outlet valves are in place, but require 24" stainless steel piping to insert units into place. Funding is required to relocate existing UV disinfection units to the JG plant and provide electrical &amp; control and piping connections. <b>Construction has been spread over two years to correspond with construction over the winter period.</b></i>			
<b>Proj. No.</b> 18-08	<b>Capital Project Title</b> Bulk Supply Meter Replacement Program	<b>Capital Project Description</b> Planned replacement of aging bulk meter replacement based upon a condition assessment and water audit.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>This item is to replace, upgrade and install new bulk water meters and related equipment that measure flow and volumes of water delivered to the wholesale customers. Many of the meter stations are in need of upgrading. Funding is required to replace the flow meter and appurtenances. <b>Funding is required for Blue Ridge, Alderly, Holland and Maplewood replacements.</b></i>			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 18-15	<b>Capital Project Title</b> Corrosion Protection Program	<b>Capital Project Description</b> Study deficiencies in the current material protection and implement recommendations.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>This item is to assess, design and implement cathodic protection for the various infrastructure, including steel pipes, that are susceptible to corrosion. The supply system has various implementations of cathodic protection ranging from interior/exterior coatings for pipe and passive anodes to impressed current systems with variable results and condition. Funding is required to retain a specialist to conduct a high level assessment of existing infrastructure with recommendations for additional investigation or areas that require immediate attention.</i>			
<b>Proj. No.</b> 18-18	<b>Capital Project Title</b> Main No.3 Segment Replacement	<b>Capital Project Description</b> Replacement of segments of Main No. 3 based upon previous studies.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>The existing Main No. 3 is approximately 70 years old. Some section of the 22 km main are steel pipe in known potentially corrosive soils. It is proposed to eventually replace a segment of Main #3 on Wale Road, Island Hwy. and Adams Place in Colwood and View Royal. Conceptual design and options analysis will be undertaken in 2018 with detailed design and construction commencing in 2019 to 2022. Funding is required to retain a consultant to undertake design and to construct a replacement to Main No. 3.</i>			
<b>Proj. No.</b> 19-05	<b>Capital Project Title</b> Repairs - Kapoor Shutdown	<b>Capital Project Description</b> Repair items such as defects in the Kapoor tunnel, replacement of critical valves, intake exterior inspection and actuator replacement while the Kapoor tunnel is shutdown.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>During the 2016 Kapoor Tunnel inspection numerous deficiencies were noted. Some of the repairs were made and inspected in 2017. Funds are required to complete remaining identified repairs as well as conduct other works, such as head tank valve maintenance, dive inspection of the Intake Tower, hydraulic actuator line replacement, that can only be conducted when the Kapoor Tunnel is offline.</i>			
<b>Proj. No.</b> 19-23	<b>Capital Project Title</b> Critical Spare Equipment Storage & Pipe Yard	<b>Capital Project Description</b> Plan, design and construct a critical equipment storage building.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>Additional and accessible storage is required at the pipe yard for critical spare equipment such as repair bands and clamps. Funds are required to plan, design and construct an equipment storage building accessible by loading vehicles.</i>			

Service: 2.670 Regional Water Supply			
Proj. No.	20-13	Capital Project Title	Electrical Isolation Audit
Capital Project Description	Inspection audit of facilities to ensure that there is sufficient electrical separation and isolation for safety.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The RWSC has numerous facilities with electrical and mechanical equipment within the same room. Funds are required to conduct and inspection of the facilities and ensure there is sufficient separation to reduce the risk of failure and for safety.		
Proj. No.	20-16	Capital Project Title	Cecelia Meter Replacement
Capital Project Description	Replacement of the Cecelia billing meter as well as its enclosure.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The St Giles and Cecelia meters are aging and in hard to maintain locations. Funding is required to construct new meter sites and decommission and demolition the old sites.		
Proj. No.	20-17	Capital Project Title	Decommission Smith Hill Site
Capital Project Description	Plan and decommission the abandoned Smith Hill reservoir site.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Smith Hill reservoir has not been in operation for many years. Funds are required to plan for decommission the site in 2020 and then carry out decommissioning in 2023.		
Proj. No.	20-18	Capital Project Title	Goldstream Main #4 Replacement
Capital Project Description	Plan and replacement of the concrete pipe portion of Main #4.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Main #4 transmission main going through Goldstream Ave in Langford is concrete pipe and should be replaced. Funds are required to plan a new alignment and logistics of replacement in 2020 with actual replacement part of Project 21-11.		
Proj. No.	20-32	Capital Project Title	pH Adjustment Facility
Capital Project Description	Design and construct a pH adjustment facility based upon the results of the pH and corrosion study.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	From the 2019 Capital Project, pH and Corrosion Study, a new facility to adjust pH in the transmission system will be designed and constructed.		

Service: 2.670 Regional Water Supply			
Proj. No.	20-33	Capital Project Title	Sooke Intake Screens Replacement
Capital Project Description	Emergency replacement of the Sooke Intake screens.		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	In January 2020 the Intake Screens failed, funds are required for the emergency replacement of the screens over the winter of 2020-2021.		
Proj. No.	21-06	Capital Project Title	Sooke Lake Dam Spillway Hoist Replacement
Capital Project Description	Replacement of the sluice gate spillway hoist at Sooke Lake Dam.		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Sooke Lake Dam Spillway Hoist is at it's end of life and poses a risk of failure when required for use of lowering the high level gate barriers. Funds are required to replace the hoist.		
Proj. No.	21-07	Capital Project Title	Goldstream Water Treatment Plant Communications Upgrade
Capital Project Description	Increase reliability and resilience of data and voice communications between the UV Plant. Sodium Hypochlorite Building.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The communications systems between the UV Plant, Sodium Hypochlorite Building and Ammonia Building operate on separate systems, requiring additional time and processes to access one from the other. Funds are required to optimize the communications system to increase reliability and resilience of data and voice communications between the facilities.		
Proj. No.	21-08	Capital Project Title	Goldstream Water Treatment Plant Emergency Automation
Capital Project Description	Installation of automatic valves and controls to safeguard chemicals in the event of dosing line breaks		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Funds are required to automate chemical dosing line isolation to ensure employee safety in the event of a chemical line break.		
Proj. No.	21-09	Capital Project Title	Goldstream Water Treatment Plant Demolition
Capital Project Description	Plan and construct provisions demolition.		
Asset Class	S	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The Goldstream Water Treatment Plant has undergone numerous upgrades and updates, both large and small since its initial construction. There are numerous vestigial mechanical and electrical assets that require planned removal. Funds are required to plan and remove unused assets that affect maintenance of the system.		



Service: 2.670 Regional Water Supply			
Proj. No.	21-10	Capital Project Title	SCADA Upgrades
Asset Class	E	Board Priority Area	0
Capital Project Description	Update the SCADA Master Plan in conjunction with the Juan de Fuca Water Distribution. Saanich Peninsula Water		
Corporate Priority Area	0		
Project Rationale	The SCADA and radio system utilized by the RWS comprises of components ranging from 2-25 years in age. A planned replacement of assets, to be coordinated with the Juan de Fuca Water Distribution and Saanich Peninsula Water & Wastewater Systems is required to create a more resilient and cohesive communications system.		
Proj. No.	21-11	Capital Project Title	RWS Supply Main No. 4 Upgrade
Asset Class	S	Board Priority Area	0
Capital Project Description	Upgrade vulnerable sections of the RWS Supply Main No. 4 to a resilient system to better able to withstand a seismic event.		
Corporate Priority Area	0		
Project Rationale	Sections of RWS Supply Main No. 4 have been identified as being vulnerable due to age and material type during a seismic event. This project is part of a partially grant funded project partnered with the Saanich Peninsula Water System.		
Proj. No.	21-12	Capital Project Title	SRRDF Upgrade
Asset Class	E	Board Priority Area	0
Capital Project Description	Increased water flows in the Sooke region have resulted in an additional sodium hypochlorite dosing pump and		
Corporate Priority Area	0		
Project Rationale	Due to increased water flows in the Sooke region, an additional sodium hypochlorite dosing pump and automation is required. Funds are required to carry out the upgrades.		

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 16-16	<b>Capital Project Title</b> Implications from Goldstream Dam Safety Review	<b>Capital Project Description</b> Conduct dam improvements at the Goldstream dams that resulted for the Dam Safety Review and routine inspections (refer to the Dam Safety	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b>	0
<b>Project Rationale</b> <i>The Goldstream Dams Dam Safety Review was initiated in 2015 and delivered in 2016 and the review provided recommendations for dam safety improvements for the 11 dams in the Goldstream Watershed. The dam deficiencies and related projects are identified in the Dam Safety Database.</i>			
<b>Proj. No.</b> 16-17	<b>Capital Project Title</b> Butchart Dam No. 5 Remediation	<b>Capital Project Description</b> Phase 1 Rehabilitation (grouting) of Butchart Dam No. 5 and planning for Phase 2.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b>	0
<b>Project Rationale</b> <i>Butchart Dam #5 was observed to have a sinkhole on the downstream slope. The earthfill dam was founded on limestone in the about 1905 and seepage issues have occurred since that time. A geotechnical investigation was conducted in 2016, and remediation has been recommended by geotechnical consultant. It is proposed to complete detailed design of remediation in 2018 and construction of repairs in 2019.</i>			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 17-25	<b>Capital Project Title</b> Implications from Sooke Lake Dam Safety Review	<b>Capital Project Description</b> Conduct dam improvements at the Sooke Lake Dam that resulted from the Dam Safety Review and routine inspections (refer to the Dam Safety Database)	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The 2016 Dam Safety Review Audit was completed and provided a list of recommended improvements. Upcoming capital work to be completed is identified in the dam safety database.			
<b>Proj. No.</b> 18-19	<b>Capital Project Title</b> Sooke Lake Dam - Instrumentation System Improvements	<b>Capital Project Description</b> Complete dam performance instrumentation system/surveillance improvements for the Sooke Lake Dam.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
The 2016 Dam Safety Review identified and recommended various dam safety surveillance instrumentation improvements including piezometers, weirs, seismometers, etc. An Instrumentation system plan was completed and includes a prioritized list of improvement projects.			
<b>Proj. No.</b> 18-20	<b>Capital Project Title</b> Sooke Lake Dam - Breach Risk Reduction Measures	<b>Capital Project Description</b> Implement measures to reduce Sooke Lake Dam breach implications in the unlikely event of dam failure (refer to the	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
A Dam Breach Assessment and Inundation Zone Mapping project was completed in 2017 by an engineering consultant and risk mitigation measures included structural and non-structural measures to lower risk should a dam breach occur. The measures are captured in the Dam Safety Database.			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 19-07	<b>Capital Project Title</b> Integrate Dam Performance and Hydromet to SCADA	<b>Capital Project Description</b> Integrate the dam safety instrumentation/surveillance (i.e. piezometers and weirs) and Hydromet	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Based on capital project 18-19, dam performance piezometers and weirs and Hydromet/Dam Safety Instrumentation stations will be integrated through the SCADA system.			
<b>Proj. No.</b> 19-08	<b>Capital Project Title</b> Charters Dam Decommissioning	<b>Capital Project Description</b> Charters Dam has been retired from drinking water service, no other interested owners, plan to decommission.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The Charters Dam has been retired from drinking water service with no other interested owners. Funds are required to plan and implement decommissioning of the dam prior to the next legislated Dam Safety Review.			
<b>Proj. No.</b> 19-09	<b>Capital Project Title</b> Cabin Pond Dams Decommissioning	<b>Capital Project Description</b> The Cabin Pond Dams (x2) have been retired from drinking water service, plan to decommission.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The two Cabin Pond Dams has been retired from drinking water service with no other interested owners. Funds are required to plan and implement decommissioning of the dams.			
<b>Proj. No.</b> 19-12	<b>Capital Project Title</b> Goldstream Dams Instrumentation Improvements	<b>Capital Project Description</b> Conduct dam safety instrumentation/surveillance improvements (refer to report from Thurber Engineering).	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Thurber completed a study on the Goldstream Dam instrumentation and found numerous deficiencies with respect to dam safety. Funds are required to design and implement improvements to the Goldstream Dam instrumentation.			

<b>Service: 2.670</b> <b>Regional Water Supply</b>			
<b>Proj. No.</b> 19-13	<b>Capital Project Title</b> Dam Safety Instrumentation - Hydromet	<b>Capital Project Description</b> The existing dam safety instrumentation/surveillance equipment is getting older and will need to be replaced/rehabilitated (does not include pending SCADA effort).	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Aging Hydromet/Dam Safety Instrumentation stations maintained by Infrastructure Engineering require replacement so that ongoing monitoring within the watersheds can be maintained. Funds are required for upgrades and replacement of existing Hydromet Stations.			
<b>Proj. No.</b> 20-19	<b>Capital Project Title</b> Goldstream System High Level Outlet Valve Replacements	<b>Capital Project Description</b> The Goldstream and Butchart high level outlet valves have been identified as requiring replacement.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Through dam safety inspections and routine operations, the Goldstream and Butchart high level outlet valves have been identified as requiring replacement. Funds are required to design and replace the valves.			
<b>Proj. No.</b> 20-20	<b>Capital Project Title</b> Saddle Dam Piezometer Installation	<b>Capital Project Description</b> Dam safety instrumentation/surveillance installations (i.e. piezometers) are required to monitor the Saddle Dam to monitor the performance of Saddle Dam and for future stability assessments.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> From the 2019 Capital Project, #19-10, recommendations were made for piezometer installation at Saddle Dam to meet regulatory requirements. Funds are required to design and implement piezometer installation.			
<b>Proj. No.</b> 21-03	<b>Capital Project Title</b> Deception Dam - Dam Safety Review 2021 & Improvements	<b>Capital Project Description</b> Conduct a Dam Safety Review and some improvements for the Deception Dam.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Deception Dam has a consequence classification of "very high" and a dam safety review is required to be completed every ten years under the current B.C. Dam Safety Regulation. The last dam safety review was completed in 2011. The dam safety review is anticipated to be an "audit-style" assessment of the physical condition of the dam, operations, maintenance, surveillance, identification of dam safety deficiencies and recommendations for dam safety improvements. Project includes budget for subsequent year to complete recommended dam safety improvements.			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 21-04	<b>Capital Project Title</b> Saddle Dam - Dam Safety Review 2021 & Improvements	<b>Capital Project Description</b> Conduct a Dam Safety Review and some improvements for the Saddle Dam.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Saddle Dam has a consequence classification of "very high" and a dam safety review is required to be completed every ten years under the current B.C. Dam Safety Regulation. The last dam safety review was completed in 2011. The dam safety review is anticipated to be and "audit-style" assessment of the physical condition of the dam, operations, maintenance, surveillance, identification of dam safety deficiencies and recommendations for dam safety improvements. Project includes budget for subsequent year to complete recommended dam safety improvements.			
<b>Proj. No.</b> 21-21	<b>Capital Project Title</b> Goldstream Dams - Gate Improvements	<b>Capital Project Description</b> logistics planning in 2021, installation in 2022	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Several of the water control gates related to the Goldstream dams are in need of repair and possibly replacement.			
<b>Proj. No.</b> 21-22	<b>Capital Project Title</b> Charters Dam - Dam Safety Review 2021	<b>Capital Project Description</b> Legislated obligation to conduct Dam Safety Review, contingent on outcome of the Decommissioning plan and DSO expectations (relates to Item 10.08)	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Charters Dam has a consequence classification of "high" and a dam safety review is required to be completed every ten years under the current B.C. Dam Safety Regulation. The last dam safety review was completed in 2011. The dam safety review is anticipated to be and "audit-style" assessment of the physical condition of the dam, operations, maintenance, surveillance, identification of dam safety deficiencies and recommendations for dam safety improvements. A dam decommissioning study is in progress and the DSR will only proceed if needed, as determined by the Dam Safety officer.			

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<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 22-08	<b>Capital Project Title</b> Deception Dam Surveillance Improvements	<b>Capital Project Description</b> Replace and supplement the Dam Safety Instrumentation at Deception Dam.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The latest engineering data review identified deficiencies with the existing piezometers and seepage weir. It is proposed to prepare a system improvement plan and thereafter complete repairs, improvmetn and install supplementary dam performance instrumentation.			
<b>Proj. No.</b> 23-01	<b>Capital Project Title</b> Sooke Lake Dam Update Seismic Assessment	<b>Capital Project Description</b> Conduct a seismic assessment of the Sooke Lake Dam as per the previous Dam Safety Reiviews.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The Sooke Lake Dam requires periodic seismic assessment updates. Funds are required to retain a consultant to conduct an update to the Sooke Lake Dam Seismic Assessment.			
<b>Proj. No.</b> 23-07	<b>Capital Project Title</b> Sooke Lake Dam Seismic Retrofits	<b>Capital Project Description</b> Detail and construct seismic retrofits for the existing structures initially focusing on the spillway and gates structures.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The siesmic assessment completed in 2017 included recommendations for siesmic retrofits for Sooke Lake Dam including siesmic anchoring of the spillway, gate structure and the intake tower bridge..			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 23-08	<b>Capital Project Title</b> Regional Watershed Dams – Flood Forecasting System	<b>Capital Project Description</b> Update the existing flood forecasting system (WD4Cast) to a modern version including Standard Operating Procedures and training for staff.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The 2016 Dam Safety Review included a recommendation to improve the flood forecasting system, which is becoming more important with Climate Change. This item will update the existing flood forecasting system from WD4Cast to a modern version including Standard Operating Procedures and training for staff.			
<b>Proj. No.</b> 23-09	<b>Capital Project Title</b> Sooke Lake Dam - Dam Safety Review 2023	<b>Capital Project Description</b> Conduct a Dam Safety Review	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Sooke Lake Dam has a consequence classification of "extreme" and a dam safety review is required to be completed every seven years under the current B.C. Dam Safety Regulation. The last dam safety review was completed in 2016. The dam safety review is anticipated to be and "audit-style" assessment of the physical condition of the dam, operations, maintenance, surveillance, identification of dam safety deficiencies and recommendations for dam safety improvements. Project includes budget for subsequent years to complete recommended dam safety improvements.			
<b>Proj. No.</b> 25-01	<b>Capital Project Title</b> Goldstream Dams - Dam Safety Review 2025	<b>Capital Project Description</b> Conduct a Dam Safety Review	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The Goldstream Watershed Dams have a consequence classification of "low" to "high" and a dam safety review is required to be completed every ten years under the current B.C. Dam Safety Regulation. The last dam safety review was completed in 2015. The dam safety review is anticipated to be and "audit-style" assessment of the physical condition of the dam, operations, maintenance, surveillance, identification of dam safety deficiencies and recommendations for dam safety improvements. Project includes budget for subsequent years to complete recommended dam safety improvements.			



<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 25-02	<b>Capital Project Title</b> Probable Maximum Flood and Inflow Design Flood Updates	<b>Capital Project Description</b> Update the previous edition from 2015 (recommended 10 year review cycle).	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The various Dam Safety Reviews and Canadian Dam Safety Guideline recommend updating the reservoir inflow design flood and freeboard analysis every ten years.			
<b>Proj. No.</b> 19-29	<b>Capital Project Title</b> Leech River Water Quality Monitoring	<b>Capital Project Description</b> Monitor water quality from the Leech River for 2 years	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Prior to utilizing the Leech River as an additional drinking water source, water quality monitoring is required to determine if it is a suitable water source with the current treatment technology utilized. Funds are required to monitor and analyze the water quality from the Leech River.			
<b>Proj. No.</b> 20-03	<b>Capital Project Title</b> Leech River Watershed - Implications for Supply Management	<b>Capital Project Description</b> Review data of Leech Monitoring Project and report on implications of adding Leech to water supply	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> This item is to develop and implement a research program to evaluate the implications of adding Leech Watershed water supply to existing Sooke Reservoir when future demand exceeds current supply			
<b>Proj. No.</b> 20-04	<b>Capital Project Title</b> Sooke Lake HyDy Model Development	<b>Capital Project Description</b> Critical data collection, model building+calibration, model utilization for 3 different scenarios	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> This project consists of the following different phases: 2020/2021 Procurement/Rental of monitoring equipment to fill critical data gaps; 2022 Consulting contract to build the hydrodynamic lake model and calibrate it against existing data; 2022 Consulting contract to run the model for a North Basin intake scenario; 2023 Consulting Contract to run the model for investigating impacts of a diversion of Leech River water into Sooke Lake; 2024 Consulting Contract for investigating impacts of wind induced seiches in Sooke Lake.			

Service: 2.670 Regional Water Supply			
Proj. No.	21-13	Capital Project Title	Flowcam Imaging System
Capital Project Description	Utilize semi-automated algal analysis to meet increased demands without increasing FTEs		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Demand for algal monitoring of the watershed areas has increased due to the monitoring of the Leech Watershed Area and overall increased monitoring due to the potential effects of climate change on the water supply for Greater Victoria. The Flowcam imaging system is a semiautomated flow cytometer imaging system that can increase sample analysis capacity substantially to meet the demand without increasing FTEs in an expert role. Water Quality also analyzes algal samples for CRD-operated local service area drinking water sources and recovers costs through internal charges back to RWS.		
Proj. No.	21-14	Capital Project Title	Sooke Lake Sampling Boat Repair
Capital Project Description	Refurbishment of structural boat parts (floor)		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	The 1994 Sooke Lake Sampling Boat needs replacement of the wood-core floor and a few other smaller repairs to extend its structural life.		
Proj. No.	21-29	Capital Project Title	Microbiological plate pourer
Capital Project Description	Automation of manual process to increase capacity/worker safety		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Currently microbiological media is heated to melting on a hotplate and manually poured into Petri dishes, and sample workload has increased such that staff spend a significant amount of time on this potentially hazardous activity. This piece of equipment automates the process to eliminate the risk of burn injuries from handling hot, sterilized media in glassware.		

Service: 2.670				Regional Water Supply	
Proj. No.	22-05	Capital Project Title	WQ Lab Capital Improvements	Capital Project Description	Building improvements in the lab
Asset Class	B	Board Priority Area	0	Corporate Priority Area	0
Project Rationale	Replacement of floor covering and wooden cabinetry original to the building due to deterioration/ wear and tear.				
Proj. No.	22-06	Capital Project Title	Sooke Lake Food Web Study	Capital Project Description	Assess the aquatic food web structure and create an inventory of fish and invertebrate species and distribution in Sooke Lake Reservoir to be used as
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
Project Rationale	CRD has been using predominantly algal data as an indicator for stream health and condition assessment in the source waters. To gain a better understanding of the source water conditions and how they may change over time it is necessary to expand this indicator system for other trophic levels in the food web. Sooke Lake Reservoir is of particular interest as the primary and critical water source for the GVDWS and therefore a aquatic food web study will be commissioned on this lake.				
Proj. No.	22-07	Capital Project Title	Bulk-Water Connection Backflow Protection Study	Capital Project Description	Investigate all bulk-water connections to CRD or municipal systems and identify the need for backflow protection
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
Project Rationale	While the CRD has a new policy requiring backflow considerations for the design of new connections to CRD supply mains, there are a number of existing connections that are unprotected or that are unknown if protected. Also, there are numerous bulk-water connections to municipal mains (Stratas, First Nation lands, federal lands) that may be unprotected. This study is to create an inventory of all bulk-water connections to public water systems in the GVDWS and to assess the risk of backflow.				

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 23-05	<b>Capital Project Title</b> Renovation of Samplers Hut (2955 Sooke Lk Road)	<b>Capital Project Description</b> Building exterior paint, roof, gutters, flooring, bathroom	
<b>Asset Class</b> B	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The CRD Samplers Hut at 2955 Sooke Lake Road will require extensive building renovations in 2023 to be able to continue to serve as a safe and adequate working place for CRD staff.			
<b>Proj. No.</b> 23-06	<b>Capital Project Title</b> GVDWS Nitrification Study	<b>Capital Project Description</b> Investigate nitrification occurrence and potential impacts on drinking water quality	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> With the operation of the upgraded Goldstream disinfection process (liquid NH3 and hypo) the volatility of the residual products and potential for nitrification in the distribution systems needs to be studied to assess any potential impacts to the drinking water quality.			
<b>Proj. No.</b> 24-02	<b>Capital Project Title</b> Boat Motor Replacement with Electric Outboards (Sooke and Goldstream Boats)	<b>Capital Project Description</b> Pump and trip motor replacement due to age and water quality concerns, large electric outboards are already available from Torqeedo for instance	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> When the existing boat motors are due for replacement they shall be replaced with electric outboard motors to reduce emissions and to provide clean propulsion of CRD boats on the drinking water source lakes. This will reduce the risk of fuels spills and eliminate combustion exhausts entering the water.			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 17-27	<b>Capital Project Title</b> Watershed Bridge and Culvert Replacement	<b>Capital Project Description</b> Replacement of small culverts and bridges throughout the GVWSA.	
<b>Asset Class</b> S	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> <i>This provides annual funding for the replacement of culverts and bridges that have reached end of life and/or are undersized given present knowledge of potential peak water flows and anticipated climate change effects. With the completion of peak flow modelling of all major structures in the Sooke and Goldstream WSAs in 2017, additional funds are required beginning in 2018 to upgrade identified structures to current standards. Costs of upgrades have increased significantly in the last 5 years.</i>			
<b>Proj. No.</b> 17-28	<b>Capital Project Title</b> Watershed Security Infrastructure Upgrade and Replacement	<b>Capital Project Description</b> New, upgrade and replacement of security infrastructure in the GVWSA.	
<b>Asset Class</b> E	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> <i>The outer boundary of the Leech, Sooke and Goldstream Water Supply Areas is approximately 119 kilometers in length. Main access roads are gated and there are 11 kilometers of existing security fencing. A constant effort is needed to maintain a Closed Watershed Policy. Through monitoring, high incident areas are identified, security plans are developed, and security infrastructure (fencing, gates and signage) is installed or upgraded where required. The uplift in provisional funding requested in 2017 has been reduced given full integration of the Weeks Lake area within the GVWSA, completion of fencing and gates related to the Sooke Hills Wilderness Trail and with separate capital projects for autogates.</i>			
<b>Proj. No.</b> 17-29	<b>Capital Project Title</b> Water Supply Area Equipment Replacement	<b>Capital Project Description</b> Hydrometeorological, fireweather and wildfire suppression equipment replacement.	
<b>Asset Class</b> E	<b>Board Priority Area</b> No Alignment	<b>Corporate Priority Area</b> Water	
<b>Project Rationale</b> <i>This provides annual funding for the replacement or upgrading of equipment for wildfire suppression and spill response, fire weather stations, hydro-meteorological monitoring and water quality sampling and monitoring equipment. Given an expansion of the hydrology and meteorology network of stations and sensors, an additional \$50,000 per year is added in 2020 and going forward. In 2021 and going forward, funding is reduced by \$20,000 as water quality equipment will be funded under a separate line item (21-17).</i>			
<b>Proj. No.</b> 17-30	<b>Capital Project Title</b> Transmission Main Repairs	<b>Capital Project Description</b> Emergency repairs to the transmission mains.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>Each year a visual inspection of this critical supply tunnel is carried out by CRD staff. This capital item allows for minor repairs that are discovered during these inspections. This also allows for annual funding for repair of emergency breaks on large diameter supply mains.</i>			

<b>Service:</b> 2.670		<b>Regional Water Supply</b>	
<b>Proj. No.</b> 17-31	<b>Capital Project Title</b> Transmission System Components Replacement	<b>Capital Project Description</b> Replacement and repair of transmission components.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> This is an annual allowance for the capital costs for the replacement and repair of supply system components that fail under normal operation and maintenance during the year.			
<b>Proj. No.</b> 17-33	<b>Capital Project Title</b> Disinfection Equipment Parts Replacement	<b>Capital Project Description</b> Replacement of incidental equipment and parts associated with the disinfection system.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The annual work includes the replacement of the plastic gas feed piping that has become very brittle, installing air valves on the ammonia solution lines, installing and replacing shut off valves on the booster pumps supply piping, installing indicator stems on UV cooling water valves, relocating the UV cooling water feed pipes, improving the landscaping around the UV building to reduce dust and other minor upgrades.			
<b>Proj. No.</b> 17-34	<b>Capital Project Title</b> Supply System Computer Model Update	<b>Capital Project Description</b> Annual update of the regional hydraulic model.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> This item is to allow for staff and consultant time each year to keep the hydraulic computer model current.			
<b>Proj. No.</b> 19-16	<b>Capital Project Title</b> Dam Improvements	<b>Capital Project Description</b> Items not covered by Dam Safety Reviews, but brought up in Dam Safety Inspections and Dam Safety Reviews	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Dam Satey Inspections are carried out throughout the year and result in minor improvements at each dam annually. These improvements are minor in nature and are typically not covered in the Dam Safety Review. Funds are required to carry out the dam safety improvements resulting from Dam Safety Inspections.			

<b>Service: 2.670</b> <b>Regional Water Supply</b>			
<b>Proj. No.</b> 19-22	<b>Capital Project Title</b> SCADA Repairs & Equipment Replacement	<b>Capital Project Description</b> Items not covered by the SCADA Replacement and SCADA Master Plan, but integral in maintaining the SCADA System and revenue meter system.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>This item is to allow for unplanned SCADA repairs and equipment replacement not covered by the capital projects SCADA Replacement.</i>			
<b>Proj. No.</b> 21-15	<b>Capital Project Title</b> Corrosion Protection	<b>Capital Project Description</b> Replace corrosion protection assets, such as coatings, for the transmission system when identified.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>There are numerous assets with varying levels of corrosion protection throughout the RWS system. Funds are required to ensure that corrosion protection assets are replaced or rehabilitated when identified.</i>			
<b>Proj. No.</b> 21-16	<b>Capital Project Title</b> Valve Chamber Upgrades	<b>Capital Project Description</b> Replace failing valves and appurtenances along the RWS supply system.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>The RWS system has numerous isolation and air valves along the transmission system, usually in underground chambers. Funds are required for replacement of valves and chamber upgrades as they are identified.</i>			
<b>Proj. No.</b> 21-17	<b>Capital Project Title</b> Water Quality Equipment Replacement	<b>Capital Project Description</b> Replacement of water quality equipment for the water quality lab and water quality operations	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>This provides annual funding for the replacement or upgrading of equipment for the water quality lab, sampling, and operations. Of this provisional budget, \$20,000 was previously included in item 17-29 (Water Supply Area annual provisional budget)</i>			

Service: 2.670 Regional Water Supply			
Proj. No.	21-18	Capital Project Title	LIMS support
Capital Project Description	Support for LIMS database		
Asset Class	E	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	Provides for support for the laboratory information management system		
Proj. No.	17-35	Capital Project Title	Vehicle & Equipment Replacement (Funding from Replacement Fund)
Capital Project Description	This is for replacement of vehicles and equipment used by CRD Water Services for the day-to-day operation and maintenance of the supply system.		
Asset Class	V	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	This is for replacement of vehicles and equipment used by CRD Water Services for the day-to-day operation and maintenance of the supply system. The Equipment Replacement Fund is used to fund the expenditure.		
Proj. No.	20-22	Capital Project Title	Vehicle for the Dam Safety Program
Capital Project Description	New pick up		
Asset Class	V	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	An additional pick up is required for the dam safety program.		
Proj. No.	20-23	Capital Project Title	Vehicle for the CSE Support Program
Capital Project Description	New Transit Van		
Asset Class	V	Board Priority Area	0
Corporate Priority Area	0		
Project Rationale	A new Transit van is required to support the Confined Space Entry Support program.		



Service: 2.670			Regional Water Supply		
Proj. No. 21-30		Capital Project Title	Vehicle for Warehouse Operations	Capital Project Description	New pick up
Asset Class V		Board Priority Area	0	Corporate Priority Area	0
Project Rationale		For use of the warehouse worker to source supplies and materials in support of the remote sites.This warehouse worker will maintain wastewater stores and will travel and transport as required items between stores locations. A pickup truck will be required.			
Proj. No. 21-24		Capital Project Title	ATV with Tracks (replace Gator)	Capital Project Description	Vehicle to access weather stations during snow conditions
Asset Class V		Board Priority Area	0	Corporate Priority Area	0
Project Rationale		The replacement of the gator with an ATV with tracks will be used to access weather stations in the winter.			
Proj. No. 21-25		Capital Project Title	UV Plant Safety Audit and Equipment Replacement	Capital Project Description	Carry out an audit of the occupied office area of the UV Plant and carry out upgrades
Asset Class V		Board Priority Area	0	Corporate Priority Area	0
Project Rationale		The UV Plant serves as the main occupational space for the UV and Chloramination plant operators. Since construction in 2004 an audit and update of the occupied space has not been carried out to ensure the space meets the current needs. Funds are required to carry out the audit and carry out upgrades.			

<b>Service:</b> 2.670/2.680		<b>Regional Water Supply &amp; JdF Water Distribution Combo</b>	
<b>Proj. No.</b> 16-01	<b>Capital Project Title</b> Upgrades to Buildings at 479 Island Highway	<b>Capital Project Description</b> Maintenance and changes to buildings and office layouts.	
<b>Asset Class</b> B	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The budget includes the following funds to upgrade and renew the buildings at 479 Island Highway: <ul style="list-style-type: none"> <li>• Repairs, upgrades and changes to the buildings (provisional \$50,000)</li> <li>• Painting of the buildings. (provisional \$10,000 annually)</li> <li>• Repair and replacement of carpets, floors and walls. (provisional \$10,000 annually)</li> <li>• Repair, refurbishment and replacement of equipment and property. (provisional \$10,000 annually)</li> </ul>			
<b>Proj. No.</b> 17-01	<b>Capital Project Title</b> Voice Radio Upgrade	<b>Capital Project Description</b> Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Service Life and projected replacement: <ul style="list-style-type: none"> <li>• The service life of the mobile and portable units was forecast as 10 years at minimum, 15 years at maximum in 2005.</li> <li>• The present radio models used in the system have just been taken out of production by the manufacturer, there will be no new units available for purchase as of July 1, 2015.</li> <li>• Support for repairs and maintenance of the present radio will continue for the next 3 years at least.</li> </ul> There are no pressing issues with equipment maintenance or repairs, present repair rates suggest we can maintain the system for the next few years, and perhaps reach a 12-15 year lifespan on the present equipment.			
<b>Proj. No.</b> 20-01	<b>Capital Project Title</b> Portable Pump Station	<b>Capital Project Description</b> Portable pump station to provide backup when a pump station is offline, in construction or to bypass a section of	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The RWS and JdF operation numerous water mains and pump stations. There are situations, when a pump station fails, construction of a pump station or bypassing a section of pipe, where a portable pump station is required to maintain the level of service. Funds will be used in 2020 to design and in 2021 to procure a portable pump station.			

<b>Service:</b> 2.670/2.680 <b>Regional Water Supply &amp; JDF Water Distribution Combo</b>			
<b>Proj. No.</b> 21-01	<b>Capital Project Title</b> Storage Container for vehicle and equipment Tires	<b>Capital Project Description</b> Tires removed from vehicles are stored on site outside of the Fleet office. They need to be stored in a more safe and	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>The tires that are purchased for replacing and winter rotating are stored outside the fleet office on the mezzanine. These tires which include large truck and equipment tires are bulky and heavy. Lifting these tires onto the mezzanine has been identified as a safety hazzard and requires more than one person. A solution to this is to purchase a storage container that can be placed and locked in the yard at 479 for the storage of the tires. The container will be at ground level which means that the onsite forklift can be used to move the tires around.</i>			
<b>Proj. No.</b> 17-03	<b>Capital Project Title</b> Office Equipment, Upgrades and Replacements	<b>Capital Project Description</b> Upgrade and replacement of office equipment as required.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>Funds will be used for the replacement and upgrading of office equipment and furniture, as required.</i>			
<b>Proj. No.</b> 17-04	<b>Capital Project Title</b> Computer Upgrades	<b>Capital Project Description</b> Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> <i>This is an annual upgrading and replacement program of computers, photocopiers, network, monitoring and associated equipment, as required. This item has been increased from \$160,000 to \$175,000 annually to reflect actual costs.</i>  <i>Capital Budget</i> <i>Network Switch Maintenance \$10,000</i> <i>Additional Wireless Access Points and Maintenance \$15,000</i> <i>Photocopier Replacement \$20,000</i> <i>Additional Data Storage \$15,000</i> <i>Replacement Computers \$75,000</i> <i>Equipment Maintenance (contingency) \$23,000</i> <i>Replace Access Control System - Gates/ Video Cameras \$12,000</i> <i>Total Capital \$170 000</i>			

<b>Service:</b> 2.670/2.680		<b>Regional Water Supply &amp; JDF Water Distribution Combo</b>	
<b>Proj. No.</b> 17-05	<b>Capital Project Title</b> Development of the Maintenance Management Systems	<b>Capital Project Description</b> Develop maintenance management system.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The maintenance management system needs further development to meet user needs and to facilitate reporting. It is proposed that funds be approved for the following IT related projects:- <ul style="list-style-type: none"> <li>• Develop a dashboard to display information.</li> <li>• Investigate standardization of SAP mobile platform.</li> </ul>			
<b>Proj. No.</b> 17-06	<b>Capital Project Title</b> Small Equipment & Tool Replacement (Water Operations)	<b>Capital Project Description</b> Replacement of tools and small equipment for Water Operations as required.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Funds will be used for replacement of a variety of Operations and Welding equipment such as cutting saws, portable generators, gas detectors, Hilti drills, plasma cutter, wire welder, etc.			
<b>Proj. No.</b> 17-07	<b>Capital Project Title</b> Small Equipment & Tool Replacement (Corporate Fleet)	<b>Capital Project Description</b> Replacement of tools and small equipment for Fleet as required.	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Funds will be used for replacement of a variety of Fleet small equipment and tools as required. This includes provision to replace the Vehicle OBD reader for reading engine codes and the shop air compressor.			

**2.670 Regional Water Supply  
Asset/ Reserve Schedule  
2021 - 2025 Financial Plan**

**Asset Profile**

**Regional Water Supply**

System assets include the lands, dams and source water reservoirs within the water supply areas, intake and source conduits, two water treatment plants, pressure regulating facilities, nine supply mains, three balancing reservoirs and revenue water meters in the water transmission system.

**Equipment Replacement Reserve Schedule**

**Reserve Fund: 2.670 Regional Water Supply Equipment Replacement Reserve (covered by CRD-ERF Bylaw)**

**Fund: 1022 Fund Center: 101454**

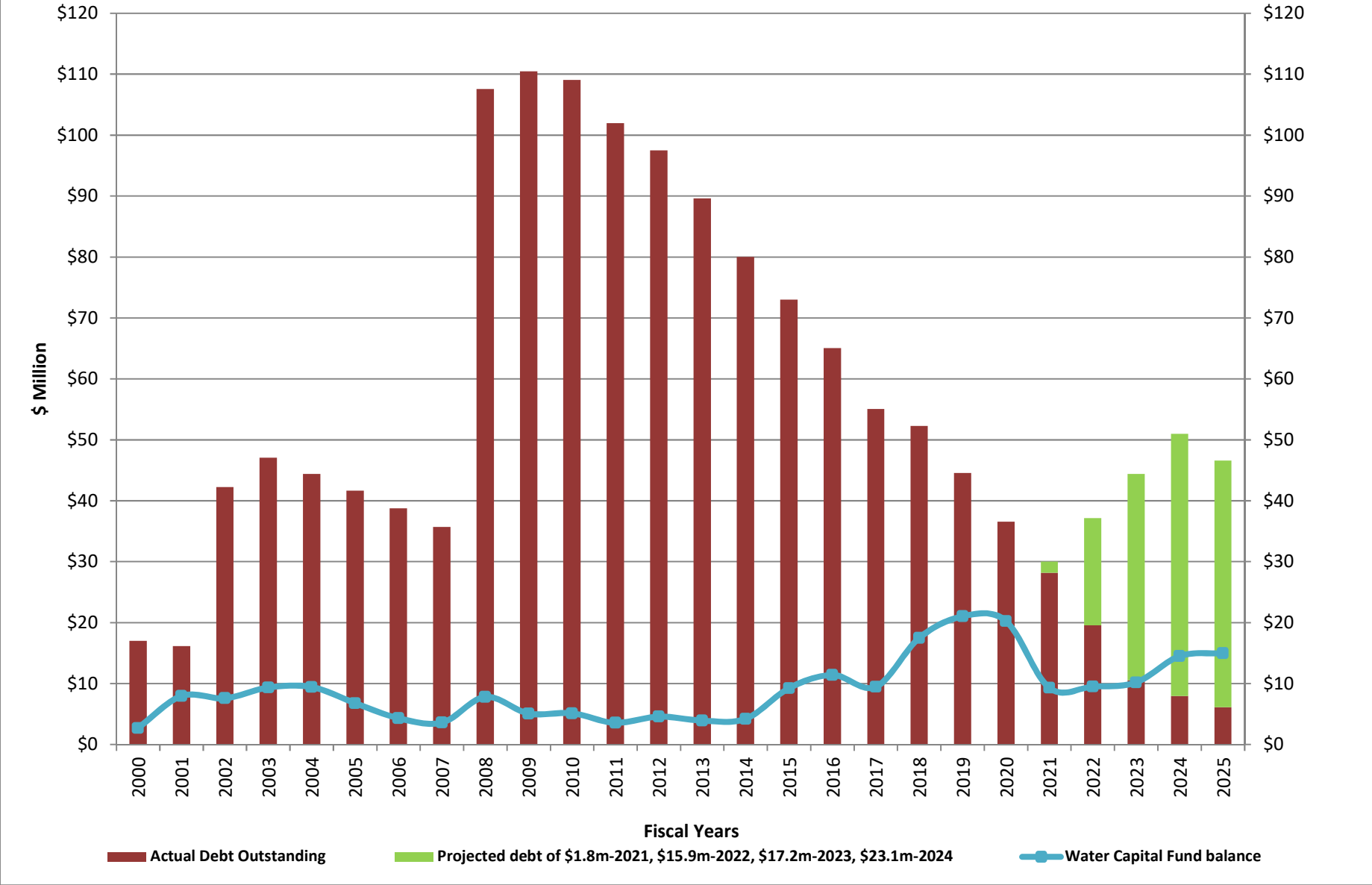
	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
<b>Beginning Balance</b>	2,510,919	2,031,817	2,049,161	2,158,001	2,278,742	2,363,053	2,440,804
<b>Equipment purchases (Based on Capital Plan)</b>	(914,681)	(367,000)	(222,000)	(215,000)	(265,000)	(280,000)	(280,000)
<b>Transfer from Operating Budget</b>	274,300	299,294	297,540	303,491	309,561	315,751	322,066
<b>Proceeds on disposals</b>	133,812	55,050	33,300	32,250	39,750	42,000	42,000
<b>Interest Income*</b>	27,467	30,000					
<b>Ending Balance \$</b>	<b>2,031,817</b>	<b>2,049,161</b>	<b>2,158,001</b>	<b>2,278,742</b>	<b>2,363,053</b>	<b>2,440,804</b>	<b>2,524,870</b>

General Comments:

Reserve Fund is used for the purpose of replacing fleet vehicles including heavy equipment and associated mobile components, as outlined in the capital plan. Proceeds from disposals are estimated at 15% of replacement equipment purchases. Note not all vehicles are sold within the year in which they are replaced.

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

# Regional Water Supply Service (Greater Victoria) Debt Outstanding vs Water Capital Fund Balance



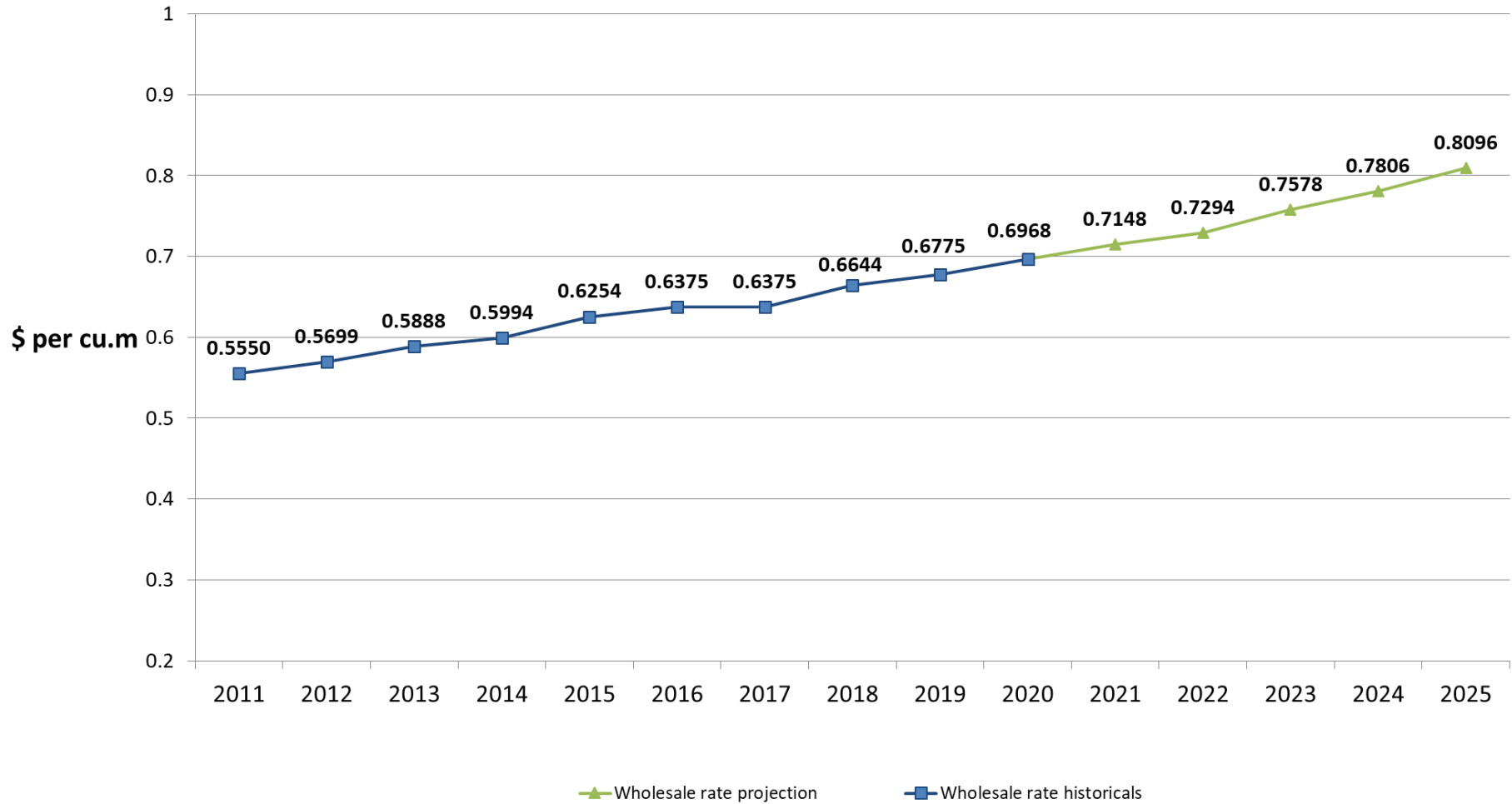
**REGIONAL WATER SUPPLY COMMISSION**  
**Agricultural Water Rate Funding Comparisons 2011 - 2019**

		No. of AR Accounts	No. of AG Accounts	AR Volume m3	AG Volume m3	Avg AR Volume m3 (Vol/Accts)	Avg AG Volume m3	Agri Rate Consumption Costs	Agri Fixed Charge Costs	Total Agri Subsidy Paid out (\$ Cons + Fixed)	Avg Agri Cost \$ (Paid/Accts)	%age of Total Paid out	Rate Differential		
													Municipal Rate m3	Agri Rate m3	Muni-CRD Diff m3
													A	B	A - B
Western Communities & Sooke *															
2019	86	14	36,598	50,277	426	3,591	\$ 165,297	\$ -	\$ 165,297	\$ 1,653	11.1%	\$ 2.1132	\$ 0.2105	\$ 1.9027	
2018	95	18	40,657	19,669	428	1,093	\$ 112,411	\$ -	\$ 112,411	\$ 995	7.9%	\$ 2.0739	\$ 0.2105	\$ 1.8634	
2017	81	11	33,458	11,628	413	1,057	\$ 76,754	\$ -	\$ 76,754	\$ 834	5.6%	\$ 1.9129	\$ 0.2105	\$ 1.7024	
2016	80	11	41,248	8,652	516	787	\$ 84,950	\$ -	\$ 84,950	\$ 934	5.9%	\$ 1.9129	\$ 0.2105	\$ 1.7024	
2015	79	11	33,537	7,078	425	643	\$ 64,968	\$ -	\$ 64,968	\$ 722	5.1%	\$ 1.8101	\$ 0.2105	\$ 1.5996	
2014	79	11	29,419	9,074	372	825	\$ 60,769	\$ -	\$ 60,769	\$ 675	5.6%	\$ 1.7892	\$ 0.2105	\$ 1.5787	
2013	80	11	25,532	5,578	319	507	\$ 46,438	\$ -	\$ 46,438	\$ 510	4.7%	\$ 1.7032	\$ 0.2105	\$ 1.4927	
2012	79	13	23,617	5,932	299	456	\$ 40,828	\$ -	\$ 40,828	\$ 444	4.3%	\$ 1.5922	\$ 0.2105	\$ 1.3817	
2011	75	11	27,910	4,893	372	445	\$ 43,641	\$ -	\$ 43,641	\$ 507	5.2%	\$ 1.5409	\$ 0.2126	\$ 1.3283	
Central Saanich															
2019	276	47	421,804	210,499	1,528	4,479	\$ 862,430	\$ 2,162	\$ 864,592	\$ 2,677	58.0%	\$ 1.7260	\$ 0.2105	\$ 1.5155	
2018	278	49	378,593	297,433	1,362	6,070	\$ 866,699	\$ 7,003	\$ 873,702	\$ 2,672	61.3%	\$ 1.6350	\$ 0.2105	\$ 1.4245	
2017	296	49	398,087	298,522	1,345	6,092	\$ 792,125	\$ 7,003	\$ 799,128	\$ 2,316	58.7%	\$ 1.5575	\$ 0.2105	\$ 1.3470	
2016	297	51	446,241	303,419	1,502	5,949	\$ 879,396	\$ 7,191	\$ 886,587	\$ 2,548	61.1%	\$ 1.5139	\$ 0.2105	\$ 1.3034	
2015	294	51	412,060	246,292	1,402	4,829	\$ 739,282	\$ 7,144	\$ 746,426	\$ 2,164	58.4%	\$ 1.4582	\$ 0.2105	\$ 1.2477	
2014	294	49	361,801	190,895	1,231	3,896	\$ 596,515	\$ 6,808	\$ 603,323	\$ 1,759	55.7%	\$ 1.4033	\$ 0.2105	\$ 1.1928	
2013	296	45	321,518	194,848	1,086	4,330	\$ 542,837	\$ 4,186	\$ 547,023	\$ 1,604	55.7%	\$ 1.3799	\$ 0.2105	\$ 1.0525	
2012	280	41	325,663	210,906	1,163	5,144	\$ 518,454	\$ 5,658	\$ 524,112	\$ 1,633	55.6%	\$ 1.2841	\$ 0.2105	\$ 0.9662	
2011	210	38	312,702	169,206	1,489	4,453	\$ 462,183	\$ 5,244	\$ 467,427	\$ 1,885	56.1%	\$ 1.2867	\$ 0.2126	\$ 0.9667	
North Saanich **															
2019	94	15	58,278	95,030	620	6,335	\$ 201,370	\$ -	\$ 201,370	\$ 1,847	13.5%	\$ 1.5240	\$ 0.2105	\$ 1.3135	
2018	100	16	97,574	70,666	976	4,417	\$ 220,982	\$ -	\$ 220,982	\$ 1,905	15.5%	\$ 1.5240	\$ 0.2105	\$ 1.3135	
2017	100	13	151,773	53,551	1,518	4,119	\$ 245,456	\$ -	\$ 245,456	\$ 2,172	18.0%	\$ 1.4643	\$ 0.2105	\$ 1.2538	
2016	100	12	148,450	36,774	1,485	3,065	\$ 230,697	\$ -	\$ 230,697	\$ 2,060	15.9%	\$ 1.4560	\$ 0.2105	\$ 1.2455	
2015	106	14	151,656	38,066	1,431	2,719	\$ 230,948	\$ -	\$ 230,948	\$ 1,925	18.1%	\$ 1.4278	\$ 0.2105	\$ 1.2173	
2014	98	14	133,853	30,372	1,366	2,169	\$ 194,919	\$ -	\$ 194,919	\$ 1,740	18.0%	\$ 1.3974	\$ 0.2105	\$ 1.1869	
2013	102	13	141,845	30,647	1,391	2,357	\$ 200,004	\$ -	\$ 200,004	\$ 1,739	20.4%	\$ 1.3700	\$ 0.2105	\$ 1.1595	
2012	99	13	117,497	45,227	1,187	3,479	\$ 188,679	\$ -	\$ 188,679	\$ 1,685	20.0%	\$ 1.3700	\$ 0.2105	\$ 1.1595	
2011	101	13	106,393	34,921	1,053	2,686	\$ 163,558	\$ -	\$ 163,558	\$ 1,435	19.6%	\$ 1.3700	\$ 0.2126	\$ 1.1574	
Saanich															
2019	68	51	37,086	140,512	545	2,755	\$ 249,436	\$ 10,278	\$ 259,714	\$ 2,182	17.4%	\$ 1.6150	\$ 0.2105	\$ 1.4045	
2018	70	49	37,503	111,896	536	2,284	\$ 208,786	\$ 9,996	\$ 218,782	\$ 1,839	15.3%	\$ 1.5910	\$ 0.2105	\$ 1.3805	
2017	80	50	38,201	132,092	478	2,642	\$ 229,604	\$ 9,719	\$ 239,324	\$ 1,841	17.6%	\$ 1.5600	\$ 0.2105	\$ 1.3495	
2016	71	53	36,409	139,764	513	2,637	\$ 237,745	\$ 10,056	\$ 247,802	\$ 1,998	17.1%	\$ 1.5600	\$ 0.2105	\$ 1.3495	
2015	75	51	74,841	129,225	998	2,534	\$ 226,276	\$ 9,727	\$ 236,003	\$ 1,873	18.5%	\$ 1.5420	\$ 0.2105	\$ 1.3315	
2014	72	53	46,230	177,633	642	3,352	\$ 213,981	\$ 9,883	\$ 223,863	\$ 1,791	20.7%	\$ 1.4560	\$ 0.2105	\$ 1.2455	
2013	65	50	35,745	122,456	550	2,449	\$ 179,004	\$ 9,655	\$ 188,659	\$ 1,641	19.2%	\$ 1.3420	\$ 0.2105	\$ 1.1315	
2012	68	47	38,212	138,455	562	2,946	\$ 180,466	\$ 9,235	\$ 189,701	\$ 1,650	20.1%	\$ 1.2320	\$ 0.2105	\$ 1.0215	
2011	71	46	101,235	121,896	1,426	2,650	\$ 149,584	\$ 9,118	\$ 158,703	\$ 1,356	19.0%	\$ 1.1530	\$ 0.2126	\$ 0.9404	
Totals															
2019	524	127	553,766	496,318	1,057	3,908	\$ 1,478,533	\$ 12,440	\$ 1,490,973	\$ 2,290	100%				
2018	543	132	554,327	499,664	1,021	3,785	\$ 1,408,879	\$ 16,999	\$ 1,425,878	\$ 2,112	100%				
2017	557	123	621,519	495,793	1,116	4,031	\$ 1,343,940	\$ 16,722	\$ 1,360,663	\$ 2,001	100%				
2016	548	127	672,348	488,609	1,227	3,847	\$ 1,432,788	\$ 17,247	\$ 1,450,036	\$ 2,148	100%				
2015	554	127	672,094	420,661	1,213	3,312	\$ 1,261,474	\$ 16,871	\$ 1,278,344	\$ 1,877	100%				
2014	543	127	571,304	407,973	1,052	3,212	\$ 1,066,184	\$ 16,691	\$ 1,082,874	\$ 1,616	100%				
2013	543	119	524,640	353,529	966	2,971	\$ 968,283	\$ 13,841	\$ 982,124	\$ 1,484	100%				
2012	526	114	504,989	400,520	960	3,513	\$ 928,426	\$ 14,893	\$ 943,320	\$ 1,474	100%				
2011	457	108	548,240	330,916	1,200	3,064	\$ 818,967	\$ 14,362	\$ 833,329	\$ 1,475	100%				

\* Western Communities do not charge a fixed charge

\*\* North Saanich charges the fixed charge on property taxes

\*\*\* AR - Agriculture/Residential customers receive a rebate on consumption over 455 cubic meters annual as the meter feeds both premise and land.  
AG - Agriculture customers receive a rebate on the entire consumption annually as the meter is dedicated only for land.

**Regional Water Supply Service (Greater Victoria) Wholesale Water Rate Historicals & Projections**



**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION  
MEETING OF THURSDAY, OCTOBER 15, 2020**

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**SUBJECT**     **Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget**

**ISSUE SUMMARY**

To provide an overview of the 2021 Saanich Peninsula Wastewater Service operating and capital budget, highlighting the changes from the 2020 budget and the proposed 2021 budget figures. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

**BACKGROUND**

The draft 2021 Saanich Peninsula Wastewater Service budget has been prepared for the Saanich Peninsula Wastewater Commission's (the Commission) consideration. The Commission will make budget recommendations to the Capital Regional District (CRD) Board. As in previous years, the draft 2021 budget has been prepared considering the CRD Board's 2021 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential synergies or efficiencies between departments and services, reviewing of service levels and adjustments related to regulatory compliance, and undertaking infrastructure improvements to maintain service levels across the service area. The following sets out the key components of the budget.

**2020 Year-end Financial Projections**

The estimated actual 2020 overall expense for trunk sewer and treatment plant operations is projected to be \$67,268 under budget due to lower expenditures in heat recovery operations and unplanned equipment repairs and maintenance, which helped offset higher than budgeted chemical costs this year. This operating expense variance is offset by a reduction in anticipated revenue from Panorama Recreation Center (PRC) due to the pool shutdown in response to COVID-19 and system shutdown early in the year as a result of corrective maintenance issues. The District Energy System (DES) is projected to generate about \$44,545 in revenue from the sale of energy to the PRC for the year. This revenue is \$101,426 below the budgeted revenue of \$145,971. The net impact of these expense and revenue differences is \$34,158 and as such, the 2020 capital reserve fund transfer is projected to decrease to \$274,605 to balance the year-end budget.

**Operating Budget**

A net increase in the 2021 operating expenses in the amount of \$519,371 is planned for trunk sewer and treatment plant operations; \$114,371 of this increase results from non-discretionary expense adjustments such as wage/salary increases, departmental support service allocations, and adjustments to other operating expenses such as chemical costs. The remaining \$405,000 of this increase is due to the cost for residuals disposal and treatment at the Residuals Treatment Facility (RTF), and beneficial end-use, as well as updated residuals trucking costs for bin hauling to the RTF, as directed by the Commission earlier this year.

The 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget, have also been prepared. The budgets are reflecting a 1.7% requisition increase, with the exception of the LWMP program budget which has an on-going annual requisition increase of \$41,000 to fund development of the Saanich Peninsula inflow and infiltration management program in order to meet the LWMP commitment and manage this risk proactively. The marine monitoring program costs are included in the overall conveyance and treatment operating budget.

The planned transfer to the maintenance reserve fund in 2021 is \$49,650. At year-end 2020, the maintenance reserve fund balance is estimated to be \$500,984, which is available to fund significant maintenance tasks that do not occur annually, such as odour control system carbon replacement, outfall inspections, and DES heat exchanger cleaning.

### Operating Revenue

Although the operating expenses are almost entirely funded through requisition based on each participant's percentage of total wastewater input, the DES system is budgeted to generate \$79,226 in revenue in 2021 from the sale of energy to the PRC. This level of revenue is determined by annual energy rate adjustments based on prior year natural gas market rates and projected energy consumption. The rate used to determine the 2021 revenue is based on the 2020 natural gas rate and anticipated reduced demand.

2021 cost sharing percentages based on prior year flows will be finalized in October and are not expected to change significantly from the 2020 cost sharing figures. The overall requisition for Saanich Peninsula trunk sewers, treatment and disposal for 2021 has been set at \$4,115,433 which is a 14.18% increase over 2020.

### Capital Budget

The planned capital expenditures for 2021 total \$3,957,500 and are funded from reserves. This includes \$2,990,000 in projects initiated in 2020 or prior, most of which are instream, multi-year projects. The 2021 capital program consists of several new projects related to replacement of equipment that is at the end of the service life and projects required to address operational issues. Three major projects included in the 2021 budget are relining segments of the asbestos cement trunk sewer main and manhole replacements, and, at the wastewater treatment plant, concrete tank repairs and replacement of the rotary presses.

The planned transfer to the capital reserve fund in 2021 is \$336,913. At year-end 2020, with a \$1.7 million transfer from Development Cost Charges (DCC) reserve, the capital reserve fund balance is estimated to be \$1,521,718, which is available to fund major capital projects. The planned transfer to the equipment replacement fund in 2021 is \$115,708. At year-end 2020, the equipment replacement fund balance is estimated to be \$675,661 which is available to fund minor capital and operating machinery and equipment replacements.

The value of the five year (2021 to 2025) capital plan is \$8,020,000. With the current capital reserve and equipment replacement fund balances, planned contributions, transfers, and expenditures, there is sufficient funding available for the five year capital plan. Although there are projected funds remaining in the capital reserve after the application of the five year plan, there is

a limited balance available for unplanned expenditures. Given this declining reserve balance, the 2021 budget includes a 10% annual increase in transfers to reserves (both Equipment Replacement Fund and Capital) and, as noted above a \$1.7 million transfer from DCC reserve. Unforeseen capital expenditures may trigger the need to borrow funds in the near future in the Saanich Peninsula Wastewater Service. There is currently no debt associated with the Saanich Peninsula Wastewater Service.

The DCC program represents \$150,000 of the capital plan which reflects the projects included in the 2018 DCC program update. Pending ministry approval of the proposed 2020 DCC transfer to capital reserve (\$1.7 million), at year-end in 2020 the DCC reserve fund balance is estimated to be \$35,004.

### **RECOMMENDATION**

The Saanich Peninsula Wastewater Commission recommends that the CRD Board:

1. Approve the 2021 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget; and
2. Balance the 2020 actual revenue and expense on the transfer to capital reserve fund.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: Draft Budget Document

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **SAANCH PENINSULA WASTEWATER**

### **COMMISSION REVIEW**

October 2020

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# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **Saanich Peninsula Wastewater**

#### **COMMISSION REVIEW**

October 2020

**DEFINITION:**

Provision of sewage treatment and disposal through treatment plant facilities and outfall for member participants.

**SERVICE DESCRIPTION:**

This program is for the provision of wastewater collection and treatment to the Saanich Peninsula municipalities of Central Saanich, North Saanich, and Sidney. Although the largest component of the program budget is for the operation and maintenance of the systems, many other key programs are funded through and support these budgets including engineering (capital projects), odour control, and marine monitoring and protection.

**PARTICIPATION:**

Operating costs to be recovered by requisition to all participating members based on measured flow from previous year.

**MAXIMUM LEVY:**

Establishment Bylaw No. 2388/2439 - Greater of \$5,663,000 or \$1.56 / \$1,000 of actual assessed value of land and improvements.

**MAXIMUM CAPITAL DEBT:**

See Debt Budget 3.775 - debt fully retired in 2016

**SPWWS SEWER SYSTEM:**

<u>Location</u>	<u>Allocation for 2020</u>
Airport	1.88%
Sidney	39.67%
Pauquachin	0.87%
Central Saanich	41.71%
North Saanich	15.34%
Tseycum	0.36%
IOS	0.17%
Total	100.00%

**FUNDING:**

Requisition

**RESERVE FUND:**

Saanich Peninsula Wastewater Commission approved that operating surpluses be transferred to capital reserve fund, starting with 2009 budget (approved Nov 6, 2008).

**Change in Budget 2020 to 2021**

Service: 3.178 SanPen Wastewater Treatment

**Total Expenditure****Comments****2020 Budget****3,849,705****Other Changes:**

Biosolids disposal and contract for services

405,000

RTF tipping fees and renegotiated trucking contract

Capital reserve contributions

34,000

10% increase in reserve contributions to fund planned projects

Allocations

42,000

Standard overhead, IWS ops, Enviro programs &amp; Water quality

Supplies - Chemicals

26,000

Bioxide purchases

Other costs

48,241

General increase 1.7% and other minor cost changes

Total Other Changes

555,241

**2021 Budget****4,404,946**

% expense increase from 2020:

**14.4%**

% Requisition increase from 2020 (if applicable):

**14.2%**

Requisition funding is 97% of service revenue

**Overall 2020 Budget Performance**

(expected variance to budget and surplus treatment)

**Estimated Actuals 2020:**

There is a one time favourable variance of \$78,266 in operations due to savings in lab costs, heat recovery operations and biosolids management. This is partially offset by increased costs related to waste sludge disposal during ongoing capital projects and electricity cost overages totaling \$10,998 and leaving a net favorable operating variance of \$67,268. This variance is offset by a reduction in anticipated revenue due to the close of Panorama Recreation Center and corresponding decrease in internal revenues from the heat recovery system of \$101,426. The net impact of these differences is \$34,158 and will be removed from the transfer to Capital Reserve, which has an expected year end balance transfer of \$274,605.



# APPENDIX A

## 3.718 - SAANICH PENINSULA WASTEWATER

	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	BUDGET REQUEST				2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
			2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL				
<u>OPERATING COSTS:</u>										
Operating	2,366,992	2,377,990	2,477,627	-	-	2,477,627	2,501,432	2,550,984	2,601,533	2,653,082
Lab	170,136	158,530	185,557	-	-	185,557	187,055	190,973	194,963	199,048
Heat Recovery	145,971	129,572	143,899	-	-	143,899	146,768	149,689	152,673	155,718
Biosolids Mgmt.	649,001	598,740	1,035,913	-	-	1,035,913	1,056,631	1,077,764	1,099,319	1,121,305
Corporate Overhead	51,205	51,205	59,680	-	-	59,680	69,019	70,400	71,808	73,244
<b>TOTAL OPERATING COSTS</b>	<b>3,383,305</b>	<b>3,316,037</b>	<b>3,902,676</b>	<b>-</b>	<b>-</b>	<b>3,902,676</b>	<b>3,960,905</b>	<b>4,039,810</b>	<b>4,120,296</b>	<b>4,202,397</b>
*Percentage Increase over prior year	0.00%	-1.99%	15.35%	0.00%	0.00%	15.35%	1.49%	1.99%	1.99%	1.99%
<u>CAPITAL / RESERVE</u>										
Transfer to Operating Reserve Fund	47,439	47,439	49,650	-	-	49,650	51,983	54,429	56,996	59,687
Transfer to Equipment Replacement Fund	110,198	110,198	115,708	-	-	115,708	121,493	127,568	133,947	140,644
Transfer to Reserve Fund	308,763	274,605	336,912	-	-	336,912	367,931	401,998	439,416	480,522
<b>TOTAL CAPITAL / RESERVES</b>	<b>466,400</b>	<b>432,242</b>	<b>502,270</b>	<b>-</b>	<b>-</b>	<b>502,270</b>	<b>541,407</b>	<b>583,995</b>	<b>630,359</b>	<b>680,853</b>
<b>TOTAL COSTS</b>	<b>3,849,705</b>	<b>3,748,279</b>	<b>4,404,946</b>	<b>-</b>	<b>-</b>	<b>4,404,946</b>	<b>4,502,312</b>	<b>4,623,805</b>	<b>4,750,655</b>	<b>4,883,250</b>
*Percentage Increase over prior year	0.00%	-2.63%	14.42%	0.00%	0.00%	14.42%	2.21%	2.70%	2.74%	2.79%
Internal Recovery - Other	(218,850)	(117,879)	(153,311)	-	-	(153,311)	(156,377)	(159,504)	(162,693)	(165,949)
Recovery - Other	(455)	-	-	-	-	-	-	-	-	-
<b>OPERATING COSTS LESS INTERNAL RECOVERIES</b>	<b>3,630,400</b>	<b>3,630,400</b>	<b>4,251,635</b>	<b>-</b>	<b>-</b>	<b>4,251,635</b>	<b>4,345,935</b>	<b>4,464,301</b>	<b>4,587,962</b>	<b>4,717,301</b>
*Percentage Increase over prior year	0.00%	0.00%	17.11%	0.00%	0.00%	17.11%	2.22%	2.72%	2.77%	2.82%
<b>SOURCES OF FUNDING (REVENUE)</b>										
<b>Surplus / (Deficit)</b>										
Balance C/F from Prior to Current year	-	-	-	-	-	-	-	-	-	-
Grants In Lieu of Taxes	(6,098)	(6,098)	(6,202)	-	-	(6,202)	(6,326)	(6,452)	(6,581)	(6,714)
Transfer From Own Funds	(20,000)	(20,000)	(130,000)	-	-	(130,000)	(55,000)	(130,000)	(110,000)	(20,000)
<b>TOTAL REVENUE</b>	<b>(26,098)</b>	<b>(26,098)</b>	<b>(136,202)</b>	<b>-</b>	<b>-</b>	<b>(136,202)</b>	<b>(61,326)</b>	<b>(136,452)</b>	<b>(116,581)</b>	<b>(26,714)</b>
<b>REQUISITION</b>	<b>(3,604,302)</b>	<b>(3,604,302)</b>	<b>(4,115,433)</b>	<b>-</b>	<b>-</b>	<b>(4,115,433)</b>	<b>(4,284,609)</b>	<b>(4,327,849)</b>	<b>(4,471,381)</b>	<b>(4,690,587)</b>
*Percentage Increase over prior year	0.00%	0.00%	14.18%	0.00%	0.00%	14.18%	4.11%	1.01%	3.32%	4.90%

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

<b>Service No.</b>	<b>3.718</b>	<b>Carry</b>						
<b>Saanich Peninsula Wastewater</b>		<b>Forward from</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>
		<b>2020</b>						

**EXPENDITURE**

Buildings	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	E	\$175,000	\$192,500	\$17,500	\$0	\$0	\$0	\$210,000
Land	L	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	S	\$2,815,000	\$3,765,000	\$950,000	\$400,000	\$1,635,000	\$1,060,000	\$7,810,000
Vehicles	V	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		<b>\$2,990,000</b>	<b>\$3,957,500</b>	<b>\$967,500</b>	<b>\$400,000</b>	<b>\$1,635,000</b>	<b>\$1,060,000</b>	<b>\$8,020,000</b>

**SOURCE OF FUNDS**

Capital Funds on Hand	Cap	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Debenture Debt (New Debt Only)	Debt	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Replacement Fund	ERF	\$175,000	\$342,500	\$167,500	\$150,000	\$150,000	\$150,000	\$960,000
Grants (Federal, Provincial)	Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	Res	\$2,715,000	\$3,515,000	\$800,000	\$250,000	\$1,485,000	\$910,000	\$6,960,000
		<b>\$2,990,000</b>	<b>\$3,957,500</b>	<b>\$967,500</b>	<b>\$400,000</b>	<b>\$1,635,000</b>	<b>\$1,060,000</b>	<b>\$8,020,000</b>

## CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM  
2021 & Forecast 2022 to 2025

Service #:

3.718

Service Name:

Saanich Peninsula Wastewater

### Proj. No.

The first two digits represent first year the project was in the capital plan.

### Capital Exp. Type

**Study** - Expenditure for feasibility and business case report.

**New** - Expenditure for new asset only

**Renewal** - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service

**Replacement** - Expenditure replaces an existing asset

### Funding Source Codes

Debt = Debenture Debt (new debt only)

ERF = Equipment Replacement Fund

Grant = Grants (Federal, Provincial)

Cap = Capital Funds on Hand

Other = Donations / Third Party Funding

### Funding Source Codes (cont)

Res = Reserve Fund

STLoan = Short Term Loans

WU = Water Utility

### Asset Class

L - Land

S - Engineering Structure

B - Buildings

V - Vehicles

E - Equipment

### Capital Project Title

Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

### Capital Project Description

Briefly describe project scope and service benefits.

For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".

### Total Project Budget

This column represents the total project budget not only within the 5-year window.

## FIVE YEAR FINANCIAL PLAN

Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
<b>WASTEWATER TREATMENT PLANT</b>													
16-06	New	Biosolids Treatment & Disposal Options Study	Study to determine viable options for treatment and disposal of biosolids from the SPWWTP.	\$100,000	S	Cap	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000
19-01	Replacement	SPWWTP Replacement of Rotary Presses	Assess dewatering options of sludge and implement prior to possible failure of the rotary presses.	\$1,190,000	S	Res	\$800,000	\$900,000	\$0	\$0	\$0	\$0	\$900,000
20-01	Renewal	Isolation Valve Installation for Oxidation Ditches	To maintain operator safety isolation valves are required prior to the oxidation ditches at the SPWWTP.	\$130,000	S	Res	\$40,000	\$40,000	\$0	\$0	\$0	\$0	\$40,000
20-02	Renewal	Replace Aerators in Oxidation Ditches	The existing 75hp aerators are at end of life and need to be upsized to 100hp to provide additional dissolved oxygen for future loading/increased strength of the wastewater.	\$200,000	E	ERF	\$175,000	\$175,000	\$0	\$0	\$0	\$0	\$175,000
20-06	Renewal	SPWWTP Road Upgrades & Repairs	The existing asphalt road at the SPWWTP requires some repairs and road extension around the clarifier tank.	\$300,000	S	Res	\$0	\$0	\$0	\$0	\$285,000	\$0	\$285,000
21-01	Renewal	SPWWTP Concrete Tank Repairs	Stantec completed an assessment and provided recommendations to repair significant internal corrosion in the clarifier, sludge tank, and process drain sump and this project will implement the repairs.	\$850,000	S	Res	\$0	\$850,000	\$0	\$0	\$0	\$0	\$850,000
21-03	Renewal	SPWWTP Screenings Bin	Debris from the raw sewage screenings is being co-mingled with dewatered sludge. It must be separated into its own bin so that dewatered sludge can be beneficially re-used.	\$300,000	S	Res	\$0	\$0	\$0	\$50,000	\$250,000	\$0	\$300,000
21-05	Renewal	SPWWTP HVAC Fan Replacements	The HVAC Fan's were identified in Stantec's 2014 condition assessment as requiring replacement, funds are required to reassess the fans, design replacement and carry out replacement.	\$200,000	S	Res	\$0	\$50,000	\$150,000	\$0	\$0	\$0	\$200,000

# APPENDIX A

FIVE YEAR FINANCIAL PLAN														
Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total	
23-03	Renewal	SPWWTP Solids Handling Equipment Removal	The old RDP Lime Stabilization biosolids process equipment has not been used for many years and no longer is operable. This equipment should be removed and recycled making way for other solids handling upgrades pending the outcome of the Biosolids Options Study.	\$400,000	S	Res	\$0	\$0	\$0	\$0	\$100,000	\$300,000	\$400,000	
23-02	Study	Bazan Bay Outfall Inspection	Follow-up electromagnetic inspection of Bazan Bay Outfall based upon the 2018 inspection.	\$200,000	S	Res	\$0	\$0	\$0	\$200,000	\$0	\$0	\$200,000	
PUMP STATIONS														
21-02	Renewal	Sidney Pump Station Wet Well Upgrades	The existing inlet gate to the wet well and the forcemain knife gate valves are seized and need to be replaced, and the catwalk in the wet well needs to be cleaned and painted to protect it from corrosion.	\$300,000	S	Res	\$0	\$50,000	\$250,000	\$0	\$0	\$0	\$300,000	
GENERAL														
19-03	Renewal	Corrosion Prevention Program	In conjunction with the RWS and JdF system a corrosion protection program to assess and monitor assets susceptible to corrosion	\$120,000	S	Res	\$20,000	\$20,000	\$0	\$0	\$0	\$60,000	\$80,000	
19-06	Renewal	Odour Control Upgrades	Based upon the 2018 KWL Odour Control Program study, upgrades to odour control systems like the biofilter at SPWWTP will be undertaken.	\$575,000	S	Res	\$150,000	\$150,000	\$400,000	\$0	\$0	\$0	\$550,000	
21-04	Replacement	Voice Radio Replacement	Replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.	\$35,000	E	ERF	\$0	\$17,500	\$17,500	\$0	\$0	\$0	\$35,000	
18-10	Replacement	Equipment Replacement - Annual Provisional	Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.	\$750,000	S	ERF	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000	
GRAVITY SEWERS & MANHOLES														
20-03	Renewal	Trunk Sewer Relining	Based upon CCTV inspection, high priority relining of about 1,300m of 500mm dia asbestos cement sewer will start in 2020. Another 800m may need to be relined within the next 5 years.	\$2,200,000	S	Res	\$1,100,000	\$1,100,000	\$0	\$0	\$550,000	\$550,000	\$2,200,000	
20-04	Renewal	Manhole Repairs and Replacement	Based upon inspections, high priority repairs and relining will start on some MH's in Central Saanich and Sidney 2020. Other repairs/relining will be scheduled in the next 5 years.	\$500,000	S	Res	\$475,000	\$225,000	\$0	\$0	\$250,000	\$0	\$475,000	
PRESSURE PIPES & APPERTUNANCES														
DEVELOPMENT COST CHARGE (DCC) PROJECTS														
19-04	Renewal	Asset Management Plan Update	Update the asset management plan to inform future works - DCC Share.	\$100,000	S	Res	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$100,000	
19-04	Renewal	Asset Management Plan Update	Update the asset management plan to inform future works - Cap Reserve Share	\$30,000	S	Res	\$30,000	\$30,000	\$0	\$0	\$0	\$0	\$30,000	
23-01	Renewal	DCC Program - 5-year Update	5-year update of the DCC program.	\$50,000	S	Res	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000	
GRAND TOTAL				\$8,530,000				\$2,990,000	\$3,957,500	\$967,500	\$400,000	\$1,635,000	\$1,060,000	\$8,020,000

<b>Service:</b> 3.718		<b>Saanich Peninsula Wastewater</b>	
<b>Proj. No.</b> 16-06	<b>Capital Project Title</b> Biosolids Treatment & Disposal Options Study	<b>Capital Project Description</b> Study to determine viable options for treatment and disposal of biosolids from the SPWWTP.	
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental Stewardship	<b>Corporate Priority Area</b> Wastewater	
<b>Project Rationale</b> A study to determine viable options for treatment and disposal of biosolids from the SPWWTP will be undertaken.			
<b>Proj. No.</b> 18-10	<b>Capital Project Title</b> Equipment Replacement - Annual Provisional	<b>Capital Project Description</b> Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.	
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b> Wastewater	
<b>Project Rationale</b> Funds are required for emergency replacement of equipment that is unplanned and outside maintenance contingencies.			
<b>Proj. No.</b> 19-01	<b>Capital Project Title</b> SPWWTP Replacement of Rotary Presses	<b>Capital Project Description</b> Assess dewatering options of sludge and implement prior to possible failure of the rotary presses.	
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b> Wastewater	
<b>Project Rationale</b> The 2013 Stantec condition assessment of the SPWWTP highlighted that the rotary presses will reach their end of life approximately 2020. It is proposed to replace the rotary presses before they fail so that the SPWWTP can maintain operation. Funding is required to assess replacement thickening options (2019) and complete the design and installation of new replacement units (2020).			

Service: 3.718		Saanich Peninsula Wastewater			
Proj. No.	19-03	Capital Project Title	Corrosion Prevention Program	Capital Project Description	In conjunction with the RWS and JdF system a corrosion protection program to assess and monitor assets susceptible to corrosion
Asset Class	S	Board Priority Area	Climate Action & Environmental	Corporate Priority Area	Wastewater
Project Rationale	The Saanich Peninsula Wastewater system is comprised of numerous steel infrastructure among other materials. The Regional Water and Juan du Fuca water systems will be utartinga corrosion protection program in 2018 that the SPWW system can be assessed and monitored as well. Funds are required to retain a corrosion prevention specialist to produce a program for assessing and monitoring corrosion prevention within the Saanich Peninsula Wastewater system.				

Proj. No.	19-04	Capital Project Title	Asset Management Plan Update	Capital Project Description	Update the asset management plan to inform future works - DCC Share.
Asset Class	S	Board Priority Area	Climate Action & Environmental	Corporate Priority Area	Wastewater
Project Rationale	An update to the strategic plan to inform future works will be undertaken.				

Proj. No.	19-06	Capital Project Title	Odour Control Upgrades	Capital Project Description	Based upon the 2018 KWL Odour Control Program study, upgrades to odour control systems like the biofilter at SPWWTP will be undertaken.
Asset Class	S	Board Priority Area	Climate Action & Environmental	Corporate Priority Area	Wastewater
Project Rationale	In 2017 KWL was retained to conduct an audit of the odour control systems in the Core Area and Saanich Peninsula Wastewater systems. KWL made recommendations on remediation, works include: SPWWTP odour control management study and Sidney and Keating PS ventilation study (2019); SPWWTP Odour Control Improvements Design (2020); SPWWTP Odour Control Improvements Construction (2021).				

Proj. No.	20-01	Capital Project Title	Isolation Valve Installation for Oxidation Ditches	Capital Project Description	To maintain operator safety isolation valves are required prior to the oxidation ditches at the SPWWTP.
Asset Class	S	Board Priority Area	Climate Action & Environmental	Corporate Priority Area	Wastewater
Project Rationale	The oxidation ditches at SPWWTP currently have outlet piping with no isolation valves to allow for repairs. Funding is required to procure two 600mm diameter valves and install outside the oxidation ditches.				

<b>Service:</b> 3.718		<b>Saanich Peninsula Wastewater</b>		
<b>Proj. No.</b> 20-02		<b>Capital Project Title</b> Replace Aerators in Oxidation Ditches	<b>Capital Project Description</b>	The existing 75hp aerators are at end of life and need to be upsized to 100hp to provide additional dissolved oxygen for future loading/increased strength of the wastewater.
<b>Asset Class</b> E		<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> The current aerators are at the end of life and are undersized necessitating replacement to maintain the treatment capacity of the existing WWTP. Funds are required to procure and install new aerators.				
<b>Proj. No.</b> 20-03		<b>Capital Project Title</b> Trunk Sewer Relining	<b>Capital Project Description</b>	Based upon CCTV inspection, high priority relining of about 1,300m of 500mm dia asbestos cement sewer will start in 2020. Another 800m may need to be relined within the next 5 years.
<b>Asset Class</b> S		<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> The trunk sewer mains were inspected in 2018-2019 resulting in approximately 1,300 m of 500 mm diameter asbestos cement sewer pipe requiring relining to maintain integrity. Funds are required to retain a contractor to conduct the pipe relining.				
<b>Proj. No.</b> 20-04		<b>Capital Project Title</b> Manhole Repairs and Replacement	<b>Capital Project Description</b>	Based upon inspections, high priority repairs and relining will start on some MH's in Central Saanich and Sidney 2020. Other repairs/relining will be scheduled in the next 5 years.
<b>Asset Class</b> S		<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> During the trunk sewer main inspections in 2018-2019, the manholes were inspected as well. A number of manholes were identified with major defects requiring repairs or relining, mostly in Central Saanich and Sidney. Funds are required to retain a contractor to carry out manhole repairs.				

<b>Service:</b> 3.718		<b>Saanich Peninsula Wastewater</b>	
<b>Proj. No.</b> 20-06	<b>Capital Project Title</b> SPWWTP Road Upgrades & Repairs	<b>Capital Project Description</b>	The existing asphalt road at the SPWWTP requires some repairs and road extension around the clarifier tank.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> <i>The SPWWTP site's access road and existing bin loading area is having pavement failure, additionally, the gravel route around the facility is being used more often to alleviate traffic along the bin hauling route and it is creating dust. Funds are required to fix failed pavement and pave the route around the treatment plant.</i>			
<b>Proj. No.</b> 21-01	<b>Capital Project Title</b> SPWWTP Concrete Tank Repairs	<b>Capital Project Description</b>	Stantec completed an assessment and provided recommendations to repair significant internal corrosion in the clarifier, sludge tank, and process drain sump and this project will implement the repairs.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> <i>required repairs for significant internal corrosion in the clarifier, sludge tank, and process drain sump and this project will implement the repairs.</i>			
<b>Proj. No.</b> 21-02	<b>Capital Project Title</b> Sidney Pump Station Wet Well Upgrades	<b>Capital Project Description</b>	The existing inlet gate to the wet well and the forcemain knife gate valves are seized and need to be replaced, and the catwalk in the wet well needs to be cleaned and painted to protect it from corrosion.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> <i>The existing inlet gate to the wet well and the forcemain knife gate valves are seized and need to be replaced, and the catwalk in the wet well needs to be cleaned and painted to protect it from corrosion.</i>			
<b>Proj. No.</b> 21-03	<b>Capital Project Title</b> SPWWTP Screenings Bin	<b>Capital Project Description</b>	Debris from the raw sewage screenings is being co-mingled with dewatered sludge. It must be separated into its own bin so that dewatered sludge can be beneficially re-used.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> <i>Debris from the raw sewage screenings is being co-mingled with dewatered sludge. It must be separated into its own bin so that dewatered sludge can be beneficially re-used.</i>			



<b>Service:</b> 3.718		<b>Saanich Peninsula Wastewater</b>	
<b>Proj. No.</b> 21-04	<b>Capital Project Title</b> Voice Radio Replacement	<b>Capital Project Description</b>	Replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.
<b>Asset Class</b> E	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> End of life replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.			
<b>Proj. No.</b> 21-05	<b>Capital Project Title</b> SPWWTP HVAC Fan Replacements	<b>Capital Project Description</b>	The HVAC Fan's were identified in Stantec's 2014 condition assessment as requiring replacement, funds are required to reassess the fans, design replacement and carry out replacement.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> The HVAC Fan's were identified in Stantec's 2014 condition assessment as requiring replacement, funds are required to reassess the fans, design replacement and carry out replacement.			
<b>Proj. No.</b> 23-01	<b>Capital Project Title</b> DCC Program - 5-year Update	<b>Capital Project Description</b>	5-year update of the DCC program.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> This item is for a planned review and update of the DCC Program.			
<b>Proj. No.</b> 23-02	<b>Capital Project Title</b> Bazan Bay Outfall Inspection	<b>Capital Project Description</b>	Follow-up electromagnetic inspection of Bazan Bay Outfall based upon the 2018 inspection.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> Follow-up electromagnetic inspection of Bazan Bay Outfall based upon the 2018 inspection.			

<b>Service:</b> 3.718		<b>Saanich Peninsula Wastewater</b>	
<b>Proj. No.</b> 23-03	<b>Capital Project Title</b> SPWWTP Solids Handling Equipment Removal	<b>Capital Project Description</b>	The old RDP Lime Stabilization biosolids process equipment has not been used for many years and no longer is operable. This equipment should be removed and recycled making way for other solids handling upgrades pending the outcome of the Biosolids Options Study.
<b>Asset Class</b> S	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> <i>The old RDP Lime Stabilization biosolids process equipment has not been used for many years and no longer is operable. This equipment should be removed and recycled making way for other solids handling upgrades pending the outcome of the Biosolids Options Study.</i>			
<b>Proj. No.</b> 21-04	<b>Capital Project Title</b> Voice Radio Replacement	<b>Capital Project Description</b>	Replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.
<b>Asset Class</b> E	<b>Board Priority Area</b> Climate Action & Environmental	<b>Corporate Priority Area</b>	Wastewater
<b>Project Rationale</b> <i>End of life replacement of the voice radios, in coordination with the RWS, SPW, JDF, and Core Area services.</i>			

### 3.718 Saanich Peninsula Wastewater Asset and Reserve Summary

#### Summary Schedule

2021 - 2025 Financial Plan

#### Asset Profile

##### Saanich Peninsula Wastewater Assets

Construction of the Saanich Peninsula Wastewater Treatment Plant (SPWWTP) was completed in January 2000 to provide wastewater service for Central Saanich, North Saanich and Sidney, as well as the local First Nations, Victoria Airport Authority, and the Institute of Ocean Sciences Centre. Annually, the SPWWTP produces on average 3,600 tonnes of sludge which is currently hauled to the Hartland landfill for disposal as controlled waste. Treated effluent is discharged through the Bazan Bay Outfall to the marine environment. The SPWWTP heat recovery system was commissioned in February 2011 and has supplied treatment plant effluent waste heat to the Panorama Recreation Center for heating its swimming pools since then. Assets in the Saanich Peninsula Wastewater System include land, the SPWWTP and a secondary treatment plant, three pumping stations, PRV station, thermal recovery and other buildings, 14 kilometres of collections and conveyance (gravity & pressure) mains, and two marine outfalls.

#### Summary

##### SPWWTP Reserve/Fund Summary

##### Projected year end balance

	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Maintenance Reserve Fund	500,984	420,634	417,616	342,046	289,042	328,730
Sewer Capital Reserve Funds	1,556,722	1,263,635	1,001,566	1,323,563	397,980	138,502
Equipment Replacement Fund	675,661	623,869	577,862	555,430	539,377	530,020
<b>Total projected year end balance</b>	<b>2,733,367</b>	<b>2,308,137</b>	<b>1,997,044</b>	<b>2,221,040</b>	<b>1,226,399</b>	<b>997,252</b>

See attached reserve schedules for projected annual cash flows.

**3.718 Saanich Peninsula Wastewater  
Operating Reserve Summary  
2021 - 2025 Financial Plan**

**Profile**

**Saanich Peninsula Wastewater**

Starting in 2003, maintenance reserve accounts were established for operating and maintenance activities that typically do not occur annually. These maintenance activities are large expense and to and to avoid large swings in the operating budget, funds are set aside annually to undertake this maintenance. The maintenance activities are the replacement and disposal of the odour control carbon at the treatment plant approximately every 2 years, replacement and disposal of the odour control carbon at Keating Pump Station every 5 years, the regulatory inspection of the Bazan Bay marine outfall every 5 years and the cleaning and rebuild of the District Energy Sharing System heat exchanger every 5-8 years.

**Operating Reserve Schedule**

Operating Reserve Schedule Fund: 1500 Fund Center: 105204	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	460,448	500,984	420,634	417,616	342,046	289,042
Planned Purchase	(20,000)	(130,000)	(55,000)	(130,000)	(110,000)	(20,000)
Transfer from Ops Budget	47,439	49,650	51,983	54,430	56,996	59,688
Interest Income*	13,097	-	-	-	-	-
<b>Total projected year end balance</b>	<b>500,984</b>	<b>420,634</b>	<b>417,616</b>	<b>342,046</b>	<b>289,042</b>	<b>328,730</b>

**Assumptions/Background:**

Maintenance Reserve Account: Outfall Inspection, Odour Control Carbon Replacement, Heat Recovery Exchange System Cleaning

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

**3.718 Saanich Peninsula Wastewater  
Equipment Replacement Reserve Fund Schedule  
2021 - 2025 Financial Plan**

**ERF Reserve Fund Schedule SPWWTP**

**ERF: SPWWTP ERF or PERS Fund for Equipment**

<b>Equipment Replacement Fund- SPWWTP Fund: 1022 Fund Center: 101700</b>	<b>Estimate</b>	<b>Budget</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Beginning Balance</b>	929,158	675,661	623,869	577,862	555,430	539,377
<b>Planned Purchase (Based on Capital Plan)</b>	(375,000)	(167,500)	(167,500)	(150,000)	(150,000)	(150,000)
<b>Transfer IN (from Ops Budget)</b>	110,198	115,708	121,493	127,568	133,946	140,644
<b>Interest Income*</b>	11,305	-	-	-	-	-
<b>Ending Balance \$</b>	<b>675,661</b>	<b>623,869</b>	<b>577,862</b>	<b>555,430</b>	<b>539,377</b>	<b>530,020</b>

**Assumptions/Background:**

The ERF funds the replacement or repair of equipment with a service life of 15 years or less. In the past the ERF has also been referred to as a Priority Equipment Replacement Strategy (PERS ). There are three individual ERF funds; Wastewater Treatment Plant (E00561), Trunk Sewers (E00562) and Saanich Peninsula Laboratory Equipment (E00586)

\* Interest in planning years nets against inflation which is not included.

**3.718 Saanich Peninsula Wastewater  
Capital Reserve Fund Schedule  
2021 - 2025 Financial Plan**

**Capital Reserve Fund Schedule - SPWWTP**

**Capital Reserve Fund SPWWTP - DCC Portion and Capital Reserve Portion**

Bylaw 2760 established a Reserve Fund for the Saanich Peninsula Wastewater System. There are two portions in the Reserve Fund: Development Cost Charges is deposited in the DCC portion and expenditures are restricted. Surplus funds from the Operating budget are deposited to the Capital Reserve portion and expenditures provide for capital works.

<b>DCC Portion Fund: 1012 Fund Center: 101356</b>	<b>Estimate</b>	<b>Budget</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Beginning Balance</b>	1,534,961	35,004	205,004	375,004	545,004	65,004
<b>Planned Capital Expenditure (Based on Capital Plan)</b>	-	-	-	-	(50,000)	-
<b>Transfer OUT - To Capital Reserve</b>	(1,700,000)	-	-	-	(600,000)	(200,000)
<b>Transfer IN - DCC Funding</b>	170,000	170,000	170,000	170,000	170,000	170,000
<b>Interest Income</b>	30,043	-	-	-	-	-
<b>Ending Balance \$</b>	<b>35,004</b>	<b>205,004</b>	<b>375,004</b>	<b>545,004</b>	<b>65,004</b>	<b>35,004</b>

**Assumptions/Background:**

Surplus funds from the Operating budget are deposited to the Capital Reserve portion and expenditures provide for capital works.  
Approved capital expenditures to be funded by DCC to be determined, as under review.

**3.718 Saanich Peninsula Wastewater  
Capital Reserve Fund Schedule  
2021 - 2025 Financial Plan**

**Capital Reserve Fund Schedule - SPWWTP**

**Capital Reserve Fund SPWWTP - DCC Portion and Capital Reserve Portion**

Bylaw 2760 established a Reserve Fund for the Saanich Peninsula Wastewater System. There are two portions in the Reserve Fund: Development Cost Charges is deposited in the DCC portion and expenditures are restricted. Surplus funds from the Operating budget are deposited to the Capital Reserve portion and expenditures provide for capital works.

<b>Capital Reserve Portion Fund: 1012 Fund Center: 102022</b>	<b>Estimate</b>	<b>Budget</b>				
	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Beginning Balance</b>	2,141,215	1,521,718	1,058,630	626,561	778,559	332,976
<b>Planned Capital Expenditure</b>	(2,610,000)	(800,000)	(800,000)	(250,000)	(1,485,000)	(910,000)
<b>Transfer from Ops Budget</b>	274,605	336,913	367,931	401,998	439,417	480,522
<b>Planned transfer from DCC Funds</b>	1,700,000	-	-	-	600,000	200,000
<b>Interest Income*</b>	15,898	-	-	-	-	-
<b>Ending Balance \$</b>	<b>1,521,718</b>	<b>1,058,630</b>	<b>626,561</b>	<b>778,559</b>	<b>332,976</b>	<b>103,498</b>

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **L.W.M.P. (Peninsula)**

#### **COMMISSION REVIEW**

October 2020



**Service:** 3.720 L.W.M.P. (Peninsula)

**Commission:** Saanich Peninsula Waste Water

**DEFINITION:**

Implementation of the Liquid Waste Management Plan for the Saanich Peninsula. Bylaw No. 2388 (1996), amended by Bylaw No. 2439 (1996) and Bylaw No. 3073 (2003)

**SERVICE DESCRIPTION:**

To manage the Saanich Peninsula Liquid Waste Management Plan (SPLWMP) and implement the commitments approved under the plan as required:

- planning, reporting, amendment preparation, implementation of commitments, biosolids management program, resource recovery development and inflow/infiltration enhancement program

**PARTICIPATION:**

**MAXIMUM LEVY:**

Greater of \$5,663,000 or \$1.56 / \$1,000 of actual assessments (2020 - \$24,155,979).

**MAXIMUM CAPITAL DEBT:**

Nil

**COMMITTEE:**

Parks & Environment

**FUNDING:**

Requisition

**RESERVE FUND:**

Bylaw No. 4144 Operating Reserve Fund

Service: 3.720 L.W.M.P. (Peninsula)

Commission: Saanich Peninsula Waste Water

	<u>Operating</u>
Central Saanich	43.12%
North Saanich (*see note below)	15.87%
Sidney	41.01%
<b>Total</b>	<b><u>100.00%</u></b>

Note:

\* North Saanich taxes all of North Saanich, including the Airport, as LWMP benefits all of North Saanich, and not just the sewer area. (March 18, 2002)

# APPENDIX A

3.720 - LWMP (PENINSULA)			BUDGET REQUEST							
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
<u>OPERATING COSTS:</u>										
Operating Expenditures	21,875	21,877	41,738	41,000	-	82,738	107,341	24,080	24,557	25,047
Contract For Services	25,000	20,000	-	-	-	-	11,799	-	-	-
Contingency	-	-	-	-	-	-	-	-	-	-
<b>TOTAL OPERATING COSTS</b>	<b>46,875</b>	<b>41,877</b>	<b>41,738</b>	<b>41,000</b>	<b>-</b>	<b>82,738</b>	<b>119,140</b>	<b>24,080</b>	<b>24,557</b>	<b>25,047</b>
*Percentage Increase over prior year	0.00%	-10.66%	-10.96%	87.47%	0.00%	76.51%	44.00%	-79.79%	1.98%	2.00%
<u>CAPITAL / RESERVE</u>										
Transfer to Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-
Transfer to Operating Reserve Fund	-	4,998	-	-	-	-	-	-	-	-
<b>TOTAL CAPITAL / RESERVES</b>	<b>-</b>	<b>4,998</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Debt Expenditures	-	-	-	-	-	-	-	-	-	-
MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
<b>TOTAL COSTS</b>	<b>46,875</b>	<b>46,875</b>	<b>41,738</b>	<b>41,000</b>	<b>-</b>	<b>82,738</b>	<b>119,140</b>	<b>24,080</b>	<b>24,557</b>	<b>25,047</b>
*Percentage Increase over prior year	0.00%	0.00%	-10.96%	87.47%	0.00%	76.51%	44.00%	-79.79%	1.98%	2.00%
Internal Recoveries	-	-	-	-	-	-	-	-	-	-
Recovery - Other	-	-	-	-	-	-	-	-	-	-
<b>OPERATING COSTS LESS INTERNAL RECOVERIES</b>	<b>46,875</b>	<b>46,875</b>	<b>41,738</b>	<b>41,000</b>	<b>-</b>	<b>82,738</b>	<b>119,140</b>	<b>24,080</b>	<b>24,557</b>	<b>25,047</b>
*Percentage Increase over prior year	0.00%	0.00%	-10.96%	87.47%	0.00%	76.51%	44.00%	-79.79%	1.98%	2.00%
<b>FUNDING SOURCES (REVENUE)</b>										
<b>Surplus / (Deficit)</b>										
Balance C/F from Prior to Current year	-	-	-	-	-	-	-	-	-	-
Grants in Lieu of Taxes	(200)	(200)	(210)	-	-	(210)	(210)	(210)	(210)	(210)
Transfer From Operating Reserve	(35,000)	(35,000)	(29,658)	-	-	(29,658)	-	-	-	-
<b>TOTAL REVENUE</b>	<b>(35,200)</b>	<b>(35,200)</b>	<b>(29,868)</b>	<b>-</b>	<b>-</b>	<b>(29,868)</b>	<b>(210)</b>	<b>(210)</b>	<b>(210)</b>	<b>(210)</b>
<b>REQUISITION</b>	<b>(11,675)</b>	<b>(11,675)</b>	<b>(11,870)</b>	<b>(41,000)</b>	<b>-</b>	<b>(52,870)</b>	<b>(118,930)</b>	<b>(23,870)</b>	<b>(24,347)</b>	<b>(24,837)</b>
*Percentage Increase over prior year	0.00%	0.00%	1.67%	351.18%	0.00%	352.85%	124.95%	-79.93%	2.00%	2.01%
<b>PARTICIPANTS: Central Saanich, North Saanich, Sidney</b>										
<b>AUTHORIZED POSITIONS:</b>										
Salaried	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Term	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.720 L.W.M.P. Peninsula**  
**Operating Reserve Summary**  
**2021 - 2025 Financial Plan**

**Profile**

**L.W.M.P. Peninsula**

Established by Bylaw No. 4144 to enable CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, as well as to mitigate fluctuations in revenue.

**Operating Reserve Schedule**

Operating Reserve Schedule Fund: 1500 Fund Center: 105527	Est. Actual	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	59,471	30,371	713	713	713	713
Planned Purchase	(35,000)	(29,658)	-	-	-	-
Transfer from Ops Budget	4,998	-	-	-	-	-
Interest Income*	902	-	-	-	-	-
<b>Total projected year end balance</b>	<b>30,371</b>	<b>713</b>	<b>713</b>	<b>713</b>	<b>713</b>	<b>713</b>

**Assumptions/Background:**

Retain reserve balance for future LWMP planning projects.

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **Saanich Peninsula - Stormwater Quality Management**

#### **COMMISSION REVIEW**

October 2020

<b>Service:</b> 1.537    Saanich Peninsula - Stormwater Quality Management	<b>Commission:</b> Saanich Peninsula Waste Water
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**DEFINITION:**

Establishment Bylaw No. 3642 (2009), as amended by Bylaw No. 4141 (2017), to identify pollution in stormwater run-off from land in the service area.

**SERVICE DESCRIPTION:**

The service provides a stormwater quality program in the Saanich Peninsula to coordinate and provide information for management of stormwater quality and surface water resources. The program identifies levels of contaminants in stormwater discharges and prioritizes the level of public health and environmental concern posed by the discharges and then works to reduce/eliminate the contaminants.

**PARTICIPATION:**

Districts of Central Saanich, North Saanich and Town of Sidney.

**MAXIMUM LEVY:**

Greater of \$106,017 or \$0.0103/\$1,000 of actual assessments. The actual assessment for 2020 was \$109,946.

**MAXIMUM CAPITAL DEBT:**

Nil

**COMMITTEE:**

Saanich Peninsula Wastewater Commission

**FUNDING:**

The apportionment of annual operating costs among the participating areas shall be on the basis of one sixth in proportion to the population of the participating areas, one sixth in proportion to the land area of the participating areas, one sixth in proportion to the length of shoreline in each of the participating areas, and one half in proportion to the number of high and medium priority discharges of stormwater to the environment in the prior year within the boundaries of each of the participating areas, as determined by the Capital Regional District Board.

**USER CHARGE:**

N/A

**Service: 1.537 Saanich Peninsula - Stormwater Quality Management**

**Commission: Saanich Peninsula Waste Water**

	<u><b>Stormwater</b></u>
Central Saanich	27.58%
North Saanich	35.68%
Sidney	24.33%
Tsawout Band	4.49%
Tsartlip Band	5.57%
Pauquachin Band	0.98%
Tseycum Band	1.37%
<b>Total</b>	<u><u><b>100.00%</b></u></u>

Note:

\* Service established effective 2010; previously provided by agreement

# APPENDIX A

1.537 SOURCE CONTROL STORMWATER - SAANICH PENINSULA			BUDGET REQUEST							
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
<u>OPERATING COSTS:</u>										
Operating Expenditures	72,938	83,005	75,443	-	-	75,443	77,371	78,919	80,488	82,091
Contract For Services	29,857	17,500	22,500	-	-	22,500	22,529	22,980	23,452	23,919
Consultant Expenses	11,000	2,000	15,000	-	-	15,000	15,300	15,610	15,920	16,240
<b>TOTAL OPERATING COSTS</b>	<b>113,795</b>	<b>102,505</b>	<b>112,943</b>	<b>-</b>	<b>-</b>	<b>112,943</b>	<b>115,200</b>	<b>117,509</b>	<b>119,860</b>	<b>122,250</b>
*Percentage Increase over prior year	0.00%	-9.92%	-0.75%	0.00%	0.00%	-0.75%	2.00%	2.00%	2.00%	1.99%
<u>CAPITAL / RESERVE</u>										
Transfer to Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-
Transfer to Operating Reserve Fund	-	11,290	2,787	-	-	2,787	2,840	2,891	2,950	3,010
<b>TOTAL CAPITAL / RESERVES</b>	<b>-</b>	<b>11,290</b>	<b>2,787</b>	<b>-</b>	<b>-</b>	<b>2,787</b>	<b>2,840</b>	<b>2,891</b>	<b>2,950</b>	<b>3,010</b>
Debt Expenditures	-	-	-	-	-	-	-	-	-	-
MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
<b>TOTAL COSTS</b>	<b>113,795</b>	<b>113,795</b>	<b>115,730</b>	<b>-</b>	<b>-</b>	<b>115,730</b>	<b>118,040</b>	<b>120,400</b>	<b>122,810</b>	<b>125,260</b>
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	2.00%	2.00%	2.00%	1.99%
Internal Recoveries	-	-	-	-	-	-	-	-	-	-
Recovery - Other	-	-	-	-	-	-	-	-	-	-
<b>OPERATING COSTS LESS INTERNAL RECOVERIES</b>	<b>113,795</b>	<b>113,795</b>	<b>115,730</b>	<b>-</b>	<b>-</b>	<b>115,730</b>	<b>118,040</b>	<b>120,400</b>	<b>122,810</b>	<b>125,260</b>
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	2.00%	2.00%	2.00%	1.99%
<b>FUNDING SOURCES (REVENUE)</b>										
<b>Surplus / (Deficit)</b>										
Balance C/F from Prior to Current year	-	-	-	-	-	-	-	-	-	-
Grants in Lieu of Taxes	(3,849)	(3,849)	(3,910)	-	-	(3,910)	(3,980)	(4,060)	(4,140)	(4,220)
Transfer From Operating Reserve	-	-	-	-	-	-	-	-	-	-
<b>TOTAL REVENUE</b>	<b>(3,849)</b>	<b>(3,849)</b>	<b>(3,910)</b>	<b>-</b>	<b>-</b>	<b>(3,910)</b>	<b>(3,980)</b>	<b>(4,060)</b>	<b>(4,140)</b>	<b>(4,220)</b>
<b>REQUISITION</b>	<b>(109,946)</b>	<b>(109,946)</b>	<b>(111,820)</b>	<b>-</b>	<b>-</b>	<b>(111,820)</b>	<b>(114,060)</b>	<b>(116,340)</b>	<b>(118,670)</b>	<b>(121,040)</b>
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	2.00%	2.00%	2.00%	2.00%
PARTICIPANTS: Central Saanich, North Saanich, Sidney										
AUTHORIZED POSITIONS:										
Salaried	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Term	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



**1.537 Saanich Peninsula - Source Control Stormwater****Operating Reserve Summary****2021 - 2025 Financial Plan****Profile****Saanich Peninsula - Source Control Stormwater**

Established by Bylaw No. 4147 to enable CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, as well as to mitigate fluctuations in revenue.

**Operating Reserve Schedule**

Operating Reserve Schedule Fund: 1500 Fund Center: 105520	Est. Actual	Budget				
	2020	2021	2022	2023	2024	2025
Projected year end balance						
Beginning Balance	27,114	38,816	41,603	44,443	47,334	50,284
Planned Purchase	-	-	-	-	-	-
Transfer from Ops Budget	11,290	2,787	2,840	2,891	2,950	3,010
Interest Income*	411	-	-	-	-	-
<b>Total projected year end balance</b>	<b>38,816</b>	<b>41,603</b>	<b>44,443</b>	<b>47,334</b>	<b>50,284</b>	<b>53,294</b>

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

# **CAPITAL REGIONAL DISTRICT**

## **2020 BUDGET**

### **Saanich Peninsula - Source Control Stormwater**

#### **COMMISSION REVIEW**

October 2020

<b>Service:</b> 1.538 Saanich Peninsula - Source Control Stormwater	<b>Commission:</b> Saanich Peninsula Waste Water
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**DEFINITION:**

To regulate, prohibit and impose requirements in respect of discharges to the municipal stormwater system and water courses  
Bylaw No. 3906 (adopted August, 2013), amended by Bylaw No. 4140 (2016).

**SERVICE DESCRIPTION:**

The service provides a regulatory stormwater source control program in the Saanich Peninsula to manage stormwater quality in the municipal drainage systems.

**PARTICIPATION:**

Districts of Central Saanich, North Saanich and Town of Sidney.

**MAXIMUM LEVY:**

Maximum Levy: Greater of \$51,715 or \$0.005/\$1,000 of actual assessments. The actual assessment for 2020 was \$77,423.

**MAXIMUM CAPITAL DEBT:**

Nil

**COMMITTEE:**

Saanich Peninsula Wastewater

**FUNDING:**

The annual costs for the service, net of grants and other revenues, shall be apportioned on the basis of:

- a) The population of the participating areas; and
- b) The population estimate as determined annually by the Regional Planning Services department of the Capital Regional District.

**USER CHARGE:**

N/A

**Service: 1.538 Saanich Peninsula - Source Control Stormwater**

**Commission: Saanich Peninsula Waste Water**

	<u><b>2020</b></u>
Central Saanich	42.86%
North Saanich	28.14%
Sidney	28.99%
<b>Total</b>	<u><u><b>100.00%</b></u></u>

Note:  
Bylaw No. 3906 (adopted August, 2013).

# APPENDIX A

1.538 STORMWATER QUALITY MANAGEMENT - SAANICH PENINSULA			BUDGET REQUEST							
	2020 BOARD BUDGET	2020 ESTIMATED ACTUAL	2021 CORE BUDGET	2021 ONGOING	2021 ONE-TIME	2021 TOTAL	2022 TOTAL	2023 TOTAL	2024 TOTAL	2025 TOTAL
<u>OPERATING COSTS:</u>										
Operating Expenditures	48,033	45,149	55,480	-	-	55,480	46,463	47,390	48,329	49,290
Contract For Services	13,400	2,500	7,000	-	-	7,000	7,140	7,280	7,430	7,580
Contingency	-	-	-	-	-	-	-	-	-	-
<b>TOTAL OPERATING COSTS</b>	<b>61,433</b>	<b>47,649</b>	<b>62,480</b>	<b>-</b>	<b>-</b>	<b>62,480</b>	<b>53,603</b>	<b>54,670</b>	<b>55,759</b>	<b>56,870</b>
*Percentage Increase over prior year	0.00%	-22.44%	1.70%	0.00%	0.00%	1.70%	-14.21%	1.99%	1.99%	1.99%
<u>CAPITAL / RESERVE</u>										
Transfer to Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-
Transfer to Operating Reserve Fund	-	9,684	-	-	-	-	2,217	2,260	2,311	2,360
<b>TOTAL CAPITAL / RESERVES</b>	<b>-</b>	<b>9,684</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,217</b>	<b>2,260</b>	<b>2,311</b>	<b>2,360</b>
Debt Expenditures	-	-	-	-	-	-	-	-	-	-
MFA Debt Reserve	-	-	-	-	-	-	-	-	-	-
<b>TOTAL COSTS</b>	<b>61,433</b>	<b>57,333</b>	<b>62,480</b>	<b>-</b>	<b>-</b>	<b>62,480</b>	<b>55,820</b>	<b>56,930</b>	<b>58,070</b>	<b>59,230</b>
*Percentage Increase over prior year	0.00%	-6.67%	1.70%	0.00%	0.00%	1.70%	-10.66%	1.99%	2.00%	2.00%
Internal Recoveries	-	-	-	-	-	-	-	-	-	-
Recovery - Other	-	-	-	-	-	-	-	-	-	-
<b>OPERATING COSTS LESS INTERNAL RECOVERIES</b>	<b>61,433</b>	<b>57,333</b>	<b>62,480</b>	<b>-</b>	<b>-</b>	<b>62,480</b>	<b>55,820</b>	<b>56,930</b>	<b>58,070</b>	<b>59,230</b>
*Percentage Increase over prior year	0.00%	-6.67%	1.70%	0.00%	0.00%	1.70%	-10.66%	1.99%	2.00%	2.00%
<b>FUNDING SOURCES (REVENUE)</b>										
<b>Surplus / (Deficit)</b>										
Balance C/F from Prior to Current year	(3,519)	(3,519)	-	-	-	-	-	-	-	-
Grants in Lieu of Taxes	(1,550)	(1,550)	(1,580)	-	-	(1,580)	(1,610)	(1,640)	(1,670)	(1,700)
Transfer From Operating Reserve	(4,100)	-	(7,750)	-	-	(7,750)	-	-	-	-
<b>TOTAL REVENUE</b>	<b>(9,169)</b>	<b>(5,069)</b>	<b>(9,330)</b>	<b>-</b>	<b>-</b>	<b>(9,330)</b>	<b>(1,610)</b>	<b>(1,640)</b>	<b>(1,670)</b>	<b>(1,700)</b>
<b>REQUISITION</b>	<b>(52,264)</b>	<b>(52,264)</b>	<b>(53,150)</b>	<b>-</b>	<b>-</b>	<b>(53,150)</b>	<b>(54,210)</b>	<b>(55,290)</b>	<b>(56,400)</b>	<b>(57,530)</b>
*Percentage Increase over prior year	0.00%	0.00%	1.70%	0.00%	0.00%	1.70%	1.99%	1.99%	2.01%	2.00%
<b>PARTICIPANTS: Sooke</b>										
<b>AUTHORIZED POSITIONS:</b>										
Salaried	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Term	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**1.538 Saanich Peninsula -Stormwater Quality Management**  
**Operating Reserve Summary**  
**2021 - 2025 Financial Plan**

**Profile**

**Saanich Peninsula -Stormwater Quality Management**

Established by Bylaw No. 4147 to enable CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, as well as to mitigate fluctuations in revenue.

**Operating Reserve Schedule**

Operating Reserve Schedule	Est. Actual	Budget				
	2020	2021	2022	2023	2024	2025
Projected year end balance						
Beginning Balance	48,986	59,413	51,663	53,880	56,140	58,451
Planned Purchase	-	(7,750)	-	-	-	-
Transfer from Ops Budget	9,684	-	2,217	2,260	2,311	2,360
Interest Income*	743	-	-	-	-	-
<b>Total projected year end balance</b>	<b>59,413</b>	<b>51,663</b>	<b>53,880</b>	<b>56,140</b>	<b>58,451</b>	<b>60,811</b>

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION  
MEETING OF THURSDAY, OCTOBER 15, 2020**

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**SUBJECT**     **Saanich Peninsula Wastewater Service - 2021 Operating and Capital Budget**

**ISSUE SUMMARY**

To provide an overview of the 2021 Saanich Peninsula Wastewater Service operating and capital budget, highlighting the changes from the 2020 budget and the proposed 2021 budget figures. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

**BACKGROUND**

The draft 2021 Saanich Peninsula Wastewater Service budget has been prepared for the Saanich Peninsula Wastewater Commission's (the Commission) consideration. The Commission will make budget recommendations to the Capital Regional District (CRD) Board. As in previous years, the draft 2021 budget has been prepared considering the CRD Board's 2021 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential synergies or efficiencies between departments and services, reviewing of service levels and adjustments related to regulatory compliance, and undertaking infrastructure improvements to maintain service levels across the service area. The following sets out the key components of the budget.

**2020 Year-end Financial Projections**

The estimated actual 2020 overall expense for trunk sewer and treatment plant operations is projected to be \$67,268 under budget due to lower expenditures in heat recovery operations and unplanned equipment repairs and maintenance, which helped offset higher than budgeted chemical costs this year. This operating expense variance is offset by a reduction in anticipated revenue from Panorama Recreation Center (PRC) due to the pool shutdown in response to COVID-19 and system shutdown early in the year as a result of corrective maintenance issues. The District Energy System (DES) is projected to generate about \$44,545 in revenue from the sale of energy to the PRC for the year. This revenue is \$101,426 below the budgeted revenue of \$145,971. The net impact of these expense and revenue differences is \$34,158 and as such, the 2020 capital reserve fund transfer is projected to decrease to \$274,605 to balance the year-end budget.

**Operating Budget**

A net increase in the 2021 operating expenses in the amount of \$519,371 is planned for trunk sewer and treatment plant operations; \$114,371 of this increase results from non-discretionary expense adjustments such as wage/salary increases, departmental support service allocations, and adjustments to other operating expenses such as chemical costs. The remaining \$405,000 of this increase is due to the cost for residuals disposal and treatment at the Residuals Treatment Facility (RTF), and beneficial end-use, as well as updated residuals trucking costs for bin hauling to the RTF, as directed by the Commission earlier this year.

The 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget, have also been prepared. The budgets are reflecting a 1.7% requisition increase, with the exception of the LWMP program budget which has an on-going annual requisition increase of \$41,000 to fund development of the Saanich Peninsula inflow and infiltration management program in order to meet the LWMP commitment and manage this risk proactively. The marine monitoring program costs are included in the overall conveyance and treatment operating budget.

The planned transfer to the maintenance reserve fund in 2021 is \$49,650. At year-end 2020, the maintenance reserve fund balance is estimated to be \$500,984, which is available to fund significant maintenance tasks that do not occur annually, such as odour control system carbon replacement, outfall inspections, and DES heat exchanger cleaning.

### Operating Revenue

Although the operating expenses are almost entirely funded through requisition based on each participant's percentage of total wastewater input, the DES system is budgeted to generate \$79,226 in revenue in 2021 from the sale of energy to the PRC. This level of revenue is determined by annual energy rate adjustments based on prior year natural gas market rates and projected energy consumption. The rate used to determine the 2021 revenue is based on the 2020 natural gas rate and anticipated reduced demand.

2021 cost sharing percentages based on prior year flows will be finalized in October and are not expected to change significantly from the 2020 cost sharing figures. The overall requisition for Saanich Peninsula trunk sewers, treatment and disposal for 2021 has been set at \$4,115,433 which is a 14.18% increase over 2020.

### Capital Budget

The planned capital expenditures for 2021 total \$3,957,500 and are funded from reserves. This includes \$2,990,000 in projects initiated in 2020 or prior, most of which are instream, multi-year projects. The 2021 capital program consists of several new projects related to replacement of equipment that is at the end of the service life and projects required to address operational issues. Three major projects included in the 2021 budget are relining segments of the asbestos cement trunk sewer main and manhole replacements, and, at the wastewater treatment plant, concrete tank repairs and replacement of the rotary presses.

The planned transfer to the capital reserve fund in 2021 is \$336,913. At year-end 2020, with a \$1.7 million transfer from Development Cost Charges (DCC) reserve, the capital reserve fund balance is estimated to be \$1,521,718, which is available to fund major capital projects. The planned transfer to the equipment replacement fund in 2021 is \$115,708. At year-end 2020, the equipment replacement fund balance is estimated to be \$675,661 which is available to fund minor capital and operating machinery and equipment replacements.

The value of the five year (2021 to 2025) capital plan is \$8,020,000. With the current capital reserve and equipment replacement fund balances, planned contributions, transfers, and expenditures, there is sufficient funding available for the five year capital plan. Although there are projected funds remaining in the capital reserve after the application of the five year plan, there is



a limited balance available for unplanned expenditures. Given this declining reserve balance, the 2021 budget includes a 10% annual increase in transfers to reserves (both Equipment Replacement Fund and Capital) and, as noted above a \$1.7 million transfer from DCC reserve. Unforeseen capital expenditures may trigger the need to borrow funds in the near future in the Saanich Peninsula Wastewater Service. There is currently no debt associated with the Saanich Peninsula Wastewater Service.

The DCC program represents \$150,000 of the capital plan which reflects the projects included in the 2018 DCC program update. Pending ministry approval of the proposed 2020 DCC transfer to capital reserve (\$1.7 million), at year-end in 2020 the DCC reserve fund balance is estimated to be \$35,004.

### **RECOMMENDATION**

The Saanich Peninsula Wastewater Commission recommends that the CRD Board:

1. Approve the 2021 Saanich Peninsula trunk sewers, treatment and disposal operating and capital budget and the 2021 Saanich Peninsula Liquid Waste Management Plan (LWMP) program budgets including the LWMP administration budget, the Saanich Peninsula Stormwater Quality Management Program budget and the Saanich Peninsula Stormwater Source Control budget; and
2. Balance the 2020 actual revenue and expense on the transfer to capital reserve fund.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: Draft Budget Document

# **CAPITAL REGIONAL DISTRICT**

## **2021 BUDGET**

### **Saanich Peninsula Water Supply**

#### **COMMISSION REVIEW**

OCTOBER 2020

Service: 2.610

Saanich Peninsula Water Supply

Committee: Saanich Peninsula Water

**DEFINITION:**

To purchase water and to acquire, design, construct, reconstruct, purchase, maintain and operate facilities and to acquire property easements, licences and authorities for the supply of water to Central Saanich, North Saanich, and Sidney, for distribution by the municipalities. Letters Patent, December 22, 1976; revised Sept. 27, 1984. Amended SLP April 27, 1978 and March 19, 1986.

**SERVICE DESCRIPTION:**

This service provides for the purchase of bulk water for supply to Central Saanich, North Saanich, and Sidney, for distribution within their municipalities. Included in the program is the responsibility to provide design, construction, operation and maintenance, licenses, and water quality monitoring to the service area.

**PARTICIPATION:**

Central Saanich /North Saanich/ Sidney

**MAXIMUM LEVY:****MAXIMUM CAPITAL DEBT:**

As established by Inspector of Municipalities.

**COMMISSION:**

Saanich Peninsula Water Commission established by Letters Patent to advise the Board with respect to this function.

**FUNDING:**

Water rates and debt cost allocation to be established by bylaw, charged to the individual municipalities.

**Bulk Water Rate**

To cover 100% of operating costs, billed monthly to each municipality.

**Requisition**

To cover 100% of debt costs by formula: levy of \$0.115 / \$1,000 of total hospital assessments for all members plus 1/3 of balance on each of members: number of connections, specified area school assessments and population.

**CAPITAL DEBT:**

All Bylaws have expired.

# APPENDIX A

CAPITAL REGIONAL DISTRICT

Program Group: CRD-Saanich Peninsula Water Supply			2021 BUDGET REQUEST				FUTURE PROJECTIONS			
	2020 BOARD BUDGET 2	2020 ESTIMATED ACTUAL 3	CORE BUDGET 4	ONGOING 5	ONE-TIME 6	TOTAL (COL 4, 5 & 6) 7	2022 8	2023 9	2024 10	2025 11
<b>SUMMARY</b>										
1										
<b><u>OPERATING EXPENDITURES:</u></b>										
ALLOCATION - OPERATIONS	1,041,844	1,091,858	1,059,266	-	-	1,059,266	1,080,104	1,101,360	1,123,041	1,145,157
UTILITIES	214,440	232,040	218,086	-	-	218,086	222,447	226,896	231,434	236,063
OPERATING - OTHER COSTS	169,615	148,315	172,795	-	-	172,795	176,251	179,773	183,359	187,020
ALLOCATION - STANDARD OVERHEAD	93,232	93,232	109,212	-	-	109,212	123,961	126,440	128,969	131,548
<b>TOTAL OPERATING EXPENDITURES</b>	<b>1,519,131</b>	<b>1,565,445</b>	<b>1,559,359</b>	<b>-</b>	<b>-</b>	<b>1,559,359</b>	<b>1,602,763</b>	<b>1,634,469</b>	<b>1,666,803</b>	<b>1,699,788</b>
*Percentage increase over prior year board budget			2.65%			2.65%	2.78%	1.98%	1.98%	1.98%
<b>TOTAL BULK WATER EXPENDITURES</b>	<b>4,738,240</b>	<b>4,738,240</b>	<b>4,860,640</b>	<b>-</b>	<b>-</b>	<b>4,860,640</b>	<b>4,959,920</b>	<b>5,153,040</b>	<b>5,308,080</b>	<b>5,505,280</b>
<b><u>CAPITAL EXPENDITURES &amp; TRANSFERS</u></b>										
TRANSFER TO CAPITAL RESERVE FUND	650,000	597,885	700,000	-	-	700,000	750,000	550,000	300,000	250,000
TRANSFER TO EQUIPMENT REPLACEMENT FUND	50,000	50,000	50,000	-	-	50,000	50,000	50,000	50,000	50,000
<b>TOTAL CAPITAL EXPENDITURES &amp; TRANSFERS</b>	<b>700,000</b>	<b>647,885</b>	<b>750,000</b>	<b>-</b>	<b>-</b>	<b>750,000</b>	<b>800,000</b>	<b>600,000</b>	<b>350,000</b>	<b>300,000</b>
<b><u>DEBT SERVICING</u></b>										
DEBT-INTEREST & PRINCIPAL	-	-	-	-	-	-	57,800	311,356	691,413	923,664
<b>TOTAL DEBT SERVICING EXPENDITURES</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>57,800</b>	<b>311,356</b>	<b>691,413</b>	<b>923,664</b>
<b>TOTAL EXPENDITURES</b>	<b>6,957,371</b>	<b>6,951,570</b>	<b>7,169,999</b>	<b>-</b>	<b>-</b>	<b>7,169,999</b>	<b>7,420,483</b>	<b>7,698,865</b>	<b>8,016,296</b>	<b>8,428,732</b>
<b><u>SOURCES OF FUNDING-OPERATIONS</u></b>										
REVENUE -WATER SALES	(6,951,571)	(6,951,570)	(7,164,199)	-	-	(7,164,199)	(7,414,683)	(7,693,065)	(8,010,496)	(8,422,932)
REVENUE -OTHER	(5,800)	-	(5,800)	-	-	(5,800)	(5,800)	(5,800)	(5,800)	(5,800)
<b>TOTAL SOURCES OF FUNDING FROM OPERATIONS</b>	<b>(6,957,371)</b>	<b>(6,951,570)</b>	<b>(7,169,999)</b>	<b>-</b>	<b>-</b>	<b>(7,169,999)</b>	<b>(7,420,483)</b>	<b>(7,698,865)</b>	<b>(8,016,296)</b>	<b>(8,428,732)</b>
<b><u>SOURCES OF FUNDING-REQUISITION</u></b>										
PROPERTY TAX REQUISITION FOR DEBT	-	-	-	-	-	-	-	-	-	-
<b>TOTAL REQUISITION</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
TRANSFER FROM PRIOR YEAR	-	-	-	-	-	-	-	-	-	-
TRANSFER TO FOLLOWING YEAR										
<b>TOTAL CARRY FORWARD (SURPLUS)/ DEFICIT</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL SOURCES OF ALL FUNDING</b>	<b>(6,957,371)</b>	<b>(6,951,570)</b>	<b>(7,169,999)</b>	<b>-</b>	<b>-</b>	<b>(7,169,999)</b>	<b>(7,420,483)</b>	<b>(7,698,865)</b>	<b>(8,016,296)</b>	<b>(8,428,732)</b>
Percentage increase over prior year's board budget			3.06%			3.06%	3.49%	3.75%	4.12%	5.14%

**Change in Budget 2020 to 2021****Service: 2.610 Saanich Peninsula Water Supply****Total Expenditure****Comments****2020 Budget****6,957,371****Change in Salaries:**

Change in Labour

17,000

Labour charges (Salaries and overhead, including corpo

Total Change in Salaries

17,000

**Other Changes:**

Bulk Water Purchase

122,400

Transfers to Capital Reserve

50,000

Standard Overhead Allocation

15,980

Other Costs

7,248

Total Other Changes

195,628

**2021 Budget****7,169,999**

% expense increase from 2020:

3.1%

% Requisition increase from 2020 (if applicable):

n/a

Requisition funding is (x)% of service revenue

**Overall 2020 Budget Performance**

(expected variance to budget and surplus treatment)

*Water sales and revenue are in line with budget for the year. Operating costs are \$46,000 (3.0%) over budget due to one time unplanned corrective system maintenance. The transfer to the Capital Reserve Fund will be reduced by the net deficit of \$52,000.*

## SAANICH PENINSULA WATER SUPPLY

### 2021 Demand Estimate

#### Retail Demand

Years	Actual Demand cu.metre	Budgeted Demand cu.metre
2016	6,870,557	6,270,000
2017	6,549,588	6,270,000
2018	7,044,786	6,300,000
2019	6,928,173	6,500,000
2020	6,800,000*	6,800,000
<b>2021 Demand Estimate</b>	<b>6,800,000</b>	

\* Projected consumption for 2020

## SAANICH PENINSULA WATER SUPPLY

### Summary of Supply Water Rates to Participating Municipalities

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>% change</u>
<b>Retail (direct) water rate</b>							
Sannich Peninsula Retail cost per cu.m.	\$0.9111	\$0.9621	\$0.9815	\$1.0223	\$1.0536	\$0.0313	3.1%
Agricultural Research Station cost per cu.m.	\$0.9463	\$0.9973	\$1.0167	\$1.0575	\$1.0888	\$0.0313	3.0%

### Summary of Bulk Water Purchase Rates from Regional Water Supply

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>% change</u>
<b>CRD Bulk water purchase cost per cu.m.</b>	\$0.6375	\$0.6644	\$0.6775	\$0.6968	\$0.7148	\$0.0180	2.6%

# SAANICH PENINSULA WATER SUPPLY

## Summary of Supply Water Rates to Participating Municipalities

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>Change</u>	<u>% change</u>
<b>Retail (direct) water rate</b>								
Unit cost per cu.m.	\$ 0.9073	\$ 0.9111	\$ 0.9621	\$ 0.9815	\$ 1.0223	\$ 1.0536	\$ 0.0313	3.1%

## Retail Water Rate Increase Impact on Participating Municipalities Water Bill

Average consumption: 235.0 cubic meters

<u>Charge for Twelve Months Consumption</u>	<u>Year</u>	<u>Annual charge</u>	<u>2021 Annual Change \$</u>
Average Consumption	2020	\$ 240.24	
	2021	\$ 247.60	\$ 7.36
Half Average Consumption	2020	\$ 120.12	
	2021	\$ 123.80	\$ 3.68
Twice Average Consumption	2020	\$ 480.48	
	2021	\$ 495.19	\$ 14.72



**Schedule A**  
**Asset Useful Life Assignments - PSAB**

<b><u>Classes:</u></b>	<b><u>Code</u></b>	<b><u>Asset Categories</u></b>	<b><u>Useful Life, Years</u></b>
<b>Land</b>	LAND	Land & Rights of Way * (Note 1)	N/A
<b>Building</b>	BLDG	Building, Permanent	50
	BLOT	Building, Temporary/ Portable	20
	BLFX	Building fixture ( <i>sprinklers</i> )	20
<b>Equipment</b>	BOAT	Boats & Marine Equipment	10
	COMP	Computer Equipment ( <i>includes software</i> )	5
	ELEC	Electronic Equipment( <i>hydromet, weather stn eqpt</i> )	5
	FIRE	Fire & Safety Equipment	10
	GENT	Generator	20
	HYDR	Hydrants and Standpipes	20
	HYDY	Hydrology	10
	MTRS	Meters	20
	OFFE	Office Equipment	5
	OFFF	Office Furniture	10
	SCDA	SCADA Equipment	10
	SCRN	Intake Screens/Membranes ( <i>stop logs</i> )	20
	SHOP	Shop Equipment	10
	TELE	Telecommunication Eqpt ( <i>radios, phone systems</i> )	10
	WEQP	Water Works Eqpt( <i>W. Quality lab, Wshed eqpt</i> )	10
	NEW GRP	Weather stn & communication tower	15
<b>Vehicle</b>	VEHC	Vehicles	8
<b>Engineering</b>	BRDG	Bridge	50
<b>Structure</b>	CANL	Canal	50
	DAMS	Dam Structures	100
	PIPE	Pipelines, includes Vaults, Kiosks, Valve chambers	75
	PIPF	Pipelines, fittings	20
	PLPV	Parking lot paved	40
	PSEQ	Pump Station Equipment	20
	PSHS	Pump Station Housing	50
	PRVS	Valves, Flushes & PRV's	20
	RDGR	Roads gravel	20
	RDPV	Roads paved	40
	RESS	Reservoirs (steel & concrete)	50
	REST	Reservoirs (tower/tank)	35
	TANK	Storage tank	40
	TELP	Telephone and Power Lines	50
	TUNN	Tunnel, Culvert and Diversions	50
	WATP	Water Treatment Plant	25
	WELL	Wet well/ Well	50
<b>Other Assets</b>	CSTU	Capital Management Studies	5
	FENC	Fences	15
	LIMP	Land & Yard Improvements	20

Note 1: Land is not depreciated so a useful life assignment is not applicable

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2021 to 2025**

<b>Service No.</b>	<b>2.610</b>	<b>Carry Forward from 2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>TOTAL</b>
	<b>Saanich Peninsula Water Supply</b>							

**EXPENDITURE**

Buildings	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	E	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000
Land	L	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	S	\$805,000	\$4,683,000	\$6,754,000	\$11,270,000	\$7,720,000	\$1,324,500	\$31,751,500
Vehicles	V	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		<b>\$805,000</b>	<b>\$4,758,000</b>	<b>\$6,754,000</b>	<b>\$11,270,000</b>	<b>\$7,720,000</b>	<b>\$1,324,500</b>	<b>\$31,826,500</b>

**SOURCE OF FUNDS**

Capital Funds on Hand	Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debenture Debt (New Debt Only)	Debt	\$0	\$0	\$2,550,000	\$5,550,000	\$4,500,000	\$300,000	\$12,900,000
Equipment Replacement Fund	ERF	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
Grants (Federal, Provincial)	Grant	\$0	\$1,200,000	\$3,450,000	\$5,450,000	\$3,000,000	\$200,000	\$13,300,000
Donations / Third Party Funding	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	Res	\$805,000	\$3,498,000	\$694,000	\$210,000	\$160,000	\$764,500	\$5,326,500
		<b>\$805,000</b>	<b>\$4,758,000</b>	<b>\$6,754,000</b>	<b>\$11,270,000</b>	<b>\$7,720,000</b>	<b>\$1,324,500</b>	<b>\$31,826,500</b>

CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM

2021 & Forecast 2022 to 2025

Service #:2.610

Service Name:Saanich Peninsula Water Supply

Proj. No.  
The first two digits represent first year the project was in the capital plan.

Capital Exp. Type  
Study - Expenditure for feasibility and business case report.  
New - Expenditure for new asset only  
Renewal - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service  
Replacement - Expenditure replaces an existing asset

Funding Source Codes  
Debt = Debenture Debt (new debt only)  
ERF = Equipment Replacement Fund  
Grant = Grants (Federal, Provincial)  
Cap = Capital Funds on Hand  
Other = Donations / Third Party Funding

Funding Source Codes (con't)  
Res = Reserve Fund  
STLoan = Short Term Loans  
WU - Water Utility

Asset Class  
L - Land  
S - Engineering Structure  
B - Buildings  
V - Vehicles  
E - Equipment

Capital Project Title  
Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

Capital Project Description  
Briefly describe project scope and service benefits.  
For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".

Total Project Budget  
This column represents the total project budget not only within the 5-year window.

FIVE YEAR FINANCIAL PLAN

Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Proj Budget	Asset Class	Funding Source	C/F from 2020	2021	2022	2023	2024	2025	5 - Year Total
SYSTEM UPGRADES AND REPLACEMENTS													
Planning													
19-02	New	Asset Management Plan Update	Update the asset management plan with recent study information (post disaster emergency water supply, Elk Lake Main Removals, ...)	\$100,000									\$50,000
Capital													
17-01	New	Reservoir Seismic Isolation Valves	Assessment, design and installation of seismic isolation valves at 7 of the reservoirs, and installation of restrained hydrants at reservoirs where possible.	\$500,000	S	Res	\$290,000	\$290,000	\$0	\$0	\$0	\$0	\$290,000
18-02	New	Site Security Assessment & Improvements	Assess the security of facilities and make improvements for the public and operators	\$215,000	S	Res	\$185,000	\$185,000	\$0	\$0	\$0	\$0	\$185,000
18-04	New	Post Disaster Emergency Water Supply	Identify and procure emergency systems for post disaster preparedeness	\$1,050,000	S	Res	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
19-01	Renewal	Corrosion Protection Program	Carry out an investigation and monitoring program in conjunction with other services to prevent infrastructure failure due to corrosion	\$110,000	S	Res	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
20-02	New	Hamsterly Pump Station Backup Power Generator	Addition of a backup power generator at the Hamsterly Pump Station	\$335,000	S	Res	\$285,000	\$285,000	\$0	\$0	\$0	\$0	\$285,000
21-01	New	Level of Service Agreement	Determine and develop appropriate level of service agreements with the participating municipalities for water supply.	\$75,000	E	Res	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000
21-02	Renewal	Stewart's Well Decommissioning	Decommission the well, and demolish the structures.	\$175,000	S	Res	\$0	\$75,000	\$100,000	\$0	\$0	\$0	\$175,000
21-03	Renewal	Upper Dean Reservoir Roof Replacement	Replace the roof membrane due to leaks.	\$400,000	S	Res	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000
21-04	Renewal	SCADA Upgrades	SCADA upgrades and planning in conjunction with the Juan de Fuca Water Distribution, Saanich Peninsula Water and Wastewater, and Core Area Wastewater Services.	\$350,000	S	Res	\$0	\$100,000	\$250,000	\$0	\$0	\$0	\$350,000

21-05	Renewal	SPW System Upgrade and Expansion	Upgrade vulnerable sections of the SPW system to a resilient system better able to withstand a seismic event, and extend sections of the system to have dual feed redundancy. Vulnerable sections are cement pipe material which are susceptible to failure during a seismic event. This is part of a grant funded project in partner with the RWS system.	\$14,700,000	S	Res	\$0	\$1,800,000	\$0	\$0	\$0	\$0	\$1,800,000
21-05	Renewal	SPW System Upgrade and Expansion	Upgrade vulnerable sections of the SPW system to a resilient system better able to withstand a seismic event, and extend sections of the system to have dual feed redundancy. Vulnerable sections are cement pipe material which are susceptible to failure during a seismic event. This is part of a grant funded project in partner with the RWS system.		S	Debt	\$0	\$0	\$2,550,000	\$5,550,000	\$4,500,000	\$300,000	\$12,900,000
21-05	Renewal	SPW System Upgrade and Expansion	Upgrade vulnerable sections of the SPW system to a resilient system better able to withstand a seismic event, and extend sections of the system to have dual feed redundancy. Vulnerable sections are cement pipe material which are susceptible to failure during a seismic event. This is part of a grant funded project in partner with the RWS system.	\$13,300,000	S	Grant	\$0	\$1,200,000	\$3,450,000	\$5,450,000	\$3,000,000	\$200,000	\$13,300,000
21-06	Renewal	Voice Radio Replacement	Replacement of the aging voice radio system with the Core Area, RWS, JDF and Saanich Peninsula Wastewater systems.	\$67,000	S	Res	\$0	\$33,000	\$34,000	\$0	\$0	\$0	\$67,000
25-01	New	Hamsterly Pump Station Capacity Upgrade	Increase the capacity of the Hamsterly Pump Station to address increased water demand. This is the service's contribution to the DCC project.	\$6,500	S	Res	\$0	\$0	\$0	\$0	\$0	\$6,500	\$6,500
Sub-Total System Upgrades and Replacements				\$31,383,500			\$760,000	\$4,653,000	\$6,544,000	\$11,160,000	\$7,660,000	\$666,500	\$30,683,500
ANNUAL PROVISIONAL ITEMS													
17-02	Renewal	Provisional Equipment Replacements	Funds to conduct emergency and unplanned repairs outside of normal Operations.	\$300,000	S	ERF	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
DEVELOPMENT COST CHARGE (DCC) PROGRAM													
20-02	New	Hamsterly Pump Station Backup Power Generator	Addition of a backup power generator at the Hamsterly Pump Station	\$95,000	S	Res	\$45,000	\$45,000	\$0	\$0	\$0	\$0	\$45,000
22-01	New	Water Strategic Plan Update	Update the strategic plan to inform future works and identify hydraulic deficiencies.	\$150,000	S	Res	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000
23-01	New	DCC Program Update	5-year update of the DCC program.	\$50,000	S	Res	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
25-01	New	Hamsterly Pump Station Capacity Upgrade	Increase the capacity of the Hamsterly Pump Station to address increased water demand.	\$598,000	S	Res	\$0	\$0	\$0	\$0	\$0	\$598,000	\$598,000
Sub-Total Development Cost Charge (DCC) Program				\$893,000			\$45,000	\$45,000	\$150,000	\$50,000	\$0	\$598,000	\$843,000
GRAND TOTAL				\$32,576,500			\$805,000	\$4,758,000	\$6,754,000	\$11,270,000	\$7,720,000	\$1,324,500	\$31,826,500

Service: 2.610

## Saanich Peninsula Water Supply

Proj. No.	19-02	Capital Project Title	Asset Management Plan Update	Capital Project Description	Update the asset management plan with recent study information (post disaster emergency water supply, Elk Lake Main Removals, ...)
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<b>Project Rationale</b> Update the strategic asset management plan based upon recent studies such as the DCC Program Update, Post Disaster Response Plan, and Site Security Assessment. The update will inform future capital works.					
Proj. No.	17-01	Capital Project Title	Reservoir Seismic Isolation Valves	Capital Project Description	Assessment, design and installation of seismic isolation valves at 7 of the reservoirs, and installation of restrained hydrants at reservoirs where possible.
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<b>Project Rationale</b> The Commission has indicated a desire to include seismic valves on each of the 8 Saanich Peninsula Water System reservoirs. At present, the Dean Park Middle Reservoir is the only reservoir equipped with a seismic valve. In summary a seismic valve is simple actuated system to shut the outlet valve(s) automatically if a seismic event (of a specific magnitude) is experienced. Each site is unique and installation complexity and associated costs will vary. The first task in this project will be to further define the proposed solution and budget for each site. The resulting detailed project will be reviewed in conjunction with the Strategic Asset Management Plan for the system to confirm affordability and value prior to initiating construction works.					
Proj. No.	18-02	Capital Project Title	Site Security Assessment & Improvements	Capital Project Description	Assess the security of facilities and make improvements for the public and operators
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<b>Project Rationale</b> The Saanich Peninsula Water system is comprised of various pump stations, pressure control stations, meter facilities and storage tanks. The facilities have varying levels of security with no consistent intent. A site security assessment is proposed to secure all facilities so that operators can safely maintain the sites and keep the public and infrastructure safe. Funding is required to assess all facilities and conduct improvements to secure them.					

Service: 2.610

## Saanich Peninsula Water Supply

Proj. No.	18-04	Capital Project Title	Post Disaster Emergency Water Supply	Capital Project Description	Identify and procure emergency systems for post disaster preparedness
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<b>Project Rationale</b> <i>In the event of a disaster, it is proposed to have in place the ability to source, treat (if required) and distribute drinking water during the initial and sustained response and recovery phases to the public. This item will see the study of the issue in 2017 and 2018 with the anticipated purchase of one or more emergency distribution systems in 2018 and beyond. Initial investigation has highlighted areas, such as having hardened hydrants/standpipes that the CRD should be investing in. Additional funds are required to start implementing these additional works.</i>					
Proj. No.	19-01	Capital Project Title	Corrosion Protection Program	Capital Project Description	Carry out an investigation and monitoring program in conjunction with other services to prevent infrastructure failure due to corrosion
Asset Class	S	Board Priority Area	0	Corporate Priority Area	0
<b>Project Rationale</b> <i>The Saanich Peninsula Water System comprises of many material types including steel. An investigation and monitoring program will be developed to prevent infrastructure failure due to corrosion. Funds are required to retain a qualified corrosion specialist to assess and aid in developing a monitoring program.</i>					
Proj. No.	20-01	Capital Project Title	#N/A	Capital Project Description	#N/A
Asset Class	#N/A	Board Priority Area	#N/A	Corporate Priority Area	#N/A
<b>Project Rationale</b> <i>Staff produced the 2018 Elk Lake Main Decommissioning Study to highlight regions of the abandoned main requiring capital works to reduce risk to public safety if the abandoned infrastructure failed. Funds are required to demolish or properly decommission abandoned and unused infrastructure.</i>					
Proj. No.	20-03	Capital Project Title	#N/A	Capital Project Description	#N/A
Asset Class	#N/A	Board Priority Area	#N/A	Corporate Priority Area	#N/A
<b>Project Rationale</b> <i>KWL carried out a water audit of the Saanich Peninsula Water system in 2017 and recommended that the meters be replaced at the Lochside PRV, Martindale meter station and Tsawout meter station. Funds are required to replace the meters and complete any associated upgrades at the stations.</i>					

<b>Service:</b> 2.610 <b>Saanich Peninsula Water Supply</b>			
<b>Proj. No.</b> 21-01	<b>Capital Project Title</b> Level of Service Agreement	<b>Capital Project Description</b> Determine and develop appropriate level of service agreements with the participating municipalities for water	
<b>Asset Class</b> E	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> The SPW Service has numerous transfer points with the participating municipalities. Funding is required to determine the pressure and flow at transfer points with the participating municipalities for water supply.			
<b>Proj. No.</b> 17-02	<b>Capital Project Title</b> Provisional Equipment Replacements	<b>Capital Project Description</b> Funds to conduct emergency and unplanned repairs outside of normal Operations.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> Replace various system equipment that may fail during the year that is not specifically identified and funded through the operating and capital budgets.			
<b>Proj. No.</b> 20-02	<b>Capital Project Title</b> Hamsterly Pump Station Backup Power Generator	<b>Capital Project Description</b> Addition of a backup power generator at the Hamsterly Pump Station	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> From the 2018 DCC Update, KWL identified that the addition of backup power at the Hamsterly Pump Station. Funds are required to design and construct backup power for the Hamsterly Pump Station.			
<b>Proj. No.</b> 22-01	<b>Capital Project Title</b> Water Strategic Plan Update	<b>Capital Project Description</b> Update the strategic plan to inform future works and identify hydraulic deficiencies.	
<b>Asset Class</b> S	<b>Board Priority Area</b> 0	<b>Corporate Priority Area</b> 0	
<b>Project Rationale</b> A water distribution system changes with development demand. A periodic update of the strategic plan to identify hydraulic deficiencies and inform future works is periodically required to ensure the level of service.			

**2.610 Saanich Peninsula Water  
Summary Schedule  
2021 - 2025 Financial Plan**

**Asset Profile**

**Saanich Peninsula Water**

One of the 16 CRD drinking water systems across the region, Saanich Peninsula Water Supply obtains treated drinking water from the Regional Water Supply System and is responsible for the bulk trunk water supply systems for Central Saanich, Sidney & North Saanich. Assets include land, 46 kilometres of water supply mains, nine balancing reservoirs, nine pumping stations, two pressure reducing stations, nine supply meters and two rechlorination stations.

**Reserve/Fund Summary**

	<b>Actual</b>	<b>Estimated</b>	<b>Budget</b>				
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
DCC Reserve Account	2,092,293	2,091,494	2,091,494	1,941,494	1,891,494	1,891,494	1,293,494
Equipment Replacement Fund	1,751,473	1,771,473	1,771,473	1,771,473	1,771,473	1,771,473	1,771,473
Capital Reserve	5,552,657	5,472,657	3,479,657	3,685,657	4,075,657	4,215,657	4,299,157
<b>Total</b>	<b>9,396,423</b>	<b>9,335,624</b>	<b>7,342,624</b>	<b>7,398,624</b>	<b>7,738,624</b>	<b>7,878,624</b>	<b>7,364,124</b>



**2.610 Saanich Peninsula Water  
Development Cost Charges  
2021 - 2025 Financial Plan**

**Development Cost Charges Reserve Schedule**

**Reserve Fund:** Saanich Peninsula Water Development Cost Charges (Bylaw # 3208)

Fund: 1009 Fund Center: 101353- DCC Water System only	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
Beginning Balance	1,996,923	2,092,293	2,091,494	2,091,494	1,941,494	1,891,494	1,891,494
Transfers to Reserve							
Transfers from Reserve based on DCC-capital plan	-	(95,000)	-	(150,000)	(50,000)	-	(598,000)
DCC's received from Member Municipalities	69,201	69,201					
Interest Income*	26,169	25,000					
<b>Ending Balance \$</b>	<b>2,092,293</b>	<b>2,091,494</b>	<b>2,091,494</b>	<b>1,941,494</b>	<b>1,891,494</b>	<b>1,891,494</b>	<b>1,293,494</b>

General Comments:

Saanich Peninsula Water Development Cost Charges (DCC's) was adopted in 2005 for the purpose of providing funds to assist with the capital costs of providing, constructing, altering or expanding the Districts water & wastewater systems that services the Member Municipalities.

The above cash flow only reflects DCC Reserve information for Water System only (Wastewater's information will be provided in the Wastewater budgets). These Reserve funds are received from member municipalities as Development Cost Charges (DCC's) to provide for the capital costs of water capacity system improvements within the service areas.

In December 2018 the bylaw was ammended to remove Development Cost Charges on new projects to recognize that the fund's balance exceeded the total of current development projects.

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

2.610 Saanich Peninsula Water  
Equipment Replacement Reserve Schedule  
2021 - 2025 Financial Plan

Equipment Replacement Reserve Schedule

**Reserve Fund:** Saanich Peninsula Water-Equipment Replacement Reserve (covered by CRD-ERF Bylaw)

Fund: 1022 Fund Center: 101452	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
Beginning Balance	1,733,094	1,751,473	1,771,473	1,771,473	1,771,473	1,771,473	1,771,473
Equipment purchases (Based on Capital Plan)	(54,176)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Transfer from Operating Budget	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Interest Income*	22,555	20,000					
<b>Ending Balance \$</b>	<b>1,751,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>	<b>1,771,473</b>

General Comments: The fund is used to replace water system infrastructure throughout the system as failing components are identified and not funded through operating budgets.

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

2.610 Saanich Peninsula Water  
Capital Reserve Fund  
2021 - 2025 Financial Plan

**Capital Reserve Fund Schedule**

**Reserve Fund:** Saanich Peninsula Water Capital Reserve Fund ( Bylaw #1397)

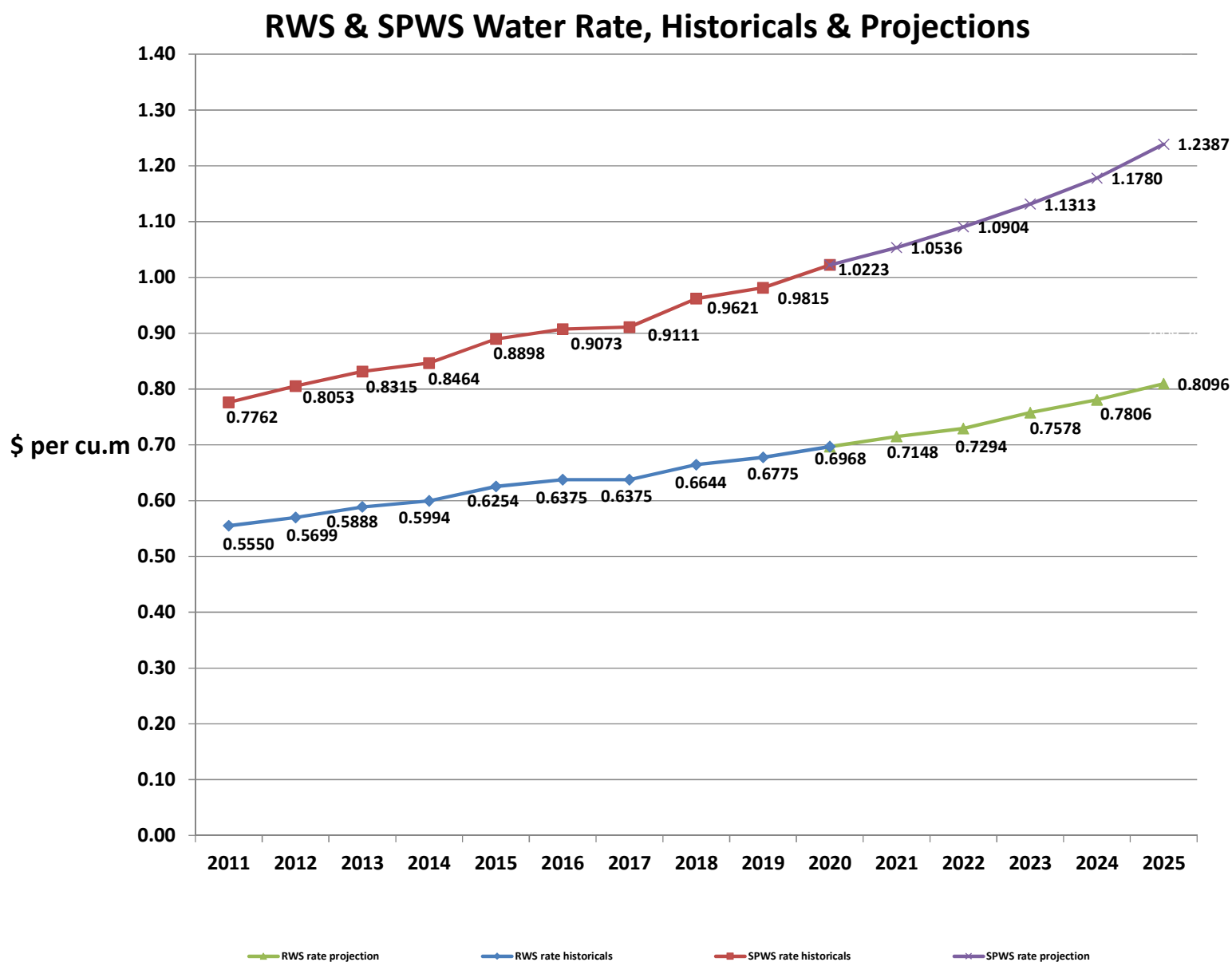
Fund: 1009 Fund Center: 102159	Actual	Estimated	Budget				
	2019	2020	2021	2022	2023	2024	2025
Beginning Balance	5,129,591	5,552,657	5,472,657	3,479,657	3,685,657	4,075,657	4,215,657
Transfers from Reserve based on capital plan	(455,000)	(780,000)	(2,693,000)	(544,000)	(160,000)	(160,000)	(166,500)
Transfer from Operating Budget	825,627	650,000	700,000	750,000	550,000	300,000	250,000
Interest Income*	52,440	50,000					
<b>Ending Balance \$</b>	<b>5,552,657</b>	<b>5,472,657</b>	<b>3,479,657</b>	<b>3,685,657</b>	<b>4,075,657</b>	<b>4,215,657</b>	<b>4,299,157</b>

General Comments:

Saanich Peninsula Water Capital Reserve Fund was adopted in 1985 for the purpose of capital payments including planning, engineering and legal costs for providing, latering or expanding water system infrastructure related to the Saanich Peninsula Water Supply System.

The fund is used for the purpose of funding the Service Capital infrastructure related directly or indirectly to water facilities, (excluding DCC) capital expenditures.

\* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.



**REGIONAL WATER SUPPLY COMMISSION**  
**Agricultural Water Rate Funding Comparisons 2011 - 2019**

													Rate Differential		
													Municipal	Agri	Muni-CRD
													Rate	Rate	Diff
													m3	m3	m3
													A	B	A - B
No. of AR Accounts	No. of AG Accounts	AR Volume m3	AG Volume m3	Avg AR Volume m3 (Vol/Accts)	Avg AG Volume m3	Agri Rate Consumption Costs	Agri Fixed Charge Costs	Total Agri Subsidy Paid out (Cons + Fixed)	Avg Agri Cost \$ (Paid/Accts)	%age of Total Paid out					
Western Communities & Sooke *															
2019	86	14	36,598	50,277	426	3,591	\$ 165,297	\$ -	\$ 165,297	\$ 1,653	11.1%	\$ 2.1132	\$ 0.2105	\$ 1.9027	
2018	95	18	40,657	19,669	428	1,093	\$ 112,411	\$ -	\$ 112,411	\$ 995	7.9%	\$ 2.0739	\$ 0.2105	\$ 1.8634	
2017	81	11	33,458	11,628	413	1,057	\$ 76,754	\$ -	\$ 76,754	\$ 834	5.6%	\$ 1.9129	\$ 0.2105	\$ 1.7024	
2016	80	11	41,248	8,652	516	787	\$ 84,950	\$ -	\$ 84,950	\$ 934	5.9%	\$ 1.9129	\$ 0.2105	\$ 1.7024	
2015	79	11	33,537	7,078	425	643	\$ 64,968	\$ -	\$ 64,968	\$ 722	5.1%	\$ 1.8101	\$ 0.2105	\$ 1.5996	
2014	79	11	29,419	9,074	372	825	\$ 60,769	\$ -	\$ 60,769	\$ 675	5.6%	\$ 1.7892	\$ 0.2105	\$ 1.5787	
2013	80	11	25,532	5,578	319	507	\$ 46,438	\$ -	\$ 46,438	\$ 510	4.7%	\$ 1.7032	\$ 0.2105	\$ 1.4927	
2012	79	13	23,617	5,932	299	456	\$ 40,828	\$ -	\$ 40,828	\$ 444	4.3%	\$ 1.5922	\$ 0.2105	\$ 1.3817	
2011	75	11	27,910	4,893	372	445	\$ 43,641	\$ -	\$ 43,641	\$ 507	5.2%	\$ 1.5409	\$ 0.2126	\$ 1.3283	
Central Saanich															
2019	276	47	421,804	210,499	1,528	4,479	\$ 862,430	\$ 2,162	\$ 864,592	\$ 2,677	58.0%	\$ 1.7260	\$ 0.2105	\$ 1.5155	
2018	278	49	378,593	297,433	1,362	6,070	\$ 866,699	\$ 7,003	\$ 873,702	\$ 2,672	61.3%	\$ 1.6350	\$ 0.2105	\$ 1.4245	
2017	296	49	398,087	298,522	1,345	6,092	\$ 792,125	\$ 7,003	\$ 799,128	\$ 2,316	58.7%	\$ 1.5575	\$ 0.2105	\$ 1.3470	
2016	297	51	446,241	303,419	1,502	5,949	\$ 879,396	\$ 7,191	\$ 886,587	\$ 2,548	61.1%	\$ 1.5139	\$ 0.2105	\$ 1.3034	
2015	294	51	412,060	246,292	1,402	4,829	\$ 739,282	\$ 7,144	\$ 746,426	\$ 2,164	58.4%	\$ 1.4582	\$ 0.2105	\$ 1.2477	
2014	294	49	361,801	190,895	1,231	3,896	\$ 596,515	\$ 6,808	\$ 603,323	\$ 1,759	55.7%	\$ 1.4033	\$ 0.2105	\$ 1.1928	
2013	296	45	321,518	194,848	1,086	4,330	\$ 542,837	\$ 4,186	\$ 547,023	\$ 1,604	55.7%	\$ 1.3799	\$ 0.2105	\$ 1.0525	
2012	280	41	325,663	210,906	1,163	5,144	\$ 518,454	\$ 5,658	\$ 524,112	\$ 1,633	55.6%	\$ 1.2841	\$ 0.2105	\$ 0.9662	
2011	210	38	312,702	169,206	1,489	4,453	\$ 462,183	\$ 5,244	\$ 467,427	\$ 1,885	56.1%	\$ 1.2867	\$ 0.2126	\$ 0.9667	
North Saanich **															
2019	94	15	58,278	95,030	620	6,335	\$ 201,370	\$ -	\$ 201,370	\$ 1,847	13.5%	\$ 1.5240	\$ 0.2105	\$ 1.3135	
2018	100	16	97,574	70,666	976	4,417	\$ 220,982	\$ -	\$ 220,982	\$ 1,905	15.5%	\$ 1.5240	\$ 0.2105	\$ 1.3135	
2017	100	13	151,773	53,551	1,518	4,119	\$ 245,456	\$ -	\$ 245,456	\$ 2,172	18.0%	\$ 1.4643	\$ 0.2105	\$ 1.2538	
2016	100	12	148,450	36,774	1,485	3,065	\$ 230,697	\$ -	\$ 230,697	\$ 2,060	15.9%	\$ 1.4560	\$ 0.2105	\$ 1.2455	
2015	106	14	151,656	38,066	1,431	2,719	\$ 230,948	\$ -	\$ 230,948	\$ 1,925	18.1%	\$ 1.4278	\$ 0.2105	\$ 1.2173	
2014	98	14	133,853	30,372	1,366	2,169	\$ 194,919	\$ -	\$ 194,919	\$ 1,740	18.0%	\$ 1.3974	\$ 0.2105	\$ 1.1869	
2013	102	13	141,845	30,647	1,391	2,357	\$ 200,004	\$ -	\$ 200,004	\$ 1,739	20.4%	\$ 1.3700	\$ 0.2105	\$ 1.1595	
2012	99	13	117,497	45,227	1,187	3,479	\$ 188,679	\$ -	\$ 188,679	\$ 1,685	20.0%	\$ 1.3700	\$ 0.2105	\$ 1.1595	
2011	101	13	106,393	34,921	1,053	2,686	\$ 163,558	\$ -	\$ 163,558	\$ 1,435	19.6%	\$ 1.3700	\$ 0.2126	\$ 1.1574	
Saanich															
2019	68	51	37,086	140,512	545	2,755	\$ 249,436	\$ 10,278	\$ 259,714	\$ 2,182	17.4%	\$ 1.6150	\$ 0.2105	\$ 1.4045	
2018	70	49	37,503	111,896	536	2,284	\$ 208,786	\$ 9,996	\$ 218,782	\$ 1,839	15.3%	\$ 1.5910	\$ 0.2105	\$ 1.3805	
2017	80	50	38,201	132,092	478	2,642	\$ 229,604	\$ 9,719	\$ 239,324	\$ 1,841	17.6%	\$ 1.5600	\$ 0.2105	\$ 1.3495	
2016	71	53	36,409	139,764	513	2,637	\$ 237,745	\$ 10,056	\$ 247,802	\$ 1,998	17.1%	\$ 1.5600	\$ 0.2105	\$ 1.3495	
2015	75	51	74,841	129,225	998	2,534	\$ 226,276	\$ 9,727	\$ 236,003	\$ 1,873	18.5%	\$ 1.5420	\$ 0.2105	\$ 1.3315	
2014	72	53	46,230	177,633	642	3,352	\$ 213,981	\$ 9,883	\$ 223,863	\$ 1,791	20.7%	\$ 1.4560	\$ 0.2105	\$ 1.2455	
2013	65	50	35,745	122,456	550	2,449	\$ 179,004	\$ 9,655	\$ 188,659	\$ 1,641	19.2%	\$ 1.3420	\$ 0.2105	\$ 1.1315	
2012	68	47	38,212	138,455	562	2,946	\$ 180,466	\$ 9,235	\$ 189,701	\$ 1,650	20.1%	\$ 1.2320	\$ 0.2105	\$ 1.0215	
2011	71	46	101,235	121,896	1,426	2,650	\$ 149,584	\$ 9,118	\$ 158,703	\$ 1,356	19.0%	\$ 1.1530	\$ 0.2126	\$ 0.9404	
Totals															
2019	524	127	553,766	496,318	1,057	3,908	\$ 1,478,533	\$ 12,440	\$ 1,490,973	\$ 2,290	100%				
2018	543	132	554,327	499,664	1,021	3,785	\$ 1,408,879	\$ 16,999	\$ 1,425,878	\$ 2,112	100%				
2017	557	123	621,519	495,793	1,116	4,031	\$ 1,343,940	\$ 16,722	\$ 1,360,663	\$ 2,001	100%				
2016	548	127	672,348	488,609	1,227	3,847	\$ 1,432,788	\$ 17,247	\$ 1,450,036	\$ 2,148	100%				
2015	554	127	672,094	420,661	1,213	3,312	\$ 1,261,474	\$ 16,871	\$ 1,278,344	\$ 1,877	100%				
2014	543	127	571,304	407,973	1,052	3,212	\$ 1,066,184	\$ 16,691	\$ 1,082,874	\$ 1,616	100%				
2013	543	119	524,640	353,529	966	2,971	\$ 968,283	\$ 13,841	\$ 982,124	\$ 1,484	100%				
2012	526	114	504,989	400,520	960	3,513	\$ 928,426	\$ 14,893	\$ 943,320	\$ 1,474	100%				
2011	457	108	548,240	330,916	1,200	3,064	\$ 818,967	\$ 14,362	\$ 833,329	\$ 1,475	100%				

\* Western Communities do not charge a fixed charge

\*\* North Saanich charges the fixed charge on property taxes

\*\*\* AR - Agriculture/Residential customers receive a rebate on consumption over 455 cubic meters annual as the meter feeds both premise and land.  
AG - Agriculture customers receive a rebate on the entire consumption annually as the meter is dedicated only for land.

**REPORT TO CAPITAL REGIONAL DISTRICT BOARD  
MEETING OF WEDNESDAY, NOVEMBER 18, 2020**

**SUBJECT**     Hauling and Processing of Kitchen Scraps – Award of Contract 30.20-16-01

**ISSUE SUMMARY**

To recommend award of Contract 30.20.16-01 for the hauling and processing of kitchen scraps.

**BACKGROUND**

The current kitchen scraps hauling and processing contract expires on February 28, 2021 and a new contract needs to be awarded to ensure continuity of service. A public tender for the provision of the service for four years, from March 1, 2021 to February 28, 2025, closed on October 22, 2020 and one bid (from the incumbent contractor) was received, as follows:

Name of Firm Tendering	Estimated Annual Tonnage	Rate Per Tonne	Estimated Annual Cost	Proposed Processing Facilities
D.L. Bins Ltd.	12,000	\$138.60	\$1,663,200.00	Fisher Road Recycling, Cobble Hill BC Convertus Canada Ltd., Nanaimo BC

The rate offered for Contract 30.20.16-01 is nearly 7% less than what is being paid under the current hauling and processing contract and will reduce costs by approximately \$114,000 annually.

Awarding this four-year hauling and processing contract will allow time for options of establishing a processing facility at Hartland to be fully investigated and procured, if approved. The tender has been reviewed and it complies with the instructions to tenderers. D.L. Bins Ltd. is qualified to undertake the contract and both of the proposed processing facilities are licensed.

The tipping fee at Hartland for source-separated kitchen scraps is currently \$120 per tonne, as directed by the Capital Regional District (CRD) Board at its April 13, 2016 meeting. The rate to haul and process kitchen scraps under Contract 30.20.16-01 means the CRD will incur a net loss of \$18.60 per tonne of kitchen scraps it receives at Hartland, for a total annual net loss of about \$223,000 in the first year of the contract. The tipping fee for kitchen scraps was last adjusted on January 1, 2017 when it was increased from \$110 to \$120 per tonne.

**ALTERNATIVES**

*Alternative 1*

That Contract 30.20.16-01, Hauling and Processing Kitchen Scraps, be awarded to D.L. Bins Ltd. from March 1, 2021 to February 28, 2025, at the rate of \$138.60 per tonne and an estimated cost of \$1,663,200 per year.

*Alternative 2*

That Contract 30.20.16-01, Hauling and Processing Kitchen Scraps, not be awarded and staff be provided with alternative direction.

**IMPLICATIONS**

*Environmental Implications*

The diversion of kitchen scraps saves landfill air space and reduces greenhouse gas emissions by avoiding methane generation at Hartland Landfill. The finished compost produced from kitchen scraps can also help reduce the use of fossil-fuel based fertilizers when used in agriculture. Alternative 1 will help facilitate the diversion of kitchen scraps by maintaining a kitchen scraps diversion option to both public and private haulers using Hartland Landfill.

*Economic Implications*

The \$138.60 per tonne rate of the new contract is nearly 7% less than the previous contract rate of \$148.08 per tonne. This represents an annual savings of \$114,000 for 2021 budget, which was prepared using the previous contract's rate. The rates paid to the contractor would be subject to an annual 1.5% inflationary adjustment beginning in January 2022, meaning the per tonne fee would rise to \$140.68 in 2022, to \$142.79 in 2023, to \$144.93 for 2024 and to \$147.10 for the two months of 2025 that the contract is in effect. This represents an average per tonne fee of approximately \$142.82 over the term of the contract.

**CONCLUSION**

The current kitchen scraps hauling and processing contract is set to expire on February 28, 2021 and a new contract is required to ensure continuity of service. A four-year tender for the service closed on October 22, 2022 and one bid was received from D.L. Bins Ltd. in the amount of \$138.60 per tonne of kitchen scraps, with an annual 1.5% inflationary adjustment. The tender has been reviewed and it complies with the tender requirements and D.L. Bins Ltd., the incumbent contractor, is qualified to undertake the contract work.

**RECOMMENDATION**

That Contract 30.20.16-01, Hauling and Processing Kitchen Scraps, be awarded to D.L. Bins Ltd. from March 1, 2021 to February 28, 2025, at the rate of \$138.60 per tonne and an estimated cost of \$1,663,200 per year.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P. Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**REPORT TO COMMITTEE OF THE WHOLE  
MEETING OF WEDNESDAY, OCTOBER 28, 2020**

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**SUBJECT**     **First Nation Participation in Closed Committee Meetings**

**ISSUE SUMMARY**

To provide options that consider the inclusion of First Nations' elected officials in CRD meetings that are closed under Section 90 of the *Community Charter* (the *Charter*).

**BACKGROUND**

On October 14, 2020 the CRD Board approved the following motion arising from the First Nations Relations Committee, in consideration of the report on First Nations Inclusion in CRD Governance:

“That staff report back to the Governance and Finance committee in November with options relating to [First Nation Member attendance at] closed meetings.”

The specific bylaw amendments being considered in the October 14, 2020 report were referred to the Committee of the Whole (COW) for further discussion. As the issue of more inclusive governance and participation in closed meetings are related items, this report is being advanced to the COW for consideration in conjunction with the Inclusive Governance report.

**ALTERNATIVES**

*Alternative 1*

The Committee of the Whole recommends to the Capital Regional District Board:  
That all closed matters be directed to Regional Board, where First Nation Member participation can be determined on an item-by-item basis.

*Alternative 2*

The Committee of the Whole recommends to the Capital Regional District Board:  
That First Nation Members be included in closed meetings on an item-by-item basis, following resolution by the applicable Standing Committee or Board.

*Alternative 3*

That this report be referred back to staff for additional information.

**IMPLICATIONS**

*Liability Implications*

S.738(1)(r) of the *Local Government Act (LGA)* provides immunity for local public officers who are not municipal councilors, when appointed to a CRD committee or commission. First Nation Members, when appointed to a regional district committee, have immunity for damages as it relates to the duty or exercise of their power or for any alleged neglect in the same way that is extended to CRD Directors.



The CRD Board is responsible for all actions that would expose the corporation to liability or court proceeding. Within the legislative context establishing the roles and responsibilities of the CRD, the validity of decision-making depends on having the statutory authority, correctly following statutory procedural requirements, following CRD procedural requirements, following a duty to act fairly where property rights are affected, and the principles of *Canada's Charter of Rights and Freedoms*. Though CRD Standing, Select and Advisory Committees play a critical role in considering and reporting on items coming within their purview, it is the CRD Board that is ultimately responsible for the services provided and actions taken. As long as the CRD is operating in a way that ensures the validity of its decision-making, there is no additional liability associated with having First Nation Members participating in closed committee meetings.

### *Confidentiality Implications*

S. 117(1) of the *LGA* establishes a duty for Board or committee members to respect confidentially, unless specifically authorized to rise and report on the item, and s.117(2) establishes that a local government may recover loss or damages from a person in breach of s.117(1). The *LGA* does not extend this to members of a Board Standing, Advisory or Select Committee and therefore First Nation Members, when participating at these committees, would not be subject to the same legislated duty or to the consequences of a breach of confidentially. This risk would be reduced though requiring that First Nation Members sign a Confidentiality and Non-Disclosure Agreement (NDA) in-keeping with the intent of s.117 of the *LGA*. This is the approach taken with the appointed members of the CAWTP Board.

While a NDA would provide a mechanism to impose sanctions for a breach of confidentiality, in practice these agreements can be difficult to enforce. At minimum, enforcement requires demonstrating that the breach itself was not inadvertent and that damages have occurred as a result of a breach. It would be possible to include clear sanctions in a NDA, but the harm caused to the CRD's relationship with the First Nation whose appointed representative was thought to be in violation could be significant. Additionally, there would likely be a need for a First Nation Member to engage their Chief, council colleagues and/or elders or knowledge-keepers to fully explore the First Nation's interests on a given item discussed in closed and this would increase the potential that the information would be disclosed in a way that is in contravention of a NDA.

Though there is certainly value in having the perspective of First Nation Members included in some items that are discussed in closed, these items should be shared with purpose and with a clear understanding by the CRD Board as to the value of the input and the risks associated with a possible disclosure of confidential information. This determination could best be made on a case-by-case basis.

### *Intergovernmental Implications*

Section 91(2)(b) of the *Charter* permits the Board to allow persons other than officers and employees to attend a closed session where the Board considers it necessary. A resolution is required to permit persons other than a Member to be present for these meetings.

There is a considerable risk to the relationship between a First Nation and the CRD should there be a need, at a committee-level, for the First Nation Members to leave while Directors introduce, debate, and consider a motion to allow the First Nation Members back into the meeting. This would highlight the limited participation rights of First Nation Members at the committee table and could serve to undermine the intent of effective, open and respectful collaboration. In this situation, First Nation Members would also not have the materials in advance of a potential

resolution passing that would permit their participation in a closed session and their contribution would therefore be limited, further undermining the value of their engagement.

It should also be noted that the *Charter* is explicit on why meetings may be closed to the public and not all items would benefit from First Nation Member participation. Many items received in closed relate to corporate issues, like human resources, labour relations, or legal matters where it would not be appropriate to include First Nation Members. First Nations have expressed that the “acquisition, disposition or expropriation of land or improvements” are items of interest and these are included under s. 90(1)(e) of the *Charter*. It is further likely that s. 90(2)(b) in the *Charter* would also be of interest to First Nations as this includes “the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party.” This section would likely include any ongoing Treaty and/or Reconciliation Agreement discussions taking place within the Capital Region.

Therefore it would seem reasonable that the CRD Board, with the support of staff, first considers items in closed and determines if the item would benefit from First Nation Member input. A motion could then be considered which would refer the item to a subsequent meeting where First Nation Members are permitted, to allow their full participation on the item. This would satisfy s.91(2) of the *Charter*, preserve the relationship between the CRD and First Nations, allow First Nation Members to access materials in advance of a meeting, and enhance the discussions taking place in closed through bringing additional perspectives forward.

### *Operational Implications*

Having any First Nation Member participation in closed meetings will require additional steps for staff. Specifically, when the Board refers a closed item to a committee for First Nations’ input, there will be a need for staff to distribute a secure link providing access to the closed meeting material directly to those First Nation Members appointed to the committee. This will provide access to only those items the Board has passed a resolution on in advance and creates additional complexity as there may be items discussed in closed where First Nation Members can participate and others where they will not be permitted. It will be the work of staff to order the agenda accordingly and discuss this in advance with First Nation Members to ensure an understanding.

There is also a risk of some delay in items as they would need to be discussed at the Board in closed prior to being referred to committee. This will add an additional step in that closed items would first go to the CRD Board and then would be referred down to committee where, following a resolution of the Board, First Nation Members can fully participate in the deliberations. Though it is unlikely this delay would significantly impact the CRD’s ability to deliver its services, staff across the organization will need to be mindful of this additional step in the process and the potential implications that could have on the specific initiative.

### *Governance Implications*

While there is no statutory or procedural requirement that mandates the process for consideration of items in closed, it is the practice at CRD to consider closed items at the committee level prior to the item being advanced to a closed Board meeting. Currently, less than half of all standing committee meetings include a closed session as there are considerably fewer closed items than open items of business. The majority of items considered in closed relate to appointments, housing project approvals, grant awards, and land transactions. Discontinuing the practice of

having closed items first received at Standing Committees would avoid the awkwardness of excusing First Nation Members from committee meetings for the closed session, and would streamline the consideration of the majority of closed items by having them received only once at Board. This approach could also increase the level of confidentiality by having each item received and discussed only once. That said, not seeking committee input may impact decision making by the Board and the length of Board meetings could be increased if each closed report required an introduction.

The critical distinction between Alternative 1 and Alternative 2 is that Alternative 1 results in the CRD Board receiving all items in closed first to determine whether there is a need for additional consideration by First Nation Members at committee. If not, the Board would proceed to consider and vote on the item at that meeting. If it is determined that there is a desire to obtain First Nations consideration, the Board would then pass a motion referring the item to the appropriate standing committee, and permit First Nation Members to attend the closed committee meeting. Alternative 2 reflects the current corporate approach to the management of items in closed and would require the specific committee considering an item in closed to pass a motion prior to the First Nation Members being permitted to participate.

### **CONCLUSION**

The most effective way for the CRD to include First Nation Members in closed meetings is to be deliberate and to make the determination on a case-by-case basis. A resolution by the Board would satisfy the legislative requirements to permit non-Members to participate in closed meetings while also allowing CRD staff to be focused when distributing sensitive information. Passing a resolution on the day that an item will be discussed will disadvantage First Nation Members, create awkwardness and risks harming the relationship. Therefore, it is the best course of action for the Board to first consider items in closed first and then, where needed, refer items to a committee that could include First Nation Members, who would then be permitted to fully participate in discussions on the item. Though this does add an extra step, it will position the CRD to be inclusive of First Nations' perspectives while also being cautious with how information is shared and discussed.

### **RECOMMENDATION**

The Committee of the Whole recommends to the Capital Regional District Board:  
That all closed matters be directed to Regional Board, where First Nation Member participation can be determined on an item-by-item basis.

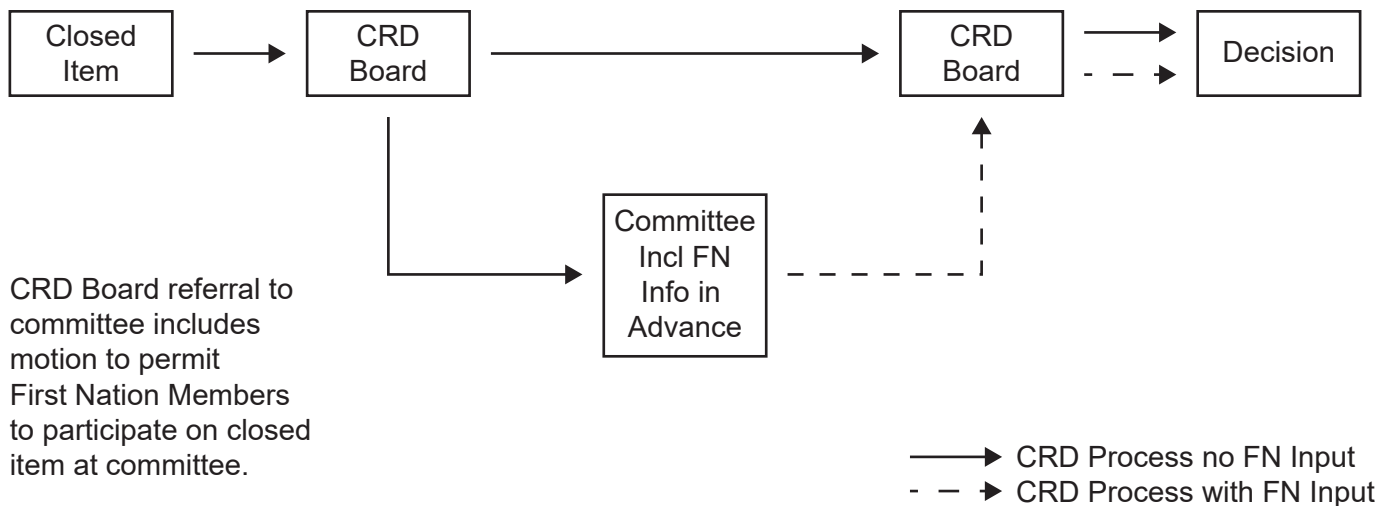
Submitted by:	Don Elliott, MUP, Manager, First Nations Relations
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **Attachment(s)**

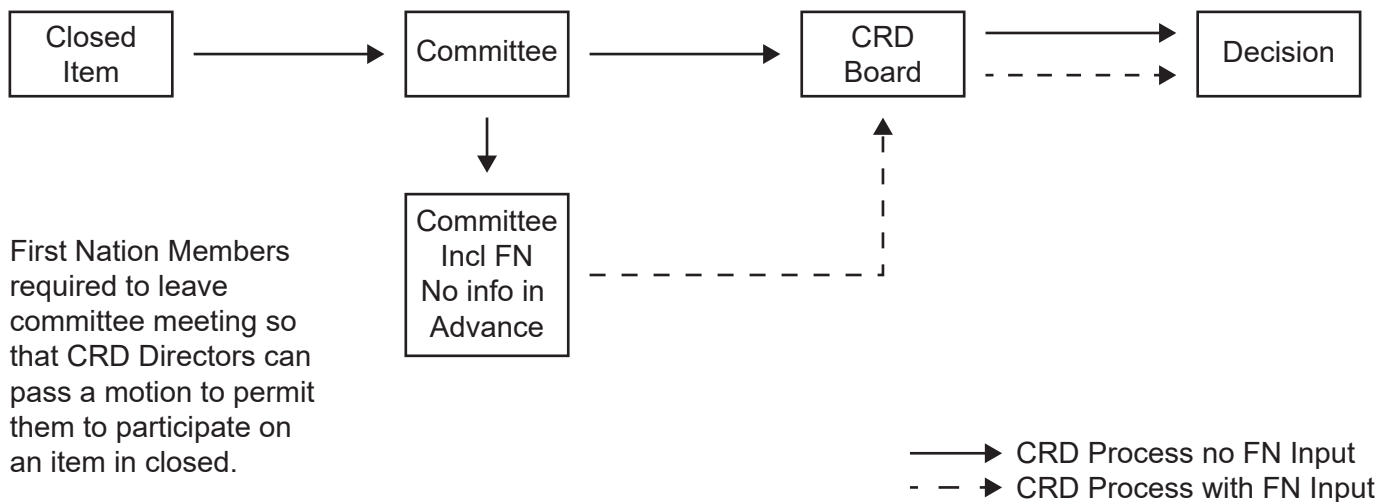
Appendix A: Closed Item Process Diagram

## Appendix A: Closed Meeting Process Diagram

### Alternative 1



### Alternative 2



**REPORT TO ELECTORAL AREAS COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**      **Port Renfrew – Snuggery Cove Water Local Service Committee Membership Amendment**

**ISSUE SUMMARY**

To amend the membership of the Port Renfrew Utility Services Committee to remove the two representatives from the Snuggery Cove Water System and amend its governance.

**BACKGROUND**

In 2002, the Capital Regional District created the Snuggery Cove Water Local Service under the Juan de Fuca Snuggery Cove Water System Service Establishment Bylaw No. 1, 2002 (BL 3004). On behalf of the ratepayers, CRD was required to borrow approximately \$325,000 to pay for a portion of the water system upgrades with the remaining portion being paid for by grant funding, per Juan de Fuca Snuggery Cove Water System Loan Authorization Bylaw No. 1, 2002 (Bylaw No. 2996).

In 2016, the water provision portion of the service was added to the Port Renfrew Water Supply Local Service Establishment By-law No. 1, 1989 (Bylaw No. 1747), creating one water service area for Port Renfrew.

The remaining debt for the upgrades has now been paid and as such, there is no need for individuals to sit on the Port Renfrew Utility Services Committee for the sole purpose of administering the Snuggery Cove debt service.

At the same time, the voting membership of the Committee is unclear and non-standard. Members may currently only vote on issues relating to the local service in which they reside, unlike many other CRD Commissions.

**ALTERNATIVES**

*Alternative 1*

The Electoral Area Services Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4364, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, Amendment No. 3, 2020 be introduced, read a first, second, and third time; and
2. That Bylaw No. 4364 be adopted.

*Alternative 2*

That this report be referred back to staff for additional information.

**IMPLICATIONS**

*Governance Implications*

At this time, removal of the two Snuggery Cove debt servicing representatives from the Committee

will result in a committee made up of the electoral area director; three appointed individuals, representing Port Renfrew's water, street lighting, solid waste, and sewer areas; and, while an agreement is in place and in good standing for solid waste, a representative of Pacheedaht First Nation.

Current and proposed membership is set out in the below tables:

<b>Current Membership</b>		
<i>Number</i>	<i>Areas</i>	<i>May Vote On</i>
EA Director	JdF	All issues
Three (3)	Port Renfrew Water, Sewer, Lighting, Solid Waste	Water, Sewer, Lighting, Solid Waste
Two (2)	Snuggery Cove Debt Service	Debt service only
One (1)	Pacheedaht First Nation	Solid waste service only

<b>Proposed Membership*</b>		
<i>Number</i>	<i>Areas</i>	<i>May Vote On</i>
EA Director	JdF	All issues
Three (3)	Port Renfrew Water, Sewer, Lighting, Solid Waste	Water, Sewer, Lighting, Solid Waste
One (1)	Pacheedaht First Nation	Solid waste service only

*\*Proposed membership is the same as membership prior to creation of the Snuggery Cove Debt Service.*

A change to the voting membership and qualifications of appointees is also proposed, from a system where local service representatives can only vote on matters relating to where they reside, to one where local service representatives can vote on any matter before the Committee, with the requirement that at least one local service representative comes from each of the Water local service and the Sewer local service area, the larger service areas that do not necessarily overlap, unlike the Street Lighting and Solid Waste services which share boundaries with the Water and Sewer local service areas.

#### *Financial Implications*

Allowing the Chief Financial Officer to set the date the Committee's budget will be due will allow both the Committee and the CRD Finance Staff to anticipate and work together to obtain a budget on an appropriate timeline, rather than rush to assemble all committee and commission budgets.

#### *Service Delivery Implications*

This will have no impact on service delivery, as the properties within the Snuggery Cove service area were added to the existing Port Renfrew water supply local service area in 2016.

#### *Alignment with Existing Plans & Strategies*

This is in-line with the proposed progress of this local service at the time of its 2002 creation.

#### **CONCLUSION**

Debt incurred to build and extend the Port Renfrew Water Service to the Snuggery Cove area has now been paid in full. CRD should take the first steps towards winding-up the Snuggery Cove debt servicing service, and amend the Committee membership accordingly.

**RECOMMENDATION**

That the Electoral Area Services Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4364, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, Amendment No. 3, 2020 be introduced, read a first, second, and third time; and
2. That Bylaw No. 4364 be adopted.

Submitted by:	Ted Robbins, B. Sc., C. Tech, General Manager, Integrated Water Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT**

Appendix A: Bylaw No. 4364, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, Amendment No. 3, 2020

Appendix B: Unofficial Consolidation of Bylaw No. 3281, Port Renfrew Utility Services Committee Bylaw No. 1; Bylaw No. 3397, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, Amendment Bylaw No. 1, 2006; and Bylaw No. 3745, Port Renfrew Utility Services Committee Bylaw No. 1, Amendment Bylaw No. 2, 2010

SNC/

**CAPITAL REGIONAL DISTRICT  
BYLAW NO. 4364**

\*\*\*\*\*

**A BYLAW TO AMEND THE MEMBERSHIP OF THE PORT RENFREW UTILITY SERVICES  
COMMITTEE (JUAN DE FUCA ELECTORAL AREA) (BYLAW NO. 3281)**

\*\*\*\*\*

**WHEREAS:**

- A. Under Bylaw No. 3281, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, the Regional Board established a committee to administer local services in the Port Renfrew Area, including the Snuggery Cove Water Local Service established by Port Renfrew Snuggery Cove Water Local Service Establishment Bylaw No. 1, 2003 (Bylaw No. 3004);
- B. The Snuggery Cove Water Local Service has paid the debt incurred under the Juan de Fuca Snuggery Cove Water System Loan Authorization Bylaw No. 1, 2002 (Bylaw No. 2996);
- C. In 2016, the area servicing the Snuggery Cove Water Local Service was absorbed into the Port Renfrew Water Distribution Service, established under Port Renfrew Water Supply Local Service Establishment By-law No.1, 1989 (Bylaw No. 1747), leaving the only function of the Snuggery Cove service as debt repayment;
- D. The Board wishes to amend Bylaw No. 3281, Port Renfrew Utility Services Committee Bylaw No. 1, 2005, to remove Snuggery Cove debt servicing representatives from the Committee;

**NOW THEREFORE**, the Capital Regional District Board in open meeting assembled hereby enacts as follows:

- 1. Bylaw No. 3281, "Port Renfrew Utility Services Committee Bylaw No. 1, 2005" is hereby amended as follows:
  - (a) By replacing section 1 in its entirety with:
    - 1. A Committee to be known as the "Port Renfrew Utility Services Committee" is hereby established and shall consist of up to five (5) members as follows:
      - (a) The Director representing the Juan de Fuca Electoral Area;
      - (b) Three (3) individuals who shall represent the Port Renfrew Water Local Service Area, Port Renfrew Sewer, and Port Renfrew Street Lighting Local Service Areas (the "Local Service Representatives" and "Local Service Areas", respectively); and
      - (c) One (1) representative of the Pacheedaht First Nation when a service agreement for solid waste services is in place and there have been no violations to the terms and conditions of the agreement.
  - (b) By replacing section 2(b) and 2(c) with:
    - (b) Local Service Representatives may vote on all matters;
    - (c) The Pacheedaht First Nation may vote on solid waste matters when the conditions under 1(c) have been met.
  - (c) In section 3(c), by replacing "2(b)" with "3(b)", to correct a typographical error;
  - (d) By inserting as section 3.1, the following:



Qualifications for Appointment

3.1 To be eligible for appointment, all Local Service Representatives must reside, be an elector, or own real property in one or more of the Local Service Areas. At least one must reside, be an elector, or own real property in the Port Renfrew Sewer Local Service Area. At least one must reside, be an elector, or own real property in the Port Renfrew Water Supply Local Service area.

- (e) In section 11, by removing the list item 11(d), "the provision of Water Services under Bylaw No 3004" and revising the list accordingly;
- (f) In section 12, by revising the reference to "Notwithstanding the provisions of section 12" to "Notwithstanding the provisions of section 11" to correct a typographical error; and
- (g) In section 12 (a), revising the reference to "... an annual budget for each of the services provided in sections 12(a) and 12(b) and 12(c)..." with "... an annual budget for each of the services provided in sections 11(a), 11(b), 11(c), and 11(d)..." and leaving the remainder of that section unchanged, to correct a typographical error and an omission.

2. This bylaw may be cited for all purposes as "Port Renfrew Utility Services Committee Bylaw No. 1, 2005, Amendment Bylaw No. 3, 2020".

READ A FIRST TIME THIS	th	day of	20__
READ A SECOND TIME THIS	th	day of	20__
READ A THIRD TIME THIS	th	day of	20__
ADOPTED THIS	th	day of	20__

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
CORPORATE OFFICER

**CAPITAL REGIONAL DISTRICT  
BYLAW NO. 3281**

\*\*\*\*\*

**A BYLAW FOR THE ESTABLISHMENT OF THE PORT RENFREW UTILITY SERVICES  
COMMITTEE (JUAN DE FUCA ELECTORAL AREA)**

\*\*\*\*\*

WHEREAS under Section 795 of the *Local Government Act* the Chair of a Regional District Board (hereinafter referred to as the "Board") may establish standing committees for matters the chair considers would be better dealt with by committee and to appoint persons to those committees;

AND WHEREAS Under sections of 176(1)(e) and 192(1) of *the Local Government Act*, the Board may, by bylaw adopted by at least two-thirds of the votes cast, delegate its powers, duties and functions, including those specifically established by an enactment, to its officers and employees, its committees or its members, or to other bodies established by the Board;

AND WHEREAS the Board wishes to establish a committee under this bylaw and to delegate to that committee all of the administrative powers of the Board with respect to the provision of the services as authorized in the following bylaws:

- (a) Bylaw 1744 "Port Renfrew Sewer Local Service Establishment Bylaw No. 1, 1989", as amended;
- (b) Bylaw 1746 "Port Renfrew Street Lighting Local Service Establishment Bylaw No. 1, 1989";
- (c) Bylaw 1747 "Port Renfrew Water Local Service Establishment Bylaw No. 1, 1989; and
- (d) Bylaw 3004 "Port Renfrew Snuggery Cove Water Local Service Establishment Bylaw No. 1, 2003.

NOW THEREFORE, the Board of the Capital Regional District in open meeting assembled enacts as follows:

Membership

1. A Committee to be known as the "Port Renfrew Utility Services Committee" is hereby established and shall consist of seven (7) members as follows:
  - (a) The Director representing the Juan de Fuca Electoral Area;
  - (b) Three (3) individuals who shall represent the Port Renfrew Water Local Service Area: Port Renfrew Sewer and the Port Renfrew Street Lighting Local Service Areas;
  - (c) Two (2) individuals who shall represent the Port Renfrew Snuggery Cove

Water Local Service Area; and

- (d) One (1) representative of the Pacheedaht First Nation when a service agreement for solid waste services is in place and there have been no violations to the terms and conditions of the agreement.
2. Committee members may vote as follows:
- (a) The Electoral Area Director may vote on all matters;
  - (b) Representatives appointed according to 1(b) and 1(c) may only vote on matters relating to the local Service Areas within which the member is either a resident, elector or owner of real property;
  - (c) All members may vote on solid waste services provided the conditions under 1 (d) have been met.

(Bylaw 3745)

### Appointment

3. (a) The Committee shall, at its regularly scheduled meeting in September, submit to the Electoral Area Director, its nominations for the members of the committee for the following term, and at the same meeting, shall invite residents or electors in the Local Service Area to submit additional nominations, on forms provided at the meeting, to the Electoral Area Director on or before 14 days from the date of the meeting. At the same meeting the committee shall schedule the Annual General Meeting which shall be held no sooner than 15 days from the date of the meeting but in all cases shall be before the last day of October;
- (b) The Committee shall invite to the Annual General Meeting residents or electors in the Local Service Areas by written notice at least two weeks prior to the date of the Meeting. Nominations received by the Electoral Area Director shall be posted with the notice of AGM. The committee shall poll the residents or electors present at the Annual General Meeting to fill the positions of committee members to be appointed effective the following January 1, from nominations put forward either by the committee or through the Electoral Area Director;
- (c) The names of the persons nominated or the results of the poll under subsection 2(b) shall be forwarded forthwith after the Annual General Meeting to the Board Secretary, and in any event, before the first Wednesday in December of that year;
- (d) The Board shall immediately upon enactment of this Bylaw appoint persons to act as members of the committee as provided above.

(Bylaw 3397)

### Terms of Office

4. The terms of office of those members of the Committee, other than the Director representing the Juan de Fuca Electoral Area, shall be for a two-year period, except that of the initial appointees, which shall be as follows:

- (a) Three of the appointees shall hold office from the date of appointment until the 31st day of December 2006;
- (b) Two of the appointees shall hold office from the date of appointment until the 31st day of December 2007.

(Bylaw 3397)

- 5. In the event of the death, resignation, or disqualification of a member of the Commission, the Board shall appoint a successor for the remainder of the term.

#### Procedure

- 6. The Committee shall endeavor to hold at least one meeting quarterly and in January of each year shall establish a schedule of quarterly meetings which shall be posted on the community notice board situated at the Transfer Station, the Post Office and on the CRD Website.
- 7. In voting on the Committee all members shall have one vote each.
- 8. The Committee shall in January of each year, by secret ballot, elect a Chair.
- 9. A quorum of the committee is a majority of the members.
- 10. The rules of procedure for the Committee shall not be inconsistent with those of the Regional District

#### Duties

- 11. The Board hereby delegates to the Committee all of the administrative powers of the Board, with respect to:
  - (a) the provision of Sewer Services under Bylaw No. 1743;
  - (b) the provision of Street Lighting Services under Bylaw No. 1746;
  - (c) the provision of Water under Bylaw No. 1747;
  - (d) the provision of Water Services under Bylaw No. 3004;
  - (e) the provision of Solid Waste Services under Bylaw No. 1745.

(Bylaw 3745)

Without limiting the generality of the above, the committee shall establish policies governing the provision and operation of the services including the recommendation of levels of user charges to be established by bylaw of the Board.

- 12. Notwithstanding the provisions of section 11 of this bylaw, the Board retains the right of approval of operation rules, procedures and policies and the levels of user charges to be established by bylaw of the Board.

### Budget

- (a) Upon its establishment, and in November of each year, the committee shall prepare an annual budget for each of the services provided in 11(a) and 11(b) and 11(c) above which shall include estimates for the administrative, development, maintenance, operational and other expenses, including debt charges, and shall submit such expenditure estimates together with estimates for expected revenue, for the approval of the Regional Board and for inclusion in the Regional Board's Five Year Financial Plan;
- (b) No expenditures, other than those provided for in the approved financial plans of the committee as included in the approved financial plan of the Board, shall be incurred by the committee.

### Facilities and Equipment

- 13. Any facilities or equipment acquired by the committee shall be acquired in the name of the Regional District, shall be the property of the Regional District and shall not be disposed of without the approval of the Regional District.

### Citation

- 14. This bylaw may be cited as "Port Renfrew Utility Services Committee Bylaw No. 1, 2005".

READ A FIRST TIME THIS	14 <sup>th</sup>	day of	September	2005
READ A SECOND TIME THIS	14 <sup>th</sup>	day of	September	2005
READ A THIRD TIME THIS	14 <sup>th</sup>	day of	September	2005
ADOPTED THIS	14 <sup>th</sup>	day of	September	2005

Original signed by Karen Watson  
CHAIRPERSON

Original signed by Carmen Thiel  
SECRETARY

**REPORT TO HIGHLAND WATER AND SEWER (MALIVIEW) SERVICES COMMISSION  
MEETING OF THURSDAY OCTOBER 22, 2020**

**SUBJECT**     **Maliview Wastewater Treatment Plant Upgrade Loan Authorization and Amend Service Establishment - Process and Next Steps**

**ISSUE SUMMARY**

To seek approval to proceed with a loan authorization, community consultation, and referendum process to advance the Maliview wastewater treatment plant upgrade and supporting documentation for the Investing in Canada Infrastructure Program grant application (ICIP).

**BACKGROUND**

The CRD is submitting an ICIP grant under the Rural and Northern Communities Program Funding stream. The ICIP program targets capital infrastructure projects in communities with a population of 25,000 or less. The Maliview wastewater treatment plan upgrade qualifies under one of the federal outcomes for green infrastructure – environmental quality for increased capacity to treat and or manage wastewater for public use and benefit. The wastewater project must result in wastewater effluent that meets the *Wastewater Systems Effluent Regulations*, or provincial regulations where there is a federal equivalency agreement in place. Projects must be completed in five years following approval (March 31, 2026). The ICIP deadline for submission is **October 22, 2020**.

The funding provided towards infrastructure projects is a three way cost share between federal and provincial partners the local government. Applicants must be prepared to finance project construction and their cost-share of the project, as well as cover any cost over-runs. The funding split is as follows:

**Table 1: Program Funding Splits**

<i>Ultimate Recipient</i>	<i>Federal</i>	<i>Provincial</i>	<i>Total Senior Gov't Contribution (up to)</i>	<i>Ultimate Recipient Contribution (up to)</i>
Local government with a population between 5,000 - 25,000	50%	40%	90%	10%

One of the requirements of the ICIP is a resolution/bylaw identifying the source of the proponent's share of the project costs including sufficient funds for cost overruns. The resolution should show the support for the project from the CRD Board. The resolution is to be submitted as part of the application package, or within **one month** after the submission deadline due to timing of CRD Board meetings.

The CRD must also submit evidence that their full share of funding has been or will be secured. This evidence may be in the form of staff reports and/or resolutions of board/council directing the use of reserve funds, and for local governments who are recovering their share of funding through borrowing, a loan authorization bylaw that has **received third reading**, and/or a date that borrowing has been approved through a formal public approval process and a copy of the related bylaw.

The Maliview wastewater treatment upgrade conceptual designs provided a total construction cost approximately \$1.65 million (class C cost estimates with up to  $\pm 25\%$ -40%). Once the project budget (CE 582.4501) is approved, staff will proceed with detailed designs, geotechnical/underground investigation, and communicating with the regulator, a Class A cost estimate of  $\pm 10\%$ -15% will be provided from final drawings and specifications for a tender ready project.

To fund the local government's share of the ICIP is as follows:

<b>Maliview WWTP Upgrading Project Cost Estimate</b>	
WWTP Upgrading Construction (Labour and Materials) <sup>1</sup>	\$1,650,000
Engineering, Quality Assurance and Project Management (12%)	\$49,500
Contingency (40%) <sup>2</sup>	\$509,850
<b>Total Estimated Cost</b>	<b>\$2,209,350</b>

1. Cost Estimation is based on conceptual/preliminary design as of September 2020 (Class C,  $\pm 25\%$  - 40%)
2. 40% contingency is allowed due to uncertainties and risks associated with underground conditions and regulatory approval as well as preliminary analysis and design from conceptual/preliminary design project.
3. If the contingency funds are not needed for the upgrading of WWTP, remaining funds will be used towards the repair/replacement of the collection system pipes (up to \$200,000, for prioritized areas/sections).

Recipients of grant funding will be responsible for ineligible costs, managing project risks, including cost increases, as the ICIP is not designed to deal with cost overruns. Any project cost increases will be the responsibility of the Ultimate Recipient.

Where applicants plan to use or have applied for funds from other federal or provincial programs, the source of these funds must be disclosed. Applicants who have confirmed or identified potential sources of other senior government funding for their project should note that the ICIP program is subject to federal stacking rules. Federal funding towards the project is limited to the Government of Canada contribution in Table 1, from all federal sources. Community Works Funds count towards the federal contribution for these purposes and will not be able to be utilized for the Ultimate Recipient's funding contribution to the project.

The next steps required to move the wastewater upgrade work forward is to decide on which loan authorization option to proceed with to support the ICIP grant, the method of electoral assent for borrowing, and next steps for community engagement.

## **ALTERNATIVES**

### *Alternative 1*

The Highland Water and Sewer Local Service Area recommends the Electoral Areas Committee recommends to the Capital Regional District Board:

1. That Bylaw 4370, "Maliview Sewer System Loan Authorization Bylaw No. 1, 2020" be introduced and read a first, second, and third time.

2. That Bylaw 4373, "Maliview Estates Sewerage Local Service Establishment Bylaw No. 1, 1991, Amendment Bylaw No. 1, 2020" be introduced and read a first, second, and third time.
3. Present the project and funding option to the ratepayers in the first quarter of 2021; and bring forward a report to the Commission on the results of the public engagement, and ratepayer's preferred electoral assent process.

#### *Alternative 2*

The Highland Water and Sewer Local Service Area recommends the Electoral Areas Committee recommend to the Capital Regional District Board:

1. Approve Bylaw 4370 loan authorization for \$221,000 and amortization period of 25 years for the Highland Water and Sewer Local Service Commission Maliview wastewater treatment plant upgrade; and
2. That Bylaw 4373, "Maliview Estates Sewerage Local Service Establishment Bylaw No. 1, 1991, Amendment Bylaw No. 1, 2020" be introduced and read a first, second, and third time.
3. Present the project and funding option to the ratepayers in the first quarter of 2021; and bring forward a report to the Commission on the results of the public engagement, and ratepayer's preferred electoral assent process.

#### *Alternative 3*

That this report be referred back to staff for additional information.

### **IMPLICATIONS**

#### *Financial Implications*

Currently there is no parcel tax within the Maliview sewer service area, the service budget is funded by user charge only from the properties connected to the system. The estimated new debt servicing cost is proposed to be funded by a new parcel tax requisition from all the taxable folios in the service area (94 taxable folios as of September 2020).

Long-term debt for all BC municipalities, including regional districts, must be arranged through the Municipal Finance Authority (MFA). MFA issues debenture debt for an initial term of only ten (10) years, irrespective of the total term of the debt. If the total term to maturity selected exceeds ten (10) years, the principle and interest would be subject to renewal in 5 years increments thereafter the first ten (10) year term. The maximum term MFA offers is 30 years.

For analytic purpose only, the estimated debt servicing cost alternatives under four different amortization term scenarios is simulated and shown below based on the indicative interest rates published on MFA website as of September 23, 2020.



<b>Alternative 1</b>	<b>Amortizations</b>			
<b>Loan Authorization \$2,210,000</b>	<b>15 year</b>	<b>20 year</b>	<b>25 year</b>	<b>30 year</b>
Estimated Interest Rate	1.93%	2.24%	2.24%	2.24%
Cost of Borrowing \$	381,580	644,932	808,281	974,373
Annual Debt Payment \$	172,772	142,747	120,731	106,146
Annual Parcel Tax per taxable folio \$	1,838	\$1,519	1,284	1,129

<b>Alternative 2</b>	<b>Amortizations</b>			
<b>Loan Authorization \$221,000</b>	<b>15 year</b>	<b>20 year</b>	<b>25 year</b>	<b>30 year</b>
Estimated Interest Rate	1.93%	2.24%	2.24%	2.24%
Cost of Borrowing \$	38,158	64,493	80,828	97,437
Annual Debt Payment \$	17,277	14,275	12,073	10,615
Annual Parcel Tax per taxable folio \$	184	152	128	113

The longer amortization term will minimize the annual debt payments, but it results in higher total cost of borrowing and higher future interest risk exposure. A debt term of 15 years mitigates interest rate risk to only one subsequent renewal period. CRD staff consider multiple guidelines on each issue with respect to term maturity, including the interest risk exposure, estimated useful life of the infrastructure and the overall impact of both the annual debt payment costs and total cost of borrowing.

The Maliview wastewater system requires corrective actions to bring the system into compliance with both the federal *Fisheries Act* and provincial *Municipal Wastewater Regulations* requirements. The capital upgrades comply with the CRD's October 22, 2019, corrective action plan to bring the wastewater plant into regulatory compliance.

There are currently insufficient funds in the Capital Reserve (\$23,223 as of September 30, 2020) to fund the proposed work; therefore it is recommended to fund the project through a loan authorization bylaw.

### *Service Establishment*

The Maliview system was established as a specified area in 1979 and converted to a local area service in 1991 to operate a collection conveyance, treatment and disposal of sewage. The CRD may levy a tax requisition on the ratepayers in the Maliview service area to fund the annual operating costs and transfers to reserves for the service. The current maximum tax levy is greater of \$20,000 or \$2.50/\$1,000 on actual assessed value of land and improvements to a maximum of \$114,344 based on 2020 assessment. The Maliview service does not have sufficient room in the tax levy to meet the debt servicing costs for the proposed \$2.1 million loan authorization. The existing service establishment bylaw (1938) requires an amendment to allow an increase to the maximum requisition to cover the costs for debt servicing and future infrastructure improvements. It is proposed that the debt servicing be funded by a single amount Parcel Tax to pay an equal share for the plant upgrade and collection repairs.

Under the *Local Government Act* (LGA) electorate approval is required in order to proceed with an amendment to the service establishment bylaw along with the loan authorization bylaw. A referendum question for both the loan authorization and service establishment amendment will be proposed in an electoral assent process to approve the upgrade. Staff are recommending increasing the maximum requisition to \$250,000.

### *Alternative 1*

It is recommended the Commission proceed with Alternative one and seek electoral assent for borrowing the total capital costs and should a grant be awarded it will reduce the overall borrowing requirements for the project.

1. The grant is not guaranteed and will be a very competitive.
2. If the grant is not awarded the capital upgrade is still required.
3. ICIP requires a secured funding plan for the replacement within the application to support the cost of the project. The funding plan is to include sufficient funds to cover all eligible costs, cost overruns beyond budget contingencies, ongoing operational costs associated with the project.
4. ICIP will not consider applications if the project represents a risk to the program funder if there is a potential for the project not to proceed should there be applicant funding difficulties; the project does not have public support; and the applicant does not demonstrate they are able to manage, maintain, and finance the project over the long term.
5. ICIP will not weight scoring of the grant should the ratepayers demonstrate their willingness to fund the entire project costs.
6. The loan authorization bylaw can be held at third reading and amended to a lesser amount upon grant award.

### *Alternative 2*

Alternative two is less expensive, however, the risk is should the grant not be awarded the ratepayers will be required to fund the entire project costs. It may require a second electoral assent process to borrow the total costs.

### **Funding Approval Options**

There are two options for approval of a loan authorization bylaw under the LGA to undertake this project:

1. Alternative Approval Process
2. Referendum Process

### **Alternative Approval Process (AAP)**

Local/regional governments can use the Alternative Approval Process under Section 345 of the LGA to obtain participating area approval of a loan authorization bylaw. It is most commonly used in relation to long-term borrowing bylaws as it is a less expensive option than using a referendum. If more than 10% of the affected electors sign a counter-petition opposing the bylaw, a referendum must be held if the Committee still wishes to adopt it. Proceeding to referendum voting must occur no later than 80 days after the deadline established for submitting elector response forms during the AAP.

Based on the above tentative schedule the AAP would take approximately six (6) months, and would cost approximately \$20,000.

### **Referendum Process**

The referendum process is typically used to seek approval by assent of the electors, Section 407 of the LGA, where for a participating area, a majority of the valid votes are counted in favour of the bylaw to fund a project. Typically, a referendum question is developed and then reviewed by the Inspector of Municipalities at the province, requesting the electors to approve the borrowing of a specified amount of funds for the project. If electoral assent is not received local government must wait at least six (6) months before seeking elector assent on another bylaw for the same purpose in a referendum. In special circumstances, the local government may request approval from the Minister to hold another assent voting opportunity sooner.

Based on the above tentative schedule, the referendum would take approximately seven (7) months, and would cost approximately \$60,000. Under current COVID conditions referendum cost have escalated as legislative services may be required to hire an auxiliary staff to assist as the CRD does not have sufficient capacity to support Board and Commissions as well as an approval process during COVID. Additional cost for barriers between polling staff and electors seems to be setting a "standard" of masks, face shields, and protective barriers. Also there may be difficulty in finding staff to work elections during a pandemic (perhaps, even a need to increase pay for staff). Due to the pandemic, the CRD anticipates an increase in mail ballots which would have a significant impact on staff time in processing the ballots.

### **Implications of an Unsuccessful AAP or Referendum**

If the above-noted processes are unsuccessful, the CRD Board may face an order from the federal and provincial regulators for the work based the level of risk/liability due to non-compliance when failure occurs and an illegal discharge occurs. Under section 180 of the *Community Charter* the CRD will be authorized to borrow sufficient funds without electoral assent for works required should an environmental protection order be issued. It is highly likely an order will be issued as the CRD has received a warning from both federal and provincial regulators.

### **Public Engagement**

Due to the financial impact of the alternatives on the taxpayers, there is a need for public engagement to inform the stakeholders of the issues, alternatives, impacts and timeline for the process. The exact form and extent of this process will be developed once the Commission decides on the preferred borrowing alternative.

The CRD follows the Public Participation Spectrum developed by the International Association for Public Participation (IAP2) as a model for developing our public engagement strategy. The spectrum outlines varying levels of public participation: inform, consult, involve, collaborate and empower. Even though the taxpayers are empowered by default through an electoral assent process, at this point in the public engagement process, staff advise focusing on informing and consulting with the ratepayers to provide them with information needed to assist them in making an informed decision. During the process, a method of obtaining public feedback will be an important factor in order to determine the community understanding of the project, gauge their

support for borrowing, and their preference for the method to seek electoral assent (AAP or referendum)

The project timeline and electoral assent processes are outlined in Appendix A and B.

## **CONCLUSION**

The Maliview wastewater system was originally constructed in the early 1970s. Since its original construction, there were modifications and upgrades to the system to address performance issues. The existing plant has been experiencing difficulties in consistently meeting the permitted treatment quality requirements. The plant upgrade is needed to address non-compliance violations. The total cost of the project is estimated at \$2,210,000 and staff will be submitting an application for up to 90% ICIP grant funding towards the cost of the project that is intended to increase the plant's capacity to treat and/or manage wastewater. Should the CRD be successful in an ICIP grant award it will reduce the overall borrowing requirements for the project.

## **RECOMMENDATION**

The Highland Water and Sewer Local Service Area recommends the Electoral Areas Committee recommends to the Capital Regional District Board:

1. That Bylaw 4370, "Maliview Sewer System Loan Authorization Bylaw No. 1, 2020" be introduced and read a first, second, and third time.
2. That Bylaw 4373, "Maliview Estates Sewerage Local Service Establishment Bylaw No. 1, 1991, Amendment Bylaw No. 1, 2020" be introduced and read a first, second, and third time.
3. Present the project and funding option to the ratepayers in the first quarter of 2021; and bring forward a report to the Commission on the results of the public engagement, and ratepayer's preferred electoral assent process.

Submitted by:	Karla Campbell, BPA, Senior Manager, Salt Spring Electoral Area
Concurrence:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

## **ATTACHMENT(S)**

Appendix A: Referendum Process

Appendix B: Alternative Approval Process

Appendix C: Draft bylaw 4370 - Loan Authorization Bylaw

Appendix D: Draft bylaw 4373 - Maliview Service Establishment Bylaw Amendment

**APPENDIX A****REFERENDUM PROCESS**

1. Maliview to decide on loan option and amortization period	October 22
2. Submit ICIP grant application	October 22
3. CRD Board approval of three readings of Loan Authorization Bylaw	November 18
4. Send Loan Authorization bylaw to Inspector of Municipality	November 19
5. Prepare Public Engagement Strategy and Educational Materials	December
6. Open House to Update Ratepayers on the Project and Referendum	January 2021
7. Commission to Review Results of Public Feedback from Open House and determine Electoral Assent Process	February
8. CRD Board to establish Referendum question, polls, and Election Officer	March 10
9. Prepare Mail-out to include with utility bill – Referendum Notice	April 1
10. Approval of Inspector of Municipalities	mid-April
11. Advertise official notices 30 days prior to Referendum	May 19
12. Advance voting	June 9 & 16
13. Referendum Voting Day	June 19
14. Board receives Referendum results; if successful, adopts bylaws	July 14
15. 30-day quashing period ends	August 19
16. Apply for Certificate of Approval	August 20
17. Prepare construction tender	Sept – October
18. Secure initial draw on MFA Loan	November

**APPENDIX B****ALTERNATIVE APPROVAL PROCESS**

1.	Maliview to decide on loan option and amortization period	October 22
2.	Submit ICIP grant application	October 22
3.	CRD Board approval of three readings of Loan Authorization Bylaw	November 18
4.	Send Loan Authorization bylaw to Inspector of Municipality	November 19
5.	Prepare Public Engagement Strategy and Educational Materials	December
6.	Open House to Update Ratepayers on the Project and Referendum	January 2021
7.	Commission to Review Results of Public Feedback from Open House and determine Electoral Assent Process	February
8.	CRD Board to establish deadline for receiving elector response forms; authorizes approval of electors in local area service; and establishes total number of electors and elector response form	March 10
9.	Approval of Inspector of Municipalities	mid-April
10.	Issue Notice of Alternative Approval Process by way of publication in two consecutive editions of the newspaper	March 31 & April 7
11.	Deadline for receiving elector response forms.	May 7
12.	Board receives Certificate of Results and adopts bylaw	June 9
13.	30-day quashing period ends	July 9
14.	Apply for Certificate of Approval	July 12
15.	Prepare construction tender	Aug - Sept
16.	Secure initial draw on MFA Loan	November

**CAPITAL REGIONAL DISTRICT**

**BYLAW NO. 4370**

\*\*\*\*\*

**A BYLAW TO AUTHORIZE THE BORROWING OF  
TWO MILLION TWO HUNDRED AND TEN DOLLARS (\$2,210,000)  
FOR THE MALIVIEW SEWER SYSTEM RENEWAL AND UPGRADE**

\*\*\*\*\*

**WHEREAS:**

- A. Under Bylaw No. 1938, "Maliview Estates Sewerage Local Service Establishment Bylaw, 1991", the Capital Regional District established a local service for the operation of a service for the collection, conveyance, treatment and disposal of sewage;
- B. The Maliview wastewater system requires capital renewal and upgrades, which will involve the planning, study, project administration, project communications, and staff time required for design and construction of facilities, design and construction of facilities for the collection, conveyance, treatment and disposal of wastewater, as well as other related works, facilities and equipment purchases;
- C. The estimated cost of the works, facilities and equipment, including expenses incidental thereto to be funded from debt servicing, is the sum of Two Million Two Hundred and Ten Thousand Dollars (\$2,210,000) which is the amount of debt intended to be authorized by this bylaw, subject to receiving funding from other sources;
- D. It is proposed that the financing of the said sewerage system facilities is to be undertaken by the Municipal Finance Authority of British Columbia pursuant to proposed agreements between that Authority and the Capital Regional District;
- E. Pursuant to Section 407 of the *Local Government Act*, participating area approval is required and shall be obtained by alternative approval process under Section 345 of the *Local Government Act*; and
- F. The approval of the Inspector of Municipalities is required under Section 403 of the *Local Government Act*.

NOW THEREFORE the Board of the Capital Regional District in open meeting assembled enacts as follows:

- 1. The Board is hereby empowered and authorized to undertake and carry out or cause to be carried out the capital renewal and upgrade of the Maliview sewerage wastewater system, which will involve the planning, study, project administration, project communications, staff time required for design and construction of facilities, design and construction of facilities for the collection, conveyance, treatment and disposal of wastewater, as well as other related works, facilities and equipment purchases:
  - (a) to borrow upon the credit of the Capital Regional District a sum not exceeding Two Million Two Hundred and Ten Thousand Dollars (\$2,210,000);

- (b) to acquire all such real property, easements, rights-of-way, leases, licenses, rights or authorities as may be requisite or desirable for or in connection with the planning, study, design and construction of a system for the collection, conveyance, treatment and disposal of sewage and all related ancillary works, studies and equipment deemed necessary by the Board.
2. The maximum term for which debentures may be issued to secure the debt intended to be created by this bylaw is 20 years.
3. This Bylaw may be cited as the "Maliview Sewer System Loan Authorization Bylaw No. 1, 2020".

READ A FIRST TIME THIS	___	day of	_____	202_
READ A SECOND TIME THIS	___	day of	_____	202_
READ A THIRD TIME THIS	___	day of	_____	202_
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS	—	day of	_____	202_
RECEIVED THE ASSENT OF THE ELECTORS UNDER SECTION 345 of the <i>LOCAL GOVERNMENT ACT</i> THIS	___	day of	_____	202_
ADOPTED THIS	___	day of	_____	202_

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
CORPORATE OFFICER

FILED WITH THE INSPECTOR OF MUNICIPALITIES THIS \_\_\_\_ day of \_\_\_\_ 2020



**CAPITAL REGIONAL DISTRICT  
BYLAW NO. 4373**

\*\*\*\*\*

**A BYLAW TO AMEND BYLAW 1938, "MALIVIEW ESTATES SEWERAGE  
LOCAL SERVICE ESTABLISHMENT BYLAW NO. 1, 1991"**

\*\*\*\*\*

**WHEREAS:**

- A. Under Bylaw No. 1938, Maliview Estates Sewerage Local Service Establishment Bylaw No. 1, 1991, the Regional Board converted a specified area to a local service operated by establishing bylaw for the collection, conveyance, treatment, and disposal of sewage;
- B. The Board wishes to amend Bylaw No. 1938 to ensure funds are available for maintenance, operation, upgrades, and to ensure compliance with modernized cost-recovery language;
- C. Elector approval is required for these changes and may be given by the Electoral Area Director consenting on behalf pursuant to ss. 347(2) and 349 of the *Local Government Act*;

The Board of the Capital Regional District in open meeting assembled enacts as follows:

- 1. Bylaw No. 1938, "Maliview Estates Sewerage Local Service Establishment Bylaw No. 1, 1991" is hereby amended as follows:
  - (a) By deleting Section 3 in its entirety and replacing it with the following:
    - 3. The annual costs for the local service, net of grants and other revenues shall be recovered by one or more of the following:
      - (a) by the requisition of money under Section 378(1)(a) of the *Local Government Act*;
      - (b) by Parcel Tax under Section 378(1)(b) of the *Local Government Act*;
      - (c) fees and charges imposed under Section 397 of the *Local Government Act*;
      - (d) revenues raised by other means authorized by the *Local Government Act* or another Act; or
      - (e) revenues received by agreement, enterprise, gift, grant or otherwise.
  - (b) By deleting Section 4 in its entirety and replacing it with the following:
    - 4. In accordance with Section 339(1) of the *Local Government Act*, the maximum amount that may be requisitioned for the Local Service will be the greater of:
      - (a) Two Hundred Fifty Thousand Dollars (\$250,000); or
      - (b) an amount equal to the amount that could be raised by a property value tax rate of \$5.466 per One Thousand Dollars (\$1,000) when applied to the net taxable value of land and improvements in the Service Area.
  - (c) By deleting Section 5 in its entirety and renumbering the remaining sections accordingly..

- |   |        |      |
|---|--------|------|
| READ A FIRST TIME THIS                              | day of | 2020 |
| READ A SECOND TIME THIS                             | day of | 2020 |
| READ A THIRD TIME THIS                              | day of | 2020 |
| APPROVED BY THE<br>INSPECTOR OF MUNICIPALITIES THIS | day of | 2020 |
| RECEIVED ASSENT OF THE ELECTORS THIS                | day of | 2020 |
| ADOPTED THIS  | day of | 2020 |

CORPORATE OFFICER

FILED WITH THE INSPECTOR OF MUNICIPALITIES THIS                      day of                      2020

## REPORT TO GOVERNANCE AND FINANCE COMMITTEE MEETING OF WEDNESDAY, OCTOBER 07, 2020

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### **SUBJECT**     Review of the Victoria Family Court and Youth Justice Committee

### **ISSUE SUMMARY**

In October 2019, the CRD Board directed staff to conduct a review of the Victoria Family Court and Youth Justice Committee (the “Committee”) to understand its mandate, governance, and finances, and present options for moving forward.

### **BACKGROUND**

To appreciate the current mandate and governance structure of the Committee, it is important to review the history of how the Committee evolved.

In 1964, the Committee was formed by the City of Victoria, with representatives of Victoria, Oak Bay, Esquimalt, and Saanich. Its four members reported as an advisory committee to another advisory committee of the City of Victoria tasked with inter-municipal business.

In 1967, the CRD received supplemental letters patent requiring it to fund the construction of a new courthouse for family and youth, servicing Victoria, Oak Bay, Saanich, Esquimalt, and the electoral areas (provincial unorganized territory).

In 1984, the Committee became a youth justice committee under the then-*Young Offenders Act* (now the *Youth Criminal Justice Act*) by the provincial Attorney General.<sup>1</sup>

In 1987, the CRD received supplemental letters patent requiring it to operate, participate in, and fund a *Provincial Court Act* family court committee on behalf of Victoria, Saanich, Oak Bay, and Esquimalt, as well as the electoral areas of Colwood, Metchosin, Sooke, Langford, and View Royal. At the time, CRD was the authority tasked with construction of a family and youth court building. The maximum requisition was \$5,000. The Committee ceased reporting to the City of Victoria and reported to the CRD as an advisory committee, having previously reported to the CRD on an ad hoc basis.

By the mid-1980s, its membership had expanded, with one CRD representative being added, and seven members-at-large appointed by CRD. As CRD’s electoral areas became municipalities, additional members were added. School district members also became voting members at some point, having previously been non-voting members as late as the mid-1980s.

In 1998, an establishing bylaw was created for the service and the maximum requisition became \$10,000. Participants were to “participate in and share the cost” of the funding and operation the

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<sup>1</sup> Hon. Brian Smith: “The establishment of a Youth Justice Committee, while not conferring any particular rights and privileges on the Committee and its members, recognizes that the Committee has a legitimate role, as representatives of your community, in making the youth justice process more effective. [...] The specific programs and activities your Committee might wish to pursue would be discussed with local officials of the youth justice system.”

Committee. Also that year, Central Saanich, Sidney, and North Saanich joined the service as the Sidney courthouse closed.

In 2000, CRD broadened the service authority to also allow funding of “board approved committees”. This was to provide funding for the Capital Region Action Team for Sexually Exploited Youth (CRAT). At the time, the Committee did not use its full \$10,000 requisition and consented to share an annual \$1,500 with CRAT rather than have CRD create a new service. The CRD Board approved CRAT as a “board approved committee”, and continues to fund it to this day by sending a cheque for \$1,500 to Oak Bay annually.

In 2003, the requisition amount was lifted to \$15,000. The then-chair of the Committee advocated for the increase due to expenses of office space, staffing support, and the value the committee provided to the community in giving local government officials and lens into how the justice system treated youth in custody and youth involved with the justice system. The Committee was identified as a select committee of the CRD Board, tasked with advising on operations of the court system and impacts on youth and family.

In 2004, the CRD Board ratified the Committee’s Constitution and Terms of Reference, which included broad membership and multiple-sub-committees. They are substantially similar to what is in use today, and what has been used since the mid-1980s. No detailed discussion on the work of the Committee or its operations is demonstrated in the meeting minutes.

In 2014, such committees became optional.<sup>2</sup>

In 2019, it was brought to the attention of the CRD that the Committee was paying for an outside Canada professional development activity and was making grants with its budget. This review was commenced soon after at the request of the CRD Board.

A list of activities undertaken by staff as part of this review is attached at Appendix A. Staff reviewed areas of conflict that were raised by some members of the Committee about its work, role, expenses, and governance. Some Committee Members take the position that the Committee is not accountable to the CRD, is wholly independent, and is able to spend funds as it wishes, subject to its own policies. Other Committee Members take issue with a lack of defined outcomes; non-compliance with meeting requirements; frequent multi-hour catered meetings; complicated governance; lack of term limits; and an unwieldy annual report. Staff undertook a review of current Committee operations and, where appropriate, applied a comparative analysis to other CRD committees and commissions as set out below.

## **ALTERNATIVES**

### *Alternative 1*

The Governance and Finance Committee recommends to the Capital Regional District Board:

That staff be directed to report back on the process to restructure the Committee in accordance with the recommendations set out in Appendix H.

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<sup>2</sup> *Justice Statutes Amendment Act*, 2014. Hon. S. Anton: “This provision was put in some time ago. There never has been funding for these committees. There was “a municipality must.” There was no way of enforcing compliance. So we have now made it permissive. Some municipalities have family court committees; others do not. [...] There are 17 family court committees now. The exact amount of how many could, I don’t know. But it’s communities with a courthouse or around a courthouse.”

*Alternative 2*

The Governance and Finance Committee recommends to the Capital Regional District Board:

That staff be directed to report back with the process for winding-up the service and appropriate bylaw amendments.

*Alternative 3*

That this report be referred back to staff for additional information.

**DISCUSSION**

***Statutory Purpose of Committee***

The Committee has a statutory grant of authority, summarized in Appendix B, with relevant legislative provisions set out in Appendix C. Family Court Youth Justice Committees are not part of the justice system, rather they discuss local issues. The Committee has never and will never receive court referrals.

As a result, the Committee undertakes the following activities:

- grants;
- court watch, where volunteers attend court and report observations;
- awareness raising, collective collaboration and group action, as well as reporting by local service providers (youth and vulnerable persons non-profits, police, school districts);
- lobbying on initiatives related to youth and family matters, including on barriers faced by youth and families in accessing services and navigating the court system; and
- acting as a resource for those doing civic events related to access to justice;

The Committee has also written papers, organized conferences, and assisted in coordinating presentations at schools and in the community. A list of projects funded or organized by the Committee post-2004 is Appendix D, while a summary of current works is Appendix E.

***Meetings***

The Committee meets nine times per year for at least two hours. Out-of-time agenda items are not typically rescheduled. Speakers do not have strictly enforced time limits. Votes are informal. Meetings are closed, except by advanced invitation or the annual meeting. The Committee's executive believes that without closure, certain members would be unable to attend and speak freely (e.g. child support workers, crime task forces).<sup>3</sup> Meeting minutes are not public. The Committee has confidentiality agreements, historically to protect the information of youth in the criminal and family court system if referrals were received. They are extremely broad.

Most CRD advisory bodies or commissions meet four to nine times per year. Meetings are open, speakers and delegations have limited times, and agendas and minutes are public, in accordance with the *Community Charter* and the CRD *Procedure Bylaw*. CRD's confidentiality agreements are more limited in scope than those currently used by the Committee.

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<sup>3</sup> Were it acting under a referral from the Courts as a youth justice committee, the *Youth Criminal Justice Act* does have language prohibiting the publication of information on young offenders. The *Community Charter* allows closure per ss. 90(f), Law enforcement investigations; 90(j) and 90 (m) information that is prohibited from disclosure under freedom of information legislation or another enactment. Closure only applies to the portion of the meeting where such information is discussed.

### ***Sub-Committees***

The Committee uses sub-committees to champion initiatives. Currently operating are:

- a steering committee, which sets the agenda in advance of meetings and is often where discussions on business occur;
- a court watch committee, responsible for scheduling volunteers to attend youth and family court and report back with their findings and observations to the Committee;
- a priorities committee, who review applications for grant funding and community youth-related initiatives that the Committee can support;
- a youth matters committee, that raises awareness of issues for youth and youth at risk in the court system and in society, and raise awareness of youth services;
- CRAT, with the purpose of assisting youth who are in or may be at risk of entering the sex trade. It primarily organizes in-school presentations.

If additional work is to be performed by CRD committees or commission, and staff are not involved, committee members do this outside meetings. Public bodies such as CRD cannot hold meetings in an informal setting and fail to invite the public to attend, and cannot operate all meetings in closed without public access to minutes.

### ***Membership, Appointment, Attendance***

There are 23 voting members and a number of non-voting resource members. CRD appoints seven members-at-large, as well as Chair, Vice Chair, and Treasurer. There is no public process for soliciting interest in CRD positions. Typically, the Committee recruits and recommends new members and CRD formalizes the appointment. Similarly, the Committee holds an election for officers at its AGM and the CRD ratifies results. Municipalities directly appoint elected officials or members of the public.

CRD committees or commissions have a typical membership of three to seven persons, though some advisory committees are larger where the intent is to get a diverse range of views from the community. Most advisory committees only meet a few times per year to provide advice or adjudicate grant applications received. CRD committees and commissions are governed by bylaws and use a public application process for new members.

It is reported that some Committee Members do not attend regularly, or attend a few meetings each year then drop off. Reported reasons for non-attendance range from the length and frequency of meetings; the time of day of meetings; a need to travel for meetings; length of speakers on individual issues; and a lack of completion of agenda items.

### ***Governance***

The Committee operates through a constitution; a terms of reference, developed by the Committee; expense policies; and individual guidance documents for each sub-committee.

The constitution is similar to the terms of reference of informal CRD working groups or committees, but the reporting relationship and authority is not as clear as that set out in a bylaw or standard CRD terms of reference. The expense policy is similar to but does not match current CRD expense policies.

### ***Records and CRD Services***

The Committee has no permanent home for documents. Its annual report stores all records, resulting in an unwieldy document.<sup>4</sup>

It does not use and is not provided regular access to CRD facilities or services. Pre-2000, it relied more on CRD services, though maintained its own office space. It does not have a safety or privacy officer.

CRD committees and commissions store records in Legislative Services or have a specific division assigned to assist in record keeping. They access CRD resources, with varying levels of support depending upon the committee or commission, and may direct questions regarding risk and insurance, safety, records management, legislative procedure, or any other issues to the appropriate staff resource and receive advice.

### ***Banking and Expenses***

The Committee's bank account requires multiple signatures. An audit committee reviews receipts. CRAT's record keeping and funds are held by Oak Bay.

The Committee's day-to-day expenses consist of:

- a contracted minute taker and secretary for an amount of approximately \$2,600 per year (or ~\$300 per meeting). It has had a contracted secretary since the mid-1980s;
- catered self-serve meals in an amount of up to approximately \$3,800 per year (roughly 25% of its budget); and
- Some reimbursement for parking, office supplies, and transit for members and guest speakers (less than \$600).

Regarding lunches, there is concern of the Committee executive that if meetings were not catered, members may not arrive or attend in a regular or timely fashion. Others say that if meetings were less frequent, at different times, and stuck to a time-limited agenda, such catering would not be necessary or, if attendance increased, may be justified.

Larger CRD commissions that meet over the lunch-hour are catered; commission and committee meetings that commence early or meet in the evening often have light refreshments.

In 2019, the Committee approved a member attending a conference in Las Vegas, Nevada. Some members were concerned there was no debate or discussion on this expense and felt that it had already been decided at a sub-committee level or at a prior meeting.

Typically, CRD committees and commissions do not provide for member professional development, or if they do, have a reasonable cap on what is reimbursable. They would not normally fund such activities outside of Canada.

The Committee has built a new website (approximately \$3,000 over two years), replacing its prior website which it was incapable of updating without significant technical assistance. It has password protected "members only" sections (for agendas and other materials that are difficult

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<sup>4</sup> The Annual Report contains documents on the Committee's creation, finances, past work product, terms of reference, constitution, letters from government, and other materials that would not normally form part of an annual report.

and expensive to mail or e-mail) that were not yet accessible as of the spring of 2020. The website was not procured through CRD.

The 2019/2020 budget year, for the first time in about a decade, a budget has been requested for the Committee's \$15,000 annual requisition. Other CRD services require detailed five-year budgets, updated each year, in advance of funding and have clear restrictions on purchasing authority (such as not using public funds to purchase capital items that do not belong to CRD). Most Board committees do not have an allocated budget amount, or if they do, it is much smaller (less than \$1,500).

### **Grants**

The Committee issues grants to youth justice initiatives, such as the Sidney Youth Mental Health Clinic (saved from closure by Committee funding); conferences, such as Reimagining Masculinities, an all-ages ticketed event featuring speakers on healthy male identity; sponsorship of a cultural safety exercise; and further funding to CRAT.

The grant function is problematic. CRD must delegate clearly to authorize granting.<sup>5</sup> CRD records from 2000 state the Committee is not authorized to provide grants, but records from 2004 state the Committee does and may provide grants. Going back as far as 1999, the Committee also provides small honorariums (less than \$300 for a year) to guest speakers and individuals involved in justice work in the community. Despite some inconsistency in the CRD's past messaging as to whether grants are permitted, the Committee should not be issuing grants without proper authority delegated by bylaw.

## **IMPLICATIONS**

### **Alternative 1: Regularize the Committee**

If the work of the Committee is valued, the Committee must be restructured to avoid member disputes, clarify its mandate, and to ensure public accountability. Regularizing the Committee would give it clear access to CRD's privacy, legal, safety, risk and insurance, and other support services. Incorporating it may allow youth and family matters to be referred by the CRD Board.

Successful family court committees operate in Vancouver and Richmond:

- Vancouver's advisory committee has a terms of reference stating the local government's policies and procedures apply. It does not have a separate budget. It is supported by staff. It holds four to six meetings per year, has a diverse membership (including youth members), and its meetings are typically two hours long. Its broadened mandate encompass all children, family, and youth issues, with a focus on including youth in civic engagement. Its terms of reference are at Appendix F.
- Richmond's advisory committee has an annual budget of \$2,500 that may be used for food, travel, attendance at conferences, and the like. It has a membership of 8 to 15. It is supported by staff. It operates in a similar fashion to the Committee, with a focus on court watching, advocacy on the concerns of youth and families, and presentations to participants to facilitate to communication across organizations. Unlike the Committee, it has fewer elected officials and more community members to focus on its work as a

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<sup>5</sup> *Local Government Act*, section 263 (1)(c) Subject to the specific limitations and conditions established under this or another Act, the corporate powers of a board include the following ... to provide assistance for the purpose of benefiting the community or any aspect of the community;



volunteer “working committee”, with more of a focus on justice initiatives and lobbying. Its terms of reference are Appendix G.

This option will require staff time and would take several months given current staff capacity and the need to work with existing Committee members on the initiative. It would require bylaw changes and staff involvement to ensure the Committee is trained in *Community Charter* meeting requirements and CRD policies and procedures.

A list of recommendations is contained in Appendix H. If pursued, staff will consult and report back with bylaw amendments and specific feedback from the Committee.

### **Alternative 2: Dissolve the Family Court Committee**

Winding-up the service would remove CRD involvement and allow those individuals who are passionate about the work of the Committee to lobby individual local governments for funding. Municipalities could establish their own committees or directly fund justice initiatives with municipal grants-in-aid. It would remove \$15,000 per year from the CRD budget and not require any additional staff time.

Dissolution may have consequences for youth and family services providers in the Capital Region. The Committee is a place for justice-involved individuals to connect and collaborate. Without funding, this may not occur and may lead to a lack of a coordinated community focus on youth and family issues and a loss of opportunities. Long term members see the best value of the Committee as the coordination piece, to keep the issues facing families and youth continued in the attention of local government and service agencies. Unlike other communities, a number of initiatives have come out of the work of the Committee that continue (CRAT’s programs in schools, the Mobile Youth Services Team, and other works).

Most other Family Court Youth Justice Committees in the province have been dissolved by other local governments in recent years.<sup>6</sup> Reasons include the following:

- mandates were unclear;
- participants did not share administrative support, or chose not to remit expenses;
- committees were not utilized, and as a result, expanded work beyond their intended purpose;
- terms of reference were revised without consultation. Some excluded qualified members and jurisdictions, while others referred to jurisdictions that did not exist;
- local governments were permitted limited influence over a committee’s activities and operations. One committee, without documented reasons, excluded elected officials and refused to recognize the supervisory relationship between funding governments and the committee, resulting in its complete loss of funding; and
- local governments thought it not their role to facilitate this work.

Regarding the non-use of these Committees, since the 1960s, other tools have been developed that replace the non-local functions of a committee, such as:

- diversion of charges through alternative measures (by way of voluntary community work, letters of apology, restitution, anger management, skills courses, etc.);

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<sup>6</sup> These committees have been a source of confusion for at least 20 years. In 1999, the Union of BC Municipalities wrote to the BC Attorney General requesting clarification on their purpose, but did not receive a response. In 2012, Port Moody requested clarification from the Province, who denied any knowledge, then on further inquiry confirmed there was no longer a provincial committee liaison nor a list of such committees.

- incorporation of restorative justice and community accountability programs into the youth criminal justice system;
- pre-sentencing reports focused on mental health, addictions, and cultural factors;
- incorporation of victim impact statements in sentencing;
- local and provincial victims services programs;
- the creation of youth and family justice centres, providing self-help and information services, dispute resolution options, limited legal advice, community resource listings, courses and publications;
- BC's Representative for Children and Youth, who advocates for youth across the foster and family justice systems;
- the use of collaborative family law, where lawyers attempt to negotiate resolution rather than traditional adversarial litigation, is more common; and
- issues facing families, women, children, youth, and trauma survivors are more readily understood by the judiciary and law enforcement.

### **Alternative 3: Refer back to staff**

Should further information be necessary, the Committee could continue to operate as normal, with any grant issues arising being referred to the Board for ratification, until a decision is made by the Board on continued operation of the service.

### **CONCLUSION**

Though well-intentioned, the Committee is not operating in accordance with CRD procedure and policy requirements. While the mandate and purpose of the committee has become less relevant in recent years with an increase in other family and youth justice support agencies that are better placed to undertake this specialized work, the Committee is valued by its long-term members and some community stakeholder organizations. Assistance in governance and its regularization would avoid confusion and disputes but would only be successful if Committee members recognized CRD's jurisdiction over its governance; alternatively, the service should be wound-up and consideration put to other uses for funding.

### **RECOMMENDATION**

The Governance and Finance Committee recommends to the Capital Regional District Board:  
That staff be directed to report back on the process to restructure the Committee in accordance with the recommendations set out in Appendix H.

Submitted by:	Steven Carey, B.Sc, J.D., Manager, Legal Services (Contract & Bylaws)
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENTS**

Appendix A: Review actions

Appendix B: Summary of legislative grant of authority

Appendix C: Relevant sections of the *Provincial Court Act, Youth Criminal Justice Act*

Appendix D: Projects 2000 to 2018

Appendix E: Projects to 2020

Appendix F: Vancouver's Children, Youth and Families Advisory Committee Terms of Reference

Appendix G: Richmond Family Court Committee Terms of Reference

Appendix H: Recommendations for Restructuring Committee

## **APPENDIX A**

### **REVIEW ACTIONS**

In conducting this review, the writer undertook the following:

- a thorough search of CRD records, through the Legislative Services, Finance Department, and Freedom of Information and Protection of Privacy Department;
- *Freedom of Information and Protection of Privacy Act* requests to the Province;
- *Access to Information Act* requests to the Federal Government; Interviews with Federal Government staff with knowledge of the use of Family Court Committees and Youth Justice Committees;
- Consultation with the City of Victoria Archives;
- Direct contacts with other local governments who have wound-up or maintained family court committees;
- Literature review of materials relating to these committees;
- Direct interviews with members of Committee and CRAT;
- Attendance at Annual General Meeting of Victoria Family Court Committee;
- consideration of CRD policies and procedures relating to committee and commission operation;
- review of materials provided by the Victoria Family Court Committee;
- survey of similar third party contribution, granting, or youth and family services functions; and
- other research as applicable.

## APPENDIX B

### **SUMMARY OF LEGISLATIVE GRANT OF AUTHORITY**

The *Provincial Court Act* and its predecessor establish the responsibility of a family court committee. It must:

- meet at least 4 times a year to review community resources for family and children's matters, assist the court if requested, and to make recommendations it considers advisable;
- assist the court, if requested, to provide a community resource or assistance in individual cases referred to the committee; and
- report annually to the municipalities involved and to the Attorney General respecting its activities.

Members must serve without remuneration, are appointed in January for one year terms, and must include those with experience in education, health, probation or welfare.

The *Youth Criminal Justice Act* states that the committee's functions may include:

- relating to a young offender:
  - giving advice on extrajudicial measures to be used;
  - providing victim support by soliciting concerns and facilitating the reconciliation of the victim and the young person;
  - ensuring that community support is available to the young person by arranging the use of services within the community, and enlisting members of the community to provide short-term mentoring and supervision;
  - if a child protection agency or community group is involved, assist in coordinating the interaction of that group with the justice system;
- advising the federal and provincial governments on policies and procedures related to the youth criminal justice system;
- providing information to the public respecting the *Youth Criminal Justice Act* and the youth criminal justice system;
- acting as a "conference", that is, taking referrals from the court; and
- such other functions as are assigned by the person who establishes the committee.

## **APPENDIX C**

### **PROVINCIAL COURT ACT**

#### **Family court committee**

5 (1) A municipality may have a family court committee appointed by the municipal council in January of each year.

(2) The members of a family court committee must include persons with experience in education, health, probation or welfare.

(3) The members of a family court committee serve without remuneration.

(4) If a court facility in which family matters are dealt with serves more than one municipality or area not in a municipality, the family court committee must be composed of representatives from each area served.

(5) The municipalities involved must appoint one member of the family court committee as chair, and another as vice chair.

(6) The family court committee must do the following:

- (a) meet at least 4 times a year to consider and examine the resources of the community for family and children's matters, to assist the court when requested and generally, and to make the recommendations to the court, the Attorney General or others it considers advisable;
- (b) assist the officers and judges of the court, if requested, to provide a community resource or assistance in individual cases referred to the committee;
- (c) report annually to the municipalities involved and to the Attorney General respecting their activities during the past year.

## **YOUTH CRIMINAL JUSTICE ACT**

### **Definitions**

2 (1) The definitions in this subsection apply in this Act:

**conference** means a group of persons who are convened to give advice in accordance with section 19.

### **Youth Justice Committees**

18 (1) The Attorney General of Canada or a province or any other minister that the lieutenant governor in council of the province may designate may establish one or more committees of citizens, to be known as youth justice committees, to assist in any aspect of the administration of this Act or in any programs or services for young persons.

### **Role of committee**

(2) The functions of a youth justice committee may include the following:

- (a) in the case of a young person alleged to have committed an offence,
  - (i) giving advice on the appropriate extrajudicial measure to be used in respect of the young person,
  - (ii) supporting any victim of the alleged offence by soliciting his or her concerns and facilitating the reconciliation of the victim and the young person,
  - (iii) ensuring that community support is available to the young person by arranging for the use of services from within the community, and enlisting members of the community to provide short-term mentoring and supervision, and
  - (iv) when the young person is also being dealt with by a child protection agency or a community group, helping to coordinate the interaction of the agency or group with the youth criminal justice system;
- (b) advising the federal and provincial governments on whether the provisions of this Act that grant rights to young persons, or provide for the protection of young persons, are being complied with;
- (c) advising the federal and provincial governments on policies and procedures related to the youth criminal justice system;
- (d) providing information to the public in respect of this Act and the youth criminal justice system;
- (e) acting as a conference; and
- (f) any other functions assigned by the person who establishes the committee.

### **Conferences may be convened**

19 (1) A youth justice court judge, the provincial director, a police officer, a justice of the peace, a prosecutor or a youth worker may convene or cause to be convened a conference for the purpose of making a decision required to be made under this Act.

### **Mandate of a conference**

(2) The mandate of a conference may be, among other things, to give advice on appropriate extrajudicial measures, conditions for judicial interim release, sentences, including the review of sentences, and reintegration plans.

### **Rules for conferences**

(3) The Attorney General or any other minister designated by the lieutenant governor in council of a province may establish rules for the convening and conducting of conferences other than conferences convened or caused to be convened by a youth justice court judge or a justice of the peace.

### **Rules to apply**

(4) In provinces where rules are established under subsection (3), the conferences to which those rules apply must be convened and conducted in accordance with those rules.



## APPENDIX D

### **COMMITTEE ACCOMPLISHMENTS 2004 TO 2018 (INCLUDES CRAT)**

1. Clothing, computer and bus tickets for **Sanctuary Youth Drop In** to assist homeless youth
2. Funded Girls Circle training and sessions at **Rockheights Middle School** in Esquimalt
3. Furnishings for the **Victoria Sexual Assault Health Clinic** Family Comfort Room
4. Submission to the Children's Representative Five Year Review
5. Increased Indigenous Cultural Awareness: through promotion and acceptance of necessity for Cultural Sensitivity Training; attendance at First Nations Court in Duncan; education on Impacts of Colonization and TRC obligations
6. Advocacy for support of Federal Motion M-47, addressing health outcomes of youth exposure to pornography
7. Funded **Restorative Justice Resource Group** multi-media tools to educate the public and to assist in training the region's first case facilitators
8. Funded the development and implementation of the **Restorative Justice Resource Group** 'Trainer of Trainers' course to launch restorative justice in three communities across the CRD
9. **Funded Restorative Justice Resource Group** training for youth participating in Restorative Justice Victoria's Youth Theatre Outreach Project for schools in the CRD
10. Funded Advanced Training of Restorative Justice trainers and volunteers throughout the CRD to better equip programs for Crown and other complex cases
11. Funded **Restorative Justice Victoria** to develop, deliver and evaluate Mentor Training and to produce a manual for province-wide sharing on best practices and procedures
12. Advocated for improved provincial funding for Restorative Justice with the Minister of Justice and Attorney General
13. Brought **Children of the Street Society** to present Taking Care of Ourselves: Taking Care of Others annually in Schools for more than 10 consecutive years at no cost to the school districts
14. Advocated for Youth Mental Health with Resolutions to the Association of Vancouver Island and Coastal Communities and the Union of British Columbia Municipalities
15. Advocated for **School Based Mental Health Clinics**
16. Advocated for the first **Youth Medical Clinic** in a School Setting (Belmont), de- stigmatizing mental health issues and increasing ease of access
17. Advocated for a **Youth Medical Clinic** on the Peninsula along the lines of the Belmont Clinic, with special interest in cultural sensitivity for Indigenous participants and, contributed essential funding
18. Identified gaps in services for youth, youth in care and Youth Mental Health and Addictions Services.
19. Identified youth at risk situations that exist in less visible ways, e.g., couch surfers and the inadequately housed
20. Advocated for supportive youth housing
21. Hosted five years of networking workshops for service providers and youth through the **Bright Ideas Conferences**
22. Co-hosted Training for Regional Police Services with the Office to Combat Trafficking in Persons on several occasions with a huge uptake in training
23. Supported the **Mobile Youth Services Team** with letters of support for additional resources
24. Identified Resource Listings available to community members (CRAT website link)
25. Increased VFCYJC Profile through presentations of the Annual Report to Councils and Boards

## **APPENDIX E**

### **PROJECTS IN 2019**

#### **Educational Opportunities Attended by Members**

- Guns and Gangs in BC Workshop, Victoria
- Indigenous Perspectives Training, Victoria
- First Nations Court, Duncan
- Global Youth Justice Conference, Las Vegas

#### **Guest Speakers**

- Linda Amy, Executive Director, Victoria Sexual Assault Centre
- Jen Harrison, Youth and Family Engagement Coordinator, Foundry Victoria
- Erich Kelch, Community Engagement Coordinator, CRD First Nations Relations Committee
- Dr. Jennifer Charlesworth, Representative for Children and Youth

#### **Correspondence Sent**

- Letter of support to the Victoria & Esquimalt Police Board re: School Liaison Officers
- Letter of support to First Call–BC Child and Youth Advocacy Coalition in support of reforms to the BC Employment Standards Act to better protect youth from workplace injury

#### **Communication**

- Facebook page launched July 2019
- Website launched November 2019
- Collation of Local Government and School District responses to the TRC Calls to Action

#### **Initiatives Supported Financially**

- Reimagining Masculinities Conference (\$3,000)
- RJ Victoria (\$2,200)
- CRAT – Taking Care of Ourselves, Taking Care of Others (\$1,000)
- Blanket Exercise Sponsorship (\$2,503.46)
- Indigenous Cultural Training (\$2,250)
- Start the Conversation Mental Health Awareness workshop (\$1,000)

## **APPENDIX F**

### **VANCOUVER CHILDREN, YOUTH, AND FAMILIES ADVISORY COMMITTEE** **TERMS OF REFERENCE**

*[reproduced from City of Vancouver's website, Vancouver.ca]*

#### **Terms of reference**

##### **Policy advice**

The committee:

- Provides input to City Council and staff about issues of concern;
- Considers any matters which may be referred to the committee by Council or staff and take under consideration matters proposed by the Vancouver Board of Education;
- Reviews and advises Council and staff on the development, implementation and assessment of City policies and services related to children, youth and families;
- Identifies barriers to participation and engagement for children, youth and families;
- Advocates for the best interests of children, youth and families;
- Initiates and works on projects that enhance access, inclusion and engagement of children, youth and families;
- Identifies opportunities and empower children and youth to have a voice in civic decision making;
- Provides recommendations to staff and Council on issues affecting children, youth and families;
- May take positions on policy initiatives from other levels of government within the mandate of the committee; and
- Acts as a family court committee under the *BC Provincial Court Act*, Section 5 and/or a youth justice committee under the *Youth Criminal Justice Act*, Section 18.
  - Read the BC Provincial Court Act, Section 5
  - Read the Youth Criminal Justice Act, Section 18

##### **Collaboration**

The committee:

- Works co-operatively with other agencies whose activities affect constituent communities, including initiating and developing relevant projects
- Acts as a resource for staff doing public involvement processes and civic events

##### **Awareness and outreach**

The committee:

- Exchanges information with the constituent communities and the general public about relevant programs and issues of interest
- Engages in outreach to disseminate information and encourage participation from constituent communities

## **Planning and reporting**

The committee:

- Produces an annual work plan with specific objectives by no later than April of each year, in consultation with Council and staff liaisons, for distribution to Council and civic departments for information;
- Presents accomplishments and progress to date at the annual Council of Councils event; and
- Submits an annual report to Council describing its accomplishments for the year, including reference to each objective set out in the work plan and any arising issues to which the committee has responded.

## **Time commitment**

Regular meetings will last up to 2.5 hours. A minimum of 1 to 2 additional hours a month is spent on email and other correspondence, other meetings, networking, and promotion. Additional preparation time to review documents and participate in preparatory working sessions for all meetings is required.

## **Attendance requirement**

A member who is absent from more than two consecutive formal meetings without a leave of absence is deemed to have resigned

## **Terms and Membership Composition**

Persons appointed to an advisory body shall meet the following essential criteria:

Not be employed by the City of Vancouver;  
Live or work in Vancouver, or have a significant body of experience with issues in Vancouver;  
and  
Be able to demonstrate relevant experience or knowledge, abilities and skills related to the mandate of the advisory body.

## **Composition:**

21 members of the public (11 is quorum) representing the following three age groups in equal thirds: 14 or younger; Between 15 and 21; and 22 or older.

- 2 non-voting Council liaisons; 1 non-voting Park Board Commissioner liaison; 1 non-voting School Board Trustee liaison; 2 non-voting staff liaisons

The appointment of civic members to each advisory committee shall meet the composition objectives set out in the Diversity on Advisory Bodies policy.

**Length of term:**

Committee members are appointed until December 31, 2020. No member of the public shall serve for more than four consecutive years on the same advisory body. A former member is eligible for reappointment after one year out of office.

**Resources for advisory committee members****Accessible events checklist and resources**

- Helps for planning events that are equally accessible and inclusive, including for people with disabilities, seniors, and people who identify as 2SLGBTQ+

**Code of Conduct Policy**

- Sets minimum expectations for the behaviour of Council officials, staff, and advisory body members in carrying out their functions

**Guidelines for Advisory Bodies**

- Explains the roles and responsibilities of members and liaisons and provides an overview of member procedures

**Diversity on Advisory Bodies**

- Establishes targets to achieve diverse demographic composition on advisory bodies.

**Procedure Bylaw**

- Regulates the procedures of Council and its committees and other bodies

## **APPENDIX G**

### **RICHMOND TERMS OF REFERENCE**

The Richmond Family Court Committee (RFCC) is community based and is accountable to the Mayor and City Council, and to the Attorney General of British Columbia. The aim of the RFCC is to examine resources available in the community for family and youth matters, to assist the Family and Youth Court when requested, and to make recommendations to the Attorney General and others as deemed advisable.

#### **MANDATE**

[reproduces the formerly mandatory s.5 of the *Provincial Court Act*]

#### **FUNCTION**

The RFCC functions as a link between the Court and City Council whereby:

- court personnel and clients may draw on the concern and support of the community;
- family and youth resources may be monitored; and
- community may become educated about the justice system and its effects on children, youth and families.

#### **MEMBERSHIP AND PROCEDURE**

The minimum number of members appointed to the RFCC shall be eight (8). The maximum number of members appointed to the RFCC is fifteen (15). Membership is based on a yearly renewable appointment. A quorum is a simple majority of all appointed members (50% plus one).

#### **SELECTION CRITERIA**

Prospective appointees will be selected on the basis of the following criteria:

- interest and commitment in promoting the objectives of the RFCC;
- representative of a broad cross-section of business, professional and community-minded individuals who are involved with family and youth law matters, including up to one senior secondary student;
- generally reflective of the communities served by the local Provincial Court hearing family and youth matters
- availability to attend regular monthly meetings;
- availability to attend minimum one session per month during working hours to observe youth and family-related court
- proceedings; and
- present employment does not place appointee in a conflict of interest situation.

#### **DUTIES**

Each member should:

- commit a minimum of four to six hours per month to perform court watch duties and attend regular monthly meetings (the Executive can expect to commit six more hours per month);
- be prepared to act on other committees in the community as a representative of the RFCC;
- be familiar with the minutes of the RFCC meeting;
- be knowledgeable of the aims of the RFCC and its mandate;
- be prepared to accept an executive position; and
- be prepared to attend provincial RFCC meetings.

## APPENDIX H

### **RECOMMENDATIONS FOR COMMITTEE REORGANIZATION**

- **Clearly define a mandate in a bylaw.**
  - State the purpose and function of the committee.
  - Clarify its delegation to make grants or, alternatively, advise on grants with CRD's Board making the final determination.
- **Institute term limits.**
  - Term limits should be to a maximum of six years, absent exceptional circumstances.
  - After a reasonable absence, a member can again become eligible for appointment for another six years in total.
- **Re-arrange agenda items.**
  - Resource member items should occur at a set time in the meeting, rather than occurring at the end after other agenda items. This will free-up the resource members to leave meetings while the work of the Committee is conducted that is not related to them. The Committee has already instituted this change on its own.
- **Reduce numbers and appoint family-and-youth involved individuals.**
  - The Committee is not required to include elected officials from each participant.
  - It is required to have individuals "with experience in education, health, probation or welfare".
  - It may be better served by a smaller group of elected officials and a larger portion of justice-involved individuals who may perform the work of the Committee.
- **Formalize meetings.**
  - Meetings must comply with the *Community Charter*.
  - Provisions exist allowing meetings to be closed and should be utilized appropriately.
  - Meetings should follow the CRD's Procedures Bylaw. They should be time limited.
- **Restrict speaking times.**
  - Speakers should be restricted to five minutes on an issue absent a vote. Time limits and alternating speaker's lists should be enforced.
  - Members should not have wide-ranging discussions outside the topic on the floor.
- **Set a grant-application intake procedure.**
  - Setting and following a transparent grants procedure with defined intake periods and criteria will allow more organizations to be aware of funding and bring a greater range of applications. It will also avoid any potential for allegations – which the writer considers without merit – of bias, overreaching authority, or any other potential impropriety that could be raised under the current model.
  - Grant restrictions and conditions are already used by the Committee.
- **Follow existing policies rather than create its own.**
  - Adopting existing CRD policies, with reasonable variations approved by the Board, will ensure compliance with privacy, safety, information management, and expenses.
- **Reduce meetings.**
  - Four to six meetings per year of two to three hours in duration would be ideal, if the purpose is to connect service providers and educate elected officials on justice issues. This will ensure more fulsome attendance.
- **Maintain a volunteer registry.**
  - If the Committee is to continue work, such as specific research projects, it should utilize volunteers where appropriate.
  - CRD is equipped to insure volunteers and to provide a corporate umbrella for recruiting volunteers.

- **Maintain records consistent with the obligations of a public authority.**
  - Records should be stored at CRD. This would avoid lengthy annual reports and a potential loss of critical historical documents and information.
  - Meeting meetings should be publicly available and accessible.
- **Consolidate finances in the CRD.**
  - CRD regularly operates funds for committee and commission use and provides limited float chequing accounts for small expenses. There is no need for the Committee or CRAT to have a separate bank account.
  - Approved grants can be issued directly from CRD, as can honorariums and reimbursement of Committee expenses.



**REPORT TO GOVERNANCE AND FINANCE COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

**SUBJECT**      **Bylaw No. 4383: 2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020**

**ISSUE SUMMARY**

The 2020 to 2024 Financial Plan was adopted on March 18, 2020, and amended April 8, June 24 and September 2, 2020. Amendments to the Plan are required to authorize revised operating and capital expenditures.

**BACKGROUND**

The Capital Regional District (CRD) Board approved the 2020 to 2024 Financial Plan (Bylaw No. 4349) on March 18, 2020; Amendment No. 1 on April 8, 2020 (Bylaw No. 4354), Amendment No. 2 on June 24, 2020 (Bylaw No. 4357) and Amendment No. 3 on September 2, 2020 (Bylaw 4366). Amendments are required in accordance with Section 374(2) of the *Local Government Act* (LGA), which states that the financial plan may be amended at any time by bylaw to incorporate changes in budget, for certainty. As new information becomes available and pursuant with Section 374 of the LGA, the CRD Board may further revise the financial plan.

The following table highlights the 2020 impact of the proposed amendments to the 5-year 2020-2024 Financial Plan.

SERVICE	DESCRIPTION	BUDGET	FUNDING	NET IMPACT	COMMITTEE / COMMISSION APPROVAL
Otter Point Fire Protection	Update to Building Expansion project	Capital	Equipment Replacement Fund, Capital Funds on Hand	\$17,500	Otter Point Fire Protection and Emergency Response Service Commission  08-Jul-20
Port Renfrew Sewer	Emergency Work for Port Renfrew WWTP/Influent Wet Well Platform	Capital	Community Works Funds	\$15,000	N/A*
East Sooke Fire Protection	Fire Hall Energy Renovation	Capital	Reserve Fund	\$30,000	East Sooke Fire Protection and Emergency Response Services Commission  17-Aug-20

**Governance and Finance Committee – November 4, 2020**  
**Bylaw No. 4383: 2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020 2**

SERVICE	DESCRIPTION	BUDGET	FUNDING	NET IMPACT	COMMITTEE / COMMISSION APPROVAL
Mayne Island Community Parks & Recreation	Update to Dinner Bay Playground and Sports Field project	Capital	Community Works Funds	\$30,000	Mayne Island Parks and Recreation Commission 08-Oct-20
Wilderness Mountain Water	Danger Tree Removal and Access Road Regrade	Capital	Community Works Funds	\$20,000	Wilderness Mountain Water Service Commission 30-Jul-2020
Maliview Sewer	Maliview Sewer WWTP Building Upgrade	Capital	Community Works Funds, Reserve Fund	\$257,620	Highland Water and Sewer (Maliview) Services Commission 22-Oct-20
SSI Liquid Waste	Phase 2 Preliminary Site Investigation of Burgoyne Bay Septage Disposal	Capital	Reserve Fund	\$7,700	SSI Liquid Waste Disposal Commission 27-Oct-20

\* N/A: Emergency Repair for EA service, authorized by EA Director in lieu of Commission

The proposed Financial Plan amendment Bylaw No. 4383 incorporates these changes, and is attached as Appendix A, including an updated Schedule B.

## **ALTERNATIVES**

### *Alternative 1*

The Governance and Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4383, "2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020" be introduced and read a first, second, and third time; and
2. That Bylaw No. 4383 be adopted.

### *Alternative 2*

That Bylaw No. 4383 be deferred pending further analysis by CRD staff.

## **IMPLICATIONS**

### *Financial Implications*

#### Otter Point Fire Protection

An amendment is required for the Building Expansion project to cover a contingency fund of 10% of the tender value, in the amount of \$17,500. This will be funded from the Equipment Replacement Fund and capital funds on hand.

#### Port Renfrew Sewer

Emergency work required on outfall remediation, and new influent wet wall platform and grating, to address health and safety issues at the treatment plant. An amendment of \$15,000 is required to the capital budget. Funding will be provided by the Community Works Fund.

#### East Sooke Fire Protection

As part of the Fire Hall energy renovation project, an amendment of \$30,000 is required for propane conversion, including the installation of fuel lines, equipment and the fuel tank. Funding is provided from the capital reserve.

#### Mayne Island Community Parks & Recreation

The Dinner Bay Playground and Sports Field capital project requires an amendment to add an additional \$30,000. The amendment will add a fall protection surface area, a containment barrier, two pieces of equipment to replace unsafe play equipment, new hardware and guard rails. This is the only playground available to the public on Mayne Island, and the updates will help to promote healthy outdoor activities, particularly during the pandemic. This will be funded by Community Works Funds.

#### Wilderness Mountain Water

The Wilderness Mountain Water Service Commission endorsed the approval of \$20,000 in new capital activities to be completed prior to the winter season, to ensure that system operation is not impacted negatively. This includes the removal of hazardous trees and regrading of the road to the treatment plant. Funding to be provided by Community Works Funds.

#### Maliview Sewer

To comply with Ministry of Environment regulations and to respond to the warning letter received from the ministry, a detailed engineering design, geotechnical investigation and site survey of the Maliview wastewater treatment plant is required. To accommodate this, an amendment of \$257,620 to the capital plan has been endorsed by Commission, with \$235,320 to be funded by Community Works Funds, and \$22,000 from reserve.

#### SSI Liquid Waste

Current site investigations of the Burgoyne Bay septage treatment facility requires site assessments to comply with provincial regulatory requirements. Phase 1 assessments are complete, and phase 2 of the assessment must now begin. Phase 2 includes limited intrusive investigations (drilling, sampling, and monitoring soil and groundwater) to confirm whether contamination is present at the site. A budget amendment of \$7,700 is required, to be funded by reserve.

**Governance and Finance Committee – November 4, 2020**  
**Bylaw No. 4383: 2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020 4**

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**CONCLUSION**

In compliance with the *Local Government Act*, the proposed amending Bylaw No. 4383 authorizes the changes required to the 2020 to 2024 Financial Plan Bylaw No. 4349, which the CRD Board approved on March 18, 2020, and amended on April 8, June 24, and September 2, 2020.

**RECOMMENDATION**

The Governance and Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4383, “2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020” be introduced and read a first, second, and third time; and
2. That Bylaw No. 4383 be adopted.

Submitted by:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT(S)**

Appendix A: Bylaw 4383, with Schedule B

**CAPITAL REGIONAL DISTRICT**

**BYLAW NO. 4383**

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**A BYLAW TO AMEND THE FIVE YEAR FINANCIAL PLAN  
FOR THE YEARS 2020 – 2024**

\*\*\*\*\*

The Board of the Capital Regional District in open meeting assembled enacts as follows:

1. Bylaw No. 4349, "2020 to 2024 Financial Plan Bylaw, 2020", is hereby amended by replacing Schedule B with the attached schedule hereto.
2. This Bylaw may be cited as "2020 to 2024 Financial Plan Bylaw, 2020, Amendment Bylaw No. 4, 2020".

READ A FIRST TIME THIS                      day of                      2020

READ A SECOND TIME THIS                      day of                      2020

READ A THIRD TIME THIS                      day of                      2020

ADOPTED THIS                      day of                      2020

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
CORPORATE OFFICER

Attachment: Schedule B

**SCHEDULE B**

**CAPITAL REGIONAL DISTRICT  
CAPITAL EXPENDITURE PLAN SUMMARY - 2020 to 2024**

<b>EXPENDITURE / FUNDING SUMMARY (ALL SERVICES)</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>TOTAL</b>
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**EXPENDITURE**

B	Buildings	89,986,683	39,569,282	116,528,181	9,105,275	4,422,500	259,611,921
E	Equipment	10,084,754	9,207,084	9,472,337	3,945,196	3,387,579	36,096,950
L	Land	5,175,562	2,190,000	600,000	640,000	1,145,000	9,750,562
S	Engineered Structures	289,844,389	59,668,769	45,146,968	42,283,424	41,535,744	478,479,294
V	Vehicles	3,962,000	828,000	928,000	921,500	1,588,000	8,227,500

<b>399,053,388</b>	<b>111,463,135</b>	<b>172,675,486</b>	<b>56,895,395</b>	<b>52,078,823</b>	<b>792,166,227</b>
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**SOURCE OF FUNDS**

C	Capital Funds on Hand	78,063,644	30,664,109	20,818,744	20,539,744	23,832,744	173,918,985
D	Debenture Debt (New Debt Only)	39,954,405	16,628,000	25,446,000	14,187,275	11,620,000	107,835,680
E	Equipment Replacement Fund	5,684,804	2,902,376	3,121,337	2,598,396	3,247,579	17,554,492
G	Grants (Federal, Provincial)	179,733,142	15,587,308	2,533,181	852,556	3,575,000	202,281,186
R	Reserve Fund	33,213,691	20,140,616	20,056,224	18,491,124	9,803,500	101,705,155
O	Other	62,403,703	25,540,726	100,700,000	226,300	-	188,870,729

<b>399,053,388</b>	<b>111,463,135</b>	<b>172,675,486</b>	<b>56,895,395</b>	<b>52,078,823</b>	<b>792,166,227</b>
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CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														
2020														
Schedule B														
Service #	Service Name	CAPITAL EXPENDITURE					SOURCE OF FUNDING							
		Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.011	Board Expenditures	105,700					105,700			105,700				105,700
1.014	Chief Administrative Officer	2,742					2,742			2,742				2,742
1.015	Real Estate	1,828					1,828			1,828				1,828
1.016	Human Resources	1,495					1,495			1,495				1,495
1.017	Finance	169,140					169,140	125,000		44,140				169,140
1.018	Health & Capital Planning Strategies	6,495					6,495			6,495				6,495
1.022	Information Technology	331,400					331,400	307,000		24,400				331,400
1.024	GM - Planning & Protective Services	-					-			-				-
1.025	Corporate Emergency	-					-			-				-
1.105	Facilities Management	6,750	35,000				41,750			41,750				41,750
1.106	CRD Fisgard HQ Building	50,000		259,729			309,729	-				309,729		309,729
1.107	Corporate Satellite Facilities			25,000			25,000	25,000						25,000
1.109	JDF Admin. Expenditures	-					-			-				-
1.110	SGI Admin. Expenditures	1,440					1,440			1,440				1,440
1.111	SSI Admin. Expenditures	1,200					1,200			1,200				1,200
1.118	Corporate Communications	2,990					2,990			2,990				2,990
1.123	Family Court Building			257,500			257,500	90,000				167,500		257,500
1.141	SSI Public Library	9,000		20,000			29,000					29,000		29,000
1.226	Health Facilities - VIHA	-		940,000		-	940,000	160,000				780,000		940,000
1.235	SGI Small Craft Harbour Facilities				1,423,000		1,423,000	867,000	-		-	531,000	25,000	1,423,000
1.236	SSI Small Craft Harbour (Fernwood Dock)				2,500		2,500				-	2,500		2,500
1.238A	Community Transit (SSI)		-		15,000		15,000					15,000		15,000
1.238B	Community Transportation (SSI)				3,751,292		3,751,292	130,572	1,000,000		1,175,220	1,445,500		3,751,292
1.280	Regional Parks	114,000	375,000	-	10,293,442	2,020,000	12,802,442	6,496,985	540,000	364,000	1,000,000	4,401,457		12,802,442
1.290	Royal Theatre	30,000		451,306			481,306	96,306				325,000	60,000	481,306
1.295	McPherson Theatre	130,000		722,646			852,646	422,646			-	430,000	-	852,646
1.297	Arts Grants and Development	1,890					1,890			1,890				1,890
1.310	Land Banking and Housing	5,000		79,603,003			79,608,003		4,200,000	5,000	14,460,000		60,943,003	79,608,003
1.313	Animal Care Services	2,970	18,000				20,970			20,970				20,970
1.318	Building Inspection	5,000	80,000				85,000			85,000				85,000
1.323	ByLaw Services	950	15,000				15,950			15,950				15,950
1.324	Regional Planning Services	10,700					10,700			10,700				10,700
1.325	Community Planning	18,910					18,910			18,910				18,910
1.335	Geo-Spatial Referencing	40,000					40,000			40,000				40,000
1.350	Willis Point Fire	5,000		1,000	55,000		61,000			5,000		56,000		61,000
1.352	South Galiano Fire		-	2,040,000			2,040,000		2,040,000	-				2,040,000
1.353	Otter Point Fire	582,500					582,500	8,750		408,750		165,000		582,500
1.356	Pender Island Fire	51,944	695,000	185,455			932,399			201,944		185,455	545,000	932,399
1.357	East Sooke Fire	39,200	-				39,200			9,200		30,000		39,200
1.358	Port Renfrew Fire	28,000					28,000			28,000				28,000
1.359	North Galiano Fire			-			-					-		-
1.360	Shirley Fire Department	10,000					10,000			10,000				10,000
1.369	Electoral Area Fire Services	5,000	30,000				35,000					30,000	5,000	35,000
1.370	JDF Emergency Program	4,870					4,870			4,870				4,870
1.372	Emergency Planning Coordination	2,000					2,000			2,000				2,000
1.375	Hazardous Material Incident Response	10,000					10,000			10,000				10,000
1.377	JDF Search and Rescue	7,700	59,000				66,700						66,700	66,700
1.405	JDF EA Community Parks & Recreation					199,000	199,000	10,000		10,000	95,000	84,000		199,000
1.40X	SEAPARC	205,200	30,000	400,000	35,000	-	670,200	-	-	89,200		581,000		670,200
1.44x	Panorama Recreation	498,000	418,000	3,185,000	193,600		4,294,600	322,000	1,753,000	766,000	767,500	686,100	-	4,294,600
1.455	SSI Community Parks	5,000	-		255,000		260,000		-	5,000	125,000	130,000		260,000
1.458	SSI Community Recreation	5,000			-		5,000			5,000	-	-		5,000
1.459	SSI Park Land & Rec Programs	33,240		1,116,044		90,000	1,239,284		-	33,240	801,044	405,000		1,239,284
1.465	Saturna Island Community Parks				10,000	516,000	526,000					20,000	506,000	526,000
1.475	Mayne Island Community Parks	51,000				10,000	61,000				30,000	31,000		61,000
1.485	Pender Island Community Parks				470,000		470,000				460,000	10,000		470,000
1.495	Galiano Community Parks				41,500		41,500					41,500		41,500
1.521	Environmental Resource Management	603,000	30,000		6,940,000		7,573,000	780,000		283,000		6,510,000		7,573,000

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														
2020														
Schedule B														
Service #      Service Name		CAPITAL EXPENDITURE					SOURCE OF FUNDING							
		Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debtenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.523	Port Renfrew Refuse Disposal	15,000			15,000		30,000			15,000		15,000		30,000
1.575	Environmental Administration Services	10,000					10,000			10,000				10,000
1.576	Environmental Engineering Services	37,000	-				37,000			37,000				37,000
1.577	IW - Environmental Operations	723,000					723,000			723,000				723,000
1.578	Environmental Protection	360,000	210,000				570,000			570,000				570,000
1.579	Environmental Water Quality	40,000					40,000			40,000				40,000
1.911	911 Call Answer	-					-		-					-
1.913	913 Fire Dispatch	5,000					5,000			5,000				5,000
2.610	Saanich Peninsula Water Supply	120,000			1,405,000		1,525,000			50,000		1,475,000		1,525,000
2.620	Highland Water (SSI)				92,963		92,963	92,963						92,963
2.621	Highland & Fernwood Water (SSI)	80,000			137,000		217,000	17,000	100,000			100,000		217,000
2.622	Cedars of Tuam Water (SSI)	10,500			75,000		85,500	3,000	70,000			12,500		85,500
2.624	Beddis Water (SSI)	52,500			12,000		64,500	12,000	-			52,500		64,500
2.626	Fulford Water (SSI)	10,000			38,750		48,750	11,000	-			37,750		48,750
2.628	Cedar Lane Water (SSI)	5,000			40,000		45,000	5,000				40,000		45,000
2.630	Magic Lake Estates Water (Pender)	94,000			-		94,000	80,000	-			14,000		94,000
2.640	Lyall Harbour Boot Cove Water (Saturna)	10,000			-	253,000	263,000				10,000	-	253,000	263,000
2.642	Skana Water (Mayne)	5,000			-		5,000		-			5,000		5,000
2.650	Port Renfrew Water	10,000			-		10,000		-			10,000		10,000
2.660	Fernwood Water (SSI)				-		-		-					-
2.665	Sticks Allison Water (Galiano)	5,000					5,000					5,000		5,000
2.667	Surfside Park Estates (Mayne)	3,000					3,000				-	3,000		3,000
2.670	Regional Water Supply	3,312,500	492,000	685,000	10,909,000	1,245,000	16,643,500	16,276,500	-	367,000				16,643,500
2.680	JDF Water Distribution	792,500	625,000	95,000	14,375,000		15,887,500	5,842,500	5,100,000	425,000		4,520,000		15,887,500
2.691	Wilderness Mountain Water Service				125,000		125,000		-		105,000	20,000		125,000
3.701	Millstream Site Remediation					842,562	842,562	513,963			328,599			842,562
3.705	SSI Septage / Composting				78,809		78,809	31,109	-			47,700		78,809
3.710	North West Trunk Sewer				4,740,000		4,740,000	10,000		200,000		4,530,000		4,740,000
3.712	North East Trunk Sewer	40,000			100,000		140,000			100,000		40,000		140,000
3.713	East Coast Interceptor				1,180,000		1,180,000			100,000		1,080,000		1,180,000
3.715	North East Trunk 2 (Bowker)				-		-			-				-
3.718	Saanich Peninsula Wastewater	225,000			3,949,000		4,174,000	100,000		375,000		3,699,000		4,174,000
3.798C	Debt - Core Area Wastewater Treatment Program	900,000	850,000		223,473,808		225,223,808	45,205,450	20,000,000		160,018,359			225,223,808
3.810	Ganges Sewer Utility (SSI)	13,500			188,405		201,905	7,000	151,405		-	43,500		201,905
3.820	Maliview Sewer Utility (SSI)	10,000			409,320		419,320	14,900			342,420	62,000		419,320
3.830	Magic Lake Sewer Utility (Pender)				5,000,000		5,000,000		5,000,000					5,000,000
3.850	Port Renfrew Sewer				15,000		15,000		-		15,000	-		15,000
TOTAL		10,084,754	3,962,000	89,986,683	289,844,389	5,175,562	399,053,388	78,063,644	39,954,405	5,684,804	179,733,142	33,213,691	62,403,703	399,053,388



CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														
2021														
Schedule B														
Service #      Service Name		CAPITAL EXPENDITURE					SOURCE OF FUNDING							
		Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.011	Board Expenditures	37,200					37,200			37,200				37,200
1.014	Chief Administrative Officer	5,151					5,151			5,151				5,151
1.015	Real Estate	914					914			914				914
1.016	Human Resources	5,732					5,732			5,732				5,732
1.017	Finance	219,278					219,278	200,000		19,278				219,278
1.018	Health & Capital Planning Strategies	2,990					2,990			2,990				2,990
1.022	Information Technology	315,250					315,250	295,000		20,250				315,250
1.024	GM - Planning & Protective Services	-					-			-				-
1.025	Corporate Emergency	-					-			-				-
1.105	Facilities Management	16,000	70,000				86,000			86,000				86,000
1.106	CRD Fisgard HQ Building	-		20,000			20,000	-				20,000		20,000
1.107	Corporate Satellite Facilities			-			-	-						-
1.109	JDF Admin. Expenditures	-					-			-				-
1.110	SGI Admin. Expenditures	-					-			-				-
1.111	SSI Admin. Expenditures	6,210					6,210			6,210				6,210
1.118	Corporate Communications	7,227					7,227			7,227				7,227
1.123	Family Court Building			39,764			39,764	-				39,764		39,764
1.141	SSI Public Library	9,000		-			9,000					9,000		9,000
1.226	Health Facilities - VIHA	75,000		2,522,500		-	2,597,500	-				2,597,500		2,597,500
1.235	SGI Small Craft Harbour Facilities				756,423		756,423	-	380,000		246,423	80,000	50,000	756,423
1.236	SSI Small Craft Harbour (Fernwood Dock)				-		-				-	-		-
1.238A	Community Transit (SSI)		20,000		15,000		35,000					35,000		35,000
1.238B	Community Transportation (SSI)				20,000		20,000	-	-		-	20,000		20,000
1.280	Regional Parks	1,469,000	140,000	600,000	2,990,740	20,000	5,219,740	-	-	209,000	2,700,000	2,310,740		5,219,740
1.290	Royal Theatre	-		1,290,000			1,290,000	-			500,000	790,000	-	1,290,000
1.295	McPherson Theatre	80,000		-			80,000	-			-	80,000	-	80,000
1.297	Arts Grants and Development	-					-			-		-		-
1.310	Land Banking and Housing	2,000		32,683,518			32,685,518	-		2,000	7,200,000		25,483,518	32,685,518
1.313	Animal Care Services	3,029	18,000				21,029			21,029				21,029
1.318	Building Inspection	-	-				-			-				-
1.323	ByLaw Services	970	15,000				15,970			15,970				15,970
1.324	Regional Planning Services	17,300					17,300			17,300				17,300
1.325	Community Planning	1,830					1,830			1,830				1,830
1.335	Geo-Spatial Referencing	40,000					40,000			40,000				40,000
1.350	Willis Point Fire	65,000		18,000	-		83,000			65,000		18,000		83,000
1.352	South Galiano Fire		-	3,000			3,000		-	3,000				3,000
1.353	Otter Point Fire	40,000					40,000	-		10,000		30,000		40,000
1.356	Pender Island Fire	34,000	75,000	18,000			127,000			109,000		18,000	-	127,000
1.357	East Sooke Fire	7,000	80,000				87,000			87,000		-		87,000
1.358	Port Renfrew Fire	-					-			-				-
1.359	North Galiano Fire			-			-					-		-
1.360	Shirley Fire Department	-					-			-				-
1.369	Electoral Area Fire Services	7,208	-				7,208					-	7,208	7,208
1.370	JDF Emergency Program	4,970					4,970			4,970				4,970
1.372	Emergency Planning Coordination	-					-			-				-
1.375	Hazardous Material Incident Response	10,000					10,000			10,000				10,000
1.377	JDF Search and Rescue	-	-				-					-		-
1.405	JDF EA Community Parks & Recreation					170,000	170,000	-		-	50,000	120,000		170,000
1.40X	SEAPARC	183,200	-	9,500	-	-	192,700	-	-	38,200	70,000	84,500		192,700
1.44x	Panorama Recreation	353,900	50,000	445,000	-		848,900	-	-	373,900	15,000	460,000	-	848,900
1.455	SSI Community Parks	23,000	-		-		23,000		-	23,000	-	-		23,000
1.458	SSI Community Recreation	5,000			300,000		305,000			5,000	175,000	125,000		305,000
1.459	SSI Park Land & Rec Programs	42,725		140,000	-	1,250,000	1,432,725	-		42,725	425,000	965,000		1,432,725
1.465	Saturna Island Community Parks				10,000	-	10,000					10,000	-	10,000
1.475	Mayne Island Community Parks	-				-	-			-		-		-
1.485	Pender Island Community Parks				10,000		10,000			-		10,000		10,000
1.495	Galiano Community Parks				13,000		13,000					13,000		13,000
1.521	Environmental Resource Management	253,000	30,000		8,243,612		8,526,612	-		283,000		8,243,612		8,526,612

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														Schedule B
2021														
Service #	Service Name	CAPITAL EXPENDITURE					SOURCE OF FUNDING							
		Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.523	Port Renfrew Refuse Disposal	-			-		-			-		-		-
1.575	Environmental Administration Services	10,000					10,000			10,000				10,000
1.576	Environmental Engineering Services	40,000	40,000				80,000			80,000				80,000
1.577	IW - Environmental Operations	277,000					277,000			277,000				277,000
1.578	Environmental Protection	82,500	35,000				117,500			117,500				117,500
1.579	Environmental Water Quality	5,000					5,000			5,000				5,000
1.911	911 Call Answer	1,413,000					1,413,000		1,413,000					1,413,000
1.913	913 Fire Dispatch	5,000					5,000			5,000				5,000
2.610	Saanich Peninsula Water Supply	75,000			260,000		335,000			50,000		285,000		335,000
2.620	Highland Water (SSI)				29,365		29,365	29,365						29,365
2.621	Highland & Fernwood Water (SSI)	-			-		-	-	-			-		-
2.622	Cedars of Tuam Water (SSI)	585,000			-		585,000	-	585,000			-		585,000
2.624	Beddis Water (SSI)	150,000			135,000		285,000	-	270,000			15,000		285,000
2.626	Fulford Water (SSI)	165,000			70,000		235,000	-	220,000			15,000		235,000
2.628	Cedar Lane Water (SSI)	-			15,000		15,000	-				15,000		15,000
2.630	Magic Lake Estates Water (Pender)	25,000			-		25,000	-	-			25,000		25,000
2.640	Lyall Harbour Boot Cove Water (Saturna)	7,000			70,000	-	77,000		50,000		-	27,000	-	77,000
2.642	Skana Water (Mayne)	-			20,000		20,000		-			20,000		20,000
2.650	Port Renfrew Water	10,000			-		10,000		-			10,000		10,000
2.660	Fernwood Water (SSI)				-		-		-			-		-
2.665	Sticks Allison Water (Galiano)	9,500					9,500					9,500		9,500
2.667	Surfside Park Estates (Mayne)	-			-		-				-	-		-
2.670	Regional Water Supply	2,377,500	185,000	1,740,000	12,210,000	750,000	17,262,500	16,177,500	900,000	185,000				17,262,500
2.680	JDF Water Distribution	627,500	70,000	40,000	16,385,000		17,122,500	8,432,500	6,500,000	70,000		2,120,000		17,122,500
2.691	Wilderness Mountain Water Service				400,000		400,000		210,000		190,000	-		400,000
3.701	Millstream Site Remediation				-	-	-	-			-			-
3.705	SSI Septage / Composting				-		-	-	-		-			-
3.710	North West Trunk Sewer				200,000		200,000	-		200,000		-		200,000
3.712	North East Trunk Sewer	-			100,000		100,000			100,000		-		100,000
3.713	East Coast Interceptor				100,000		100,000			100,000		-		100,000
3.715	North East Trunk 2 (Bowker)				-		-			-				-
3.718	Saanich Peninsula Wastewater	-			1,650,000		1,650,000	-		150,000		1,500,000		1,650,000
3.798C	Debt - Core Area Wastewater Treatment Program		-		14,545,629		14,545,629	5,529,744	5,000,000		4,015,885			14,545,629
3.810	Ganges Sewer Utility (SSI)	-			-		-	-	-		-	-		-
3.820	Maliview Sewer Utility (SSI)	-			100,000		100,000	-	100,000		-	-		100,000
3.830	Magic Lake Sewer Utility (Pender)				1,000,000		1,000,000		1,000,000					1,000,000
3.850	Port Renfrew Sewer				20,000		20,000		-		-	20,000		20,000
TOTAL		9,207,084	828,000	39,569,282	59,668,769	2,190,000	111,463,135	30,664,109	16,628,000	2,902,376	15,587,308	20,140,616	25,540,726	111,463,135

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														
2022														
Schedule B														
Service #      Service Name		CAPITAL EXPENDITURE					SOURCE OF FUNDING							
		Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.011	Board Expenditures	95,000					95,000			95,000				95,000
1.014	Chief Administrative Officer	3,656					3,656			3,656				3,656
1.015	Real Estate	-					-			-				-
1.016	Human Resources	3,904					3,904			3,904				3,904
1.017	Finance	250,120					250,120	200,000		50,120				250,120
1.018	Health & Capital Planning Strategies	-					-			-				-
1.022	Information Technology	541,350					541,350	529,000		12,350				541,350
1.024	GM - Planning & Protective Services	1,495					1,495			1,495				1,495
1.025	Corporate Emergency	6,000					6,000			6,000				6,000
1.105	Facilities Management	2,000	80,000				82,000			82,000				82,000
1.106	CRD Fisgard HQ Building	-		-			-	-		-		-		-
1.107	Corporate Satellite Facilities			-			-	-		-				-
1.109	JDF Admin. Expenditures	2,000					2,000			2,000				2,000
1.110	SGI Admin. Expenditures	1,500					1,500			1,500				1,500
1.111	SSI Admin. Expenditures	9,890					9,890			9,890				9,890
1.118	Corporate Communications	5,732					5,732			5,732				5,732
1.123	Family Court Building			-			-	-		-		-		-
1.141	SSI Public Library	9,000		-			9,000					9,000		9,000
1.226	Health Facilities - VIHA	85,000		-		-	85,000	-				85,000		85,000
1.235	SGI Small Craft Harbour Facilities				190,000		190,000	-	90,000		-	100,000	-	190,000
1.236	SSI Small Craft Harbour (Fernwood Dock)				-		-				-	-		-
1.238A	Community Transit (SSI)		-		15,000		15,000					15,000		15,000
1.238B	Community Transportation (SSI)				-		-	-	-	-		-		-
1.280	Regional Parks	68,000	225,000	-	2,585,000	20,000	2,898,000	-	-	293,000	2,000,000	605,000		2,898,000
1.290	Royal Theatre	-		1,540,000			1,540,000	-			-	540,000	1,000,000	1,540,000
1.295	McPherson Theatre			700,000			700,000	-			-	700,000	-	700,000
1.297	Arts Grants and Development	1,550					1,550			1,550				1,550
1.310	Land Banking and Housing	1,500		111,000,000			111,001,500		11,300,000	1,500	-		99,700,000	111,001,500
1.313	Animal Care Services	4,040	18,000				22,040			22,040				22,040
1.318	Building Inspection	-	-				-			-				-
1.323	ByLaw Services	990	15,000				15,990			15,990				15,990
1.324	Regional Planning Services	5,100					5,100			5,100				5,100
1.325	Community Planning	35,000					35,000			35,000				35,000
1.335	Geo-Spatial Referencing	30,000					30,000			30,000				30,000
1.350	Willis Point Fire	20,000		12,000	-		32,000			20,000		12,000		32,000
1.352	South Galiano Fire		-	3,000			3,000		-	3,000				3,000
1.353	Otter Point Fire	40,000					40,000	-		10,000		30,000		40,000
1.356	Pender Island Fire	4,000	-	-			4,000			4,000		-	-	4,000
1.357	East Sooke Fire	7,200	160,000				167,200			167,200				167,200
1.358	Port Renfrew Fire	-					-			-				-
1.359	North Galiano Fire			-			-					-		-
1.360	Shirley Fire Department	-					-			-				-
1.369	Electoral Area Fire Services	-	-				-					-	-	-
1.370	JDF Emergency Program	11,710					11,710			11,710				11,710
1.372	Emergency Planning Coordination	-					-			-				-
1.375	Hazardous Material Incident Response	10,000					10,000			10,000				10,000
1.377	JDF Search and Rescue	-	-				-			-			-	-
1.405	JDF EA Community Parks & Recreation			-		-	-	-		-		-		-
1.40X	SEAPARC	113,700	-	330,000	-	-	443,700	-	-	108,700	-	335,000		443,700
1.44x	Panorama Recreation	284,650		130,000	70,000		484,650	-	-	221,650	-	263,000	-	484,650
1.455	SSI Community Parks	5,000	40,000		1,110,000		1,155,000		1,000,000	45,000	-	110,000		1,155,000
1.458	SSI Community Recreation	5,000			-		5,000			5,000	-	-		5,000
1.459	SSI Park Land & Rec Programs	48,250		733,181	-	50,000	831,431	-		48,250	533,181	250,000		831,431
1.465	Saturna Island Community Parks				10,000	-	10,000					10,000	-	10,000
1.475	Mayne Island Community Parks	-				-	-			-		-		-
1.485	Pender Island Community Parks				10,000		10,000				-	10,000		10,000
1.495	Galiano Community Parks				20,000		20,000					20,000		20,000
1.521	Environmental Resource Management	253,000	30,000		13,212,224		13,495,224	-		283,000		13,212,224		13,495,224

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN

2022	Schedule B	
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### Schedule B

		CAPITAL EXPENDITURE					SOURCE OF FUNDING							
Service #	Service Name	Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.523	Port Renfrew Refuse Disposal	-			-		-			-		-		-
1.575	Environmental Administration Services	10,000					10,000			10,000				10,000
1.576	Environmental Engineering Services	40,000	-				40,000			40,000				40,000
1.577	IW - Environmental Operations	387,000					387,000			387,000				387,000
1.578	Environmental Protection	99,000	-				99,000			99,000				99,000
1.579	Environmental Water Quality	5,000					5,000			5,000				5,000
1.911	911 Call Answer	-					-		-					-
1.913	913 Fire Dispatch	5,000					5,000			5,000				5,000
2.610	Saanich Peninsula Water Supply	-			360,000		360,000			50,000		310,000		360,000
2.620	Highland Water (SSI)				-		-	-						-
2.621	Highland & Fernwood Water (SSI)	20,000			-		20,000		-			20,000		20,000
2.622	Cedars of Tuam Water (SSI)	10,000			5,000		15,000	-	15,000			-		15,000
2.624	Beddis Water (SSI)	-			25,000		25,000	-	-			25,000		25,000
2.626	Fulford Water (SSI)	-			-		-	-	-			-		-
2.628	Cedar Lane Water (SSI)	-			10,000		10,000	-				10,000		10,000
2.630	Magic Lake Estates Water (Pender)	25,000			1,000,000		1,025,000	-	1,025,000			-		1,025,000
2.640	Lyall Harbour Boot Cove Water (Saturna)	46,000			185,000	-	231,000		231,000		-	-	-	231,000
2.642	Skana Water (Mayne)	400,000			75,000		475,000		400,000			75,000		475,000
2.650	Port Renfrew Water	10,000			-		10,000		-			10,000		10,000
2.660	Fernwood Water (SSI)				-		-		-					-
2.665	Sticks Allison Water (Galiano)	10,000					10,000					10,000		10,000
2.667	Surfside Park Estates (Mayne)	-					-		-			-		-
2.670	Regional Water Supply	6,207,500	150,000	2,040,000	7,240,000	530,000	16,167,500	9,017,500	7,000,000	150,000				16,167,500
2.680	JDF Water Distribution	232,500	210,000	40,000	11,295,000		11,777,500	5,437,500	3,100,000	210,000		3,030,000		11,777,500
2.691	Wilderness Mountain Water Service				-		-		-			-		-
3.701	Millstream Site Remediation					-	-	-				-		-
3.705	SSI Septage / Composting				180,000		180,000	105,000	-			75,000		180,000
3.710	North West Trunk Sewer				200,000		200,000	-		200,000		-		200,000
3.712	North East Trunk Sewer	-			100,000		100,000			100,000		-		100,000
3.713	East Coast Interceptor				100,000		100,000			100,000		-		100,000
3.715	North East Trunk 2 (Bowker)				-		-		-			-		-
3.718	Saanich Peninsula Wastewater	-			335,000		335,000	-		150,000		185,000		335,000
3.798C	Debt - Core Area Wastewater Treatment Program	-	-		5,529,744		5,529,744	5,529,744	-		-			5,529,744
3.810	Ganges Sewer Utility (SSI)	-			-		-	-				-		-
3.820	Malivue Sewer Utility (SSI)	-			1,160,000		1,160,000	-	1,160,000			-		1,160,000
3.830	Magic Lake Sewer Utility (Pender)				-		-		-			-		-
3.850	Port Renfrew Sewer				125,000		125,000		125,000					125,000
TOTAL		9,472,337	928,000	116,528,181	45,146,968	600,000	172,675,486	20,818,744	25,446,000	3,121,337	2,533,181	20,056,224	100,700,000	172,675,486

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN												
2023												
Schedule B												
Service #	Service Name	CAPITAL EXPENDITURE					SOURCE OF FUNDING					
		Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debtenture Debt	Equipment Repl Fund	Grants	Capital Reserves
												Other
												TOTAL
1.011	Board Expenditures	21,500					21,500			21,500		21,500
1.014	Chief Administrative Officer	13,625					13,625			13,625		13,625
1.015	Real Estate	-					-			-		-
1.016	Human Resources	4,485					4,485			4,485		4,485
1.017	Finance	133,290					133,290	100,000		33,290		133,290
1.018	Health & Capital Planning Strategies	-					-			-		-
1.022	Information Technology	269,650					269,650	265,000		4,650		269,650
1.024	GM - Planning & Protective Services	1,828					1,828			1,828		1,828
1.025	Corporate Emergency	6,000					6,000			6,000		6,000
1.105	Facilities Management	2,650	-				2,650			2,650		2,650
1.106	CRD Fisdard HQ Building	-		15,000			15,000	-			15,000	15,000
1.107	Corporate Satellite Facilities			-			-	-				-
1.109	JDF Admin. Expenditures	-					-			-		-
1.110	SGI Admin. Expenditures	1,530					1,530			1,530		1,530
1.111	SSI Admin. Expenditures	1,200					1,200			1,200		1,200
1.118	Corporate Communications	1,828					1,828			1,828		1,828
1.123	Family Court Building			10,000			10,000	-			10,000	10,000
1.141	SSI Public Library	-					-			-		-
1.226	Health Facilities - VIHA	255,000		25,000		-	280,000	-			280,000	280,000
1.235	SGI Small Craft Harbour Facilities				525,000		525,000	-	350,000		-	175,000
1.236	SSI Small Craft Harbour (Fernwood Dock)				197,000		197,000				50,000	147,000
1.238A	Community Transit (SSI)		-		-		-			-		-
1.238B	Community Transportation (SSI)				-		-	-	-	-		-
1.280	Regional Parks	102,000	238,500	-	1,895,000	20,000	2,255,500	-	-	280,500	675,000	1,300,000
1.290	Royal Theatre	-		500,000			500,000	-			-	500,000
1.295	McPherson Theatre	-		1,100,000			1,100,000	-			100,000	900,000
1.297	Arts Grants and Development	-			-		-			-		-
1.310	Land Banking and Housing	4,000		-			4,000		-	4,000	-	-
1.313	Animal Care Services	4,120	18,000				22,120			22,120		-
1.318	Building Inspection	5,000	-				5,000			5,000		-
1.323	ByLaw Services	1,010	15,000				16,010			16,010		-
1.324	Regional Planning Services	12,000					12,000			12,000		-
1.325	Community Planning	2,410					2,410			2,410		-
1.335	Geo-Spatial Referencing	45,000					45,000			45,000		-
1.350	Willis Point Fire	6,000		5,000	-		11,000			6,000		5,000
1.352	South Galiano Fire		-	3,000			3,000		-	3,000		-
1.353	Otter Point Fire	40,000					40,000	-		10,000		30,000
1.356	Pender Island Fire	25,000	-	-			25,000			25,000		-
1.357	East Sooke Fire	7,300	-				7,300			7,300		-
1.358	Port Renfrew Fire	-					-			-		-
1.359	North Galiano Fire			-			-			-		-
1.360	Shirley Fire Department	-					-			-		-
1.369	Electoral Area Fire Services	126,300	-				126,300					126,300
1.370	JDF Emergency Program	7,470					7,470			7,470		-
1.372	Emergency Planning Coordination	-					-			-		-
1.375	Hazardous Material Incident Response	10,000					10,000			10,000		-
1.377	JDF Search and Rescue	-	-				-			-		-
1.405	JDF EA Community Parks & Recreation					-	-	-		-		-
1.40X	SEAPARC	116,000	30,000	-	250,000	-	396,000	-		66,000	-	330,000
1.44x	Panorama Recreation	179,000	26,000	125,000	-		330,000	-		175,000	-	155,000
1.455	SSI Community Parks	5,000	-		-		5,000		-	5,000		-
1.458	SSI Community Recreation	5,000			-		5,000			5,000		-
1.459	SSI Park Land & Rec Programs	89,500		7,192,275	50,000	50,000	7,381,775		7,167,275	89,500	-	125,000
1.465	Saturna Island Community Parks				10,000	-	10,000					10,000
1.475	Mayne Island Community Parks	-				-	-			-		-
1.485	Pender Island Community Parks				10,000		10,000				-	10,000
1.495	Galiano Community Parks				16,900		16,900					16,900
1.521	Environmental Resource Management	253,000	30,000		14,012,224		14,295,224	-		283,000		14,012,224

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN									
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2023
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Schedule B

		CAPITAL EXPENDITURE					SOURCE OF FUNDING							
Service #	Service Name	Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.523	Port Renfrew Refuse Disposal	-			-		-			-		-		-
1.575	Environmental Administration Services	10,000					10,000			10,000				10,000
1.576	Environmental Engineering Services	40,000	40,000				80,000			80,000				80,000
1.577	IW - Environmental Operations	128,000					128,000			128,000				128,000
1.578	Environmental Protection	74,500	-				74,500			74,500				74,500
1.579	Environmental Water Quality	5,000					5,000			5,000				5,000
1.911	911 Call Answer	-					-		-					-
1.913	913 Fire Dispatch	5,000					5,000			5,000				5,000
2.610	Saanich Peninsula Water Supply	-			260,000		260,000			50,000		210,000		260,000
2.620	Highland Water (SSI)				-		-	-						-
2.621	Highland & Fernwood Water (SSI)	250,000			-		250,000	-	250,000			-		250,000
2.622	Cedars of Tuam Water (SSI)	-			-		-	-	-					-
2.624	Beddis Water (SSI)	30,000			100,000		130,000	-	100,000			30,000		130,000
2.626	Fulford Water (SSI)	-			-		-	-	-			-		-
2.628	Cedar Lane Water (SSI)	-			-		-					-		-
2.630	Magic Lake Estates Water (Pender)	200,000			-		200,000	-	200,000			-		200,000
2.640	Lyall Harbour Boot Cove Water (Saturna)	45,000			520,000	-	565,000		565,000		-	-	-	565,000
2.642	Skana Water (Mayne)	-			-		-	-	-			-		-
2.650	Port Renfrew Water	10,000			1,955,000		1,965,000		1,955,000			10,000		1,965,000
2.660	Fernwood Water (SSI)				-		-		-					-
2.665	Sticks Allison Water (Galiano)	-					-					-		-
2.667	Surfside Park Estates (Mayne)	-					-					-		-
2.670	Regional Water Supply	1,207,500	50,000	90,000	7,065,000	570,000	8,982,500	8,932,500	-	50,000				8,982,500
2.680	JDF Water Distribution	182,500	474,000	40,000	6,910,000		7,606,500	5,712,500	1,400,000	474,000		20,000		7,606,500
2.691	Wilderness Mountain Water Service				-		-		-		-	-		-
3.701	Millstream Site Remediation					-	-	-			-			-
3.705	SSI Septage / Composting				1,000,000		1,000,000	-	1,000,000			-		1,000,000
3.710	North West Trunk Sewer				200,000		200,000			200,000		-		200,000
3.712	North East Trunk Sewer	-			100,000		100,000			100,000		-		100,000
3.713	East Coast Interceptor				100,000		100,000			100,000		-		100,000
3.715	North East Trunk 2 (Bowker)				-		-			-				-
3.718	Saanich Peninsula Wastewater	-			350,000		350,000	-		150,000		200,000		350,000
3.798C	Debt - Core Area Wastewater Treatment Program	-	-		5,529,744		5,529,744	5,529,744	-		-			5,529,744
3.810	Ganges Sewer Utility (SSI)	-			27,556		27,556	-	-		27,556	-		27,556
3.820	Malview Sewer Utility (SSI)	-			-		-	-	-		-			-
3.830	Magic Lake Sewer Utility (Pender)				-		-			-				-
3.850	Port Renfrew Sewer				1,200,000		1,200,000		1,200,000			-		1,200,000
TOTAL		3,945,196	921,500	9,105,275	42,283,424	640,000	56,895,395	20,539,744	14,187,275	2,598,396	852,556	18,491,124	226,300	56,895,395

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														
2024														
Schedule B														
		CAPITAL EXPENDITURE					SOURCE OF FUNDING							
Service #	Service Name	Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.011	Board Expenditures	-					-			-				-
1.014	Chief Administrative Officer	2,742					2,742			2,742				2,742
1.015	Real Estate	1,828					1,828			1,828				1,828
1.016	Human Resources	1,495					1,495			1,495				1,495
1.017	Finance	32,409					32,409	-		32,409				32,409
1.018	Health & Capital Planning Strategies	1,495					1,495			1,495				1,495
1.022	Information Technology	667,600					667,600	648,000		19,600				667,600
1.024	GM - Planning & Protective Services	-					-			-				-
1.025	Corporate Emergency	8,000					8,000			8,000				8,000
1.105	Facilities Management	9,150	-				9,150			9,150				9,150
1.106	CRD Fisgard HQ Building	-		-			-	-		-		-		-
1.107	Corporate Satellite Facilities	-		-			-	-		-		-		-
1.109	JDF Admin. Expenditures	-					-			-				-
1.110	SGI Admin. Expenditures	-					-			-				-
1.111	SSI Admin. Expenditures	1,200					1,200			1,200				1,200
1.118	Corporate Communications	2,990					2,990			2,990				2,990
1.123	Family Court Building	-		-			-	-		-		-		-
1.141	SSI Public Library	-		-			-			-		-		-
1.226	Health Facilities - VIHA	120,000		-		75,000	195,000	-		-		195,000		195,000
1.235	SGI Small Craft Harbour Facilities				400,000		400,000	-	-	-	-	400,000	-	400,000
1.236	SSI Small Craft Harbour (Fernwood Dock)				-		-			-		-		-
1.238A	Community Transit (SSI)		-		-		-			-		-		-
1.238B	Community Transportation (SSI)				-		-			-		-		-
1.280	Regional Parks	74,000	555,000	-	1,584,000	20,000	2,233,000	-	-	629,000	575,000	1,029,000		2,233,000
1.290	Royal Theatre	-		1,000,000			1,000,000	-		-	500,000	500,000	-	1,000,000
1.295	McPherson Theatre	-		500,000			500,000	-		-	-	500,000	-	500,000
1.297	Arts Grants and Development	-					-			-				-
1.310	Land Banking and Housing	5,000		-			5,000		-	5,000	-		-	5,000
1.313	Animal Care Services	4,205	18,000				22,205			22,205				22,205
1.318	Building Inspection	-	40,000				40,000			40,000				40,000
1.323	ByLaw Services	1,030	15,000				16,030			16,030				16,030
1.324	Regional Planning Services						-			-				-
1.325	Community Planning	3,910					3,910			3,910				3,910
1.335	Geo-Spatial Referencing	40,000					40,000			40,000				40,000
1.350	Willis Point Fire	20,000		8,500	-		28,500			20,000		8,500		28,500
1.352	South Galiano Fire		600,000	-			600,000		-	600,000				600,000
1.353	Otter Point Fire	10,000					10,000	-		10,000		-		10,000
1.356	Pender Island Fire		-	-			-			-		-	-	-
1.357	East Sooke Fire	7,400	-				7,400			7,400		-		7,400
1.358	Port Renfrew Fire	-					-			-		-		-
1.359	North Galiano Fire			-			-			-		-		-
1.360	Shirley Fire Department	-					-			-				-
1.369	Electoral Area Fire Services	-	-				-			-		-	-	-
1.370	JDF Emergency Program	-					-			-				-
1.372	Emergency Planning Coordination	-					-			-				-
1.375	Hazardous Material Incident Response	10,000					10,000			10,000				10,000
1.377	JDF Search and Rescue	-	-				-			-			-	-
1.405	JDF EA Community Parks & Recreation					-	-	-		-	-	-		-
1.40X	SEAPARC	66,000	-	-	-	500,000	566,000	-	500,000	66,000	-	-		566,000
1.44x	Panorama Recreation	428,625		409,000	-		837,625	-	-	248,625	-	589,000	-	837,625
1.455	SSI Community Parks	5,000	-		210,000		215,000		-	5,000	-	210,000		215,000
1.458	SSI Community Recreation	5,000			-		5,000			5,000	-	-		5,000
1.459	SSI Park Land & Rec Programs	27,500		2,425,000	-	150,000	2,602,500		-	27,500	2,400,000	175,000		2,602,500
1.465	Saturna Island Community Parks				10,000	-	10,000					10,000	-	10,000
1.475	Mayne Island Community Parks	-				-	-			-	-	-		-
1.485	Pender Island Community Parks				10,000		10,000			-		10,000		10,000
1.495	Galiano Community Parks				2,000		2,000					2,000		2,000
1.521	Environmental Resource Management	253,000	30,000		5,350,000		5,633,000	-		283,000		5,350,000		5,633,000

CAPITAL REGIONAL DISTRICT - CAPITAL EXPENDITURE PLAN														
2024														
		CAPITAL EXPENDITURE						SOURCE OF FUNDING						Schedule B
Service #	Service Name	Equipment	Vehicles	Buildings	Engineered Structures	Land	TOTAL	Capital Funds on Hand	Debenture Debt	Equipment Repl Fund	Grants	Capital Reserves	Other	TOTAL
1.523	Port Renfrew Refuse Disposal	-			-		-			-		-		-
1.575	Environmental Administration Services	10,000					10,000			10,000				10,000
1.576	Environmental Engineering Services	40,000	80,000				120,000			120,000				120,000
1.577	IW - Environmental Operations	65,000					65,000			65,000				65,000
1.578	Environmental Protection	73,000	-				73,000			73,000				73,000
1.579	Environmental Water Quality	5,000					5,000			5,000				5,000
1.911	911 Call Answer	-					-		-					-
1.913	913 Fire Dispatch	5,000					5,000			5,000				5,000
2.610	Saanich Peninsula Water Supply	-			210,000		210,000			50,000		160,000		210,000
2.620	Highland Water (SSI)				-		-	-						-
2.621	Highland & Fernwood Water (SSI)	-			20,000		20,000	-	-			20,000		20,000
2.622	Cedars of Tuam Water (SSI)	-			-		-	-	-			-		-
2.624	Beddis Water (SSI)	-			-		-	-	-			-		-
2.626	Fulford Water (SSI)	-			-		-	-	-			-		-
2.628	Cedar Lane Water (SSI)	-			-		-	-				-		-
2.630	Magic Lake Estates Water (Pender)	-			-		-	-				-		-
2.640	Lyall Harbour Boot Cove Water (Saturna)	-			20,000	-	20,000		20,000		-	-	-	20,000
2.642	Skana Water (Mayne)	-			-		-					-		-
2.650	Port Renfrew Water	10,000			-		10,000		-			10,000		10,000
2.660	Fernwood Water (SSI)				-		-		-					-
2.665	Sticks Allison Water (Galiano)	-			-		-					-		-
2.667	Surfside Park Estates (Mayne)	200,000					200,000				100,000	100,000		200,000
2.670	Regional Water Supply	987,500	250,000	40,000	18,315,000	400,000	19,992,500	11,642,500	8,100,000	250,000				19,992,500
2.680	JDF Water Distribution	182,500	-	40,000	5,965,000		6,187,500	6,012,500	-	-		175,000		6,187,500
2.691	Wilderness Mountain Water Service				-		-		-		-	-		-
3.701	Millstream Site Remediation					-	-	-			-			-
3.705	SSI Septage / Composting				-		-		-			-		-
3.710	North West Trunk Sewer				200,000		200,000	-		200,000		-		200,000
3.712	North East Trunk Sewer	-			100,000		100,000			100,000		-		100,000
3.713	East Coast Interceptor				100,000		100,000			100,000		-		100,000
3.715	North East Trunk 2 (Bowker)				-		-							-
3.718	Saanich Peninsula Wastewater	-			510,000		510,000	-		150,000		360,000		510,000
3.798C	Debt - Core Area Wastewater Treatment Program	-	-		5,529,744		5,529,744	5,529,744	-		-			5,529,744
3.810	Ganges Sewer Utility (SSI)	-			-		-	-	-			-		-
3.820	Malview Sewer Utility (SSI)	-			-		-	-	-			-		-
3.830	Magic Lake Sewer Utility (Pender)				3,000,000		3,000,000		3,000,000					3,000,000
3.850	Port Renfrew Sewer				-		-				-	-		-
TOTAL		3,387,579	1,588,000	4,422,500	41,535,744	1,145,000	52,078,823	23,832,744	11,620,000	3,247,579	3,575,000	9,803,500	-	52,078,823



**REPORT TO GOVERNANCE AND FINANCE COMMITTEE  
MEETING OF WEDNESDAY, NOVEMBER 04, 2020**

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**SUBJECT**     **Bylaw No. 4384: Amendment to Operating Reserve Bylaw No. 4146**

**ISSUE SUMMARY**

To amend Capital Regional District (CRD) Board approval of Bylaw No. 4146 relating to the administration of Operating Reserve Funds.

**BACKGROUND**

In 2016, the CRD Board approved establishment the Operating Reserve Fund bylaw listed below. This bylaw is specific to the Electoral Area services, and enable these CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, and special one-time operating projects, as well as to mitigate fluctuations in revenue. Contained in this bylaw is the list of services for which operating reserve funds are authorized.

Reserve guidelines limit transfers to operating reserves, transferring only to fund one-time projects or with the intent of stabilizing ongoing revenue requirements. Reserve funding levels support financial stability of ongoing operations and reduce risk of service interruption. A review of the CRD's reserve fund policies and reserve fund health is currently underway with findings to be reported to the Governance and Finance Committee.

As part of the 2021 financial planning process, transfers to operating reserve were identified that result in the need to amend an existing operating reserve bylaw. It is proposed that the bylaw be amended as follows:

Bylaw No.	Bylaw Title	Amendment
4146	Capital Regional District Electoral Area Services Operating Reserve Fund Bylaw No. 1, 2016	Add:  'Building Inspection' 'Emergency Planning Coordination' 'SGI Electoral Area Administration' 'SGI Economic Development' 'SSI Community Parks' 'SSI Community Recreation' 'SSI Pool and Park Land'

The addition of an operating reserve for the Building Inspection service is to mitigate the fluctuations in building permit revenue and requisition. The Emergency Planning Coordination service will use the operating reserve to enable one-time programs and to cover unforeseen emergency response costs. The SGI Electoral Area Administration and SGI Economic Development services will use the operating reserve to fund one-time program costs and to mitigate the fluctuation in requisition. The operating reserve will enable the SSI Parks and

Recreation services (three service budgets) to cover cyclical expenditures, unforeseen operating expenses, special one-time projects and to mitigate fluctuations in fee revenue and requisition.

### **ALTERNATIVES**

#### *Alternative 1*

The Governance and Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4384 cited as the “Capital Regional District Regional Services Operating Reserve Fund Bylaw No. 1, 2016, Amendment Bylaw No. 3, 2020” be introduced and read a first, second and third time.
2. That Bylaw No. 4384 be adopted.

#### *Alternative 2*

That Bylaws 4384 be deferred pending further information from staff.

### **IMPLICATIONS**

#### *Financial Implications*

The proposed amendments to the bylaws will enable the transfer of surplus funds to reserve for future operating expenditures and revenue stabilization as required. Funds transferred to and from these reserves will be approved by the Board as part of the annual financial planning process will be held in separate funds for each service.

### **CONCLUSION**

Bylaw 4146 enables CRD services to set aside operating funds to cover cyclical expenditures, unforeseen operating expenses, special one-time operating projects, and mitigate fluctuations in revenue. Contained in the bylaw is the list of services for which operating reserve funds are authorized. The recommendation is to amend the bylaws to include the additional services. Funds transferred to and from these reserves will be approved by the Board as part of the annual financial planning process, and will be held in separate funds for each service.

### **RECOMMENDATION**

The Governance and Finance Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4384 cited as the “Capital Regional District Regional Services Operating Reserve Fund Bylaw No. 1, 2016, Amendment Bylaw No. 3, 2020” be introduced and read a first, second and third time.
2. That Bylaw No. 4384 be adopted.

Submitted by:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: Bylaw No. 4384

**CAPITAL REGIONAL DISTRICT**

**BYLAW NO. 4384**

\*\*\*\*\*

**A BYLAW TO AMEND THE CAPITAL REGIONAL DISTRICT  
ELECTORAL AREA SERVICES OPERATING RESERVE FUNDS BYLAW**

\*\*\*\*\*

The Board of the Capital Regional District in open meeting assembled enacts as follows:

1. Bylaw No. 4146, "Capital Regional District Electoral Area Services Operating Reserve Fund Bylaw No. 1, 2016" is hereby amended by deleting Schedule A in its entirety and replacing it with the following:

**SCHEDULE A**

- 1) Durrance Road Fire
- 2) SGI Emergency Program
- 3) SSI Emergency Program
- 4) Nuisance and Unsightly Premises
- 5) Electoral Area Fire Services
- 6) Soil Deposit and Removal
- 7) Noise Control
- 8) Animal Care Services
- 9) Community Planning (Juan De Fuca)
- 10) SSI Community Transit and Transportation
- 11) SSI Economic Development
- 12) Building Inspection
- 13) Emergency Planning Coordination
- 14) SGI Electoral Area Administration
- 15) SGI Economic Development Commission
- 16) SSI Community Parks
- 17) SSI Community Recreation
- 18) SSI Pool and Park Land

2. This Bylaw may be cited as "Capital Regional District Electoral Area Services Operating Reserve Fund Bylaw No. 1, 2016, Amendment Bylaw No. 3, 2020".

READ A FIRST TIME THIS	th	DAY OF	2020
READ A SECOND TIME THIS	th	DAY OF	2020
READ A THIRD TIME THIS	th	DAY OF	2020
ADOPTED THIS	th	DAY OF	2020

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
CORPORATE OFFICER

**REPORT TO REGIONAL WATER SUPPLY COMMISSION  
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

---

**SUBJECT**     **Bylaw 4382: Regional Water Supply Water Works Facilities Loan Authorization Bylaw**

**ISSUE SUMMARY**

A Capital Regional District (CRD) Board resolution is required to approve loan authorization Bylaw No. 4382 for the purpose of financing the Regional Water Supply five year 2021-2025 capital plan.

**BACKGROUND**

The most recent loan authorization for the Regional Water Supply was approved in 2013 under Bylaw 3902 to finance capital spending over 2015 to 2020. A loan authorization is typically prepared every five years, or as long-term debt is required. The Regional Water Supply capital plan (the "Capital Plan") includes planned replacement and improvements that will require borrowing of \$46 million from the Municipal Finance Authority of British Columbia (MFABC). This borrowing will occur as required to meet cash flow needs for implementation of Commission approved capital projects. Under the *Local Government Act*, participating area approval is required.

The following bylaw is proposed:

Service Area	Action	Purpose	Bylaw
2.670	Loan Authorization Bylaw	To create a loan authorization bylaw to permit long-term borrowing related to the capital plan for this service.	4382 Regional Water Supply Loan Authorization Bylaw No. 5, 2020

**ALTERNATIVES**

*Alternative 1*

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

1. That Bylaw No. 4382 cited as "Regional Water Supply Water Works Facilities Loan Authorization Bylaw No. 5, 2020" be introduced and read a first, second and third time; and
2. That Bylaw No. 4382 be referred to the Inspector of Municipalities for approval, and if received, to proceed with elector approval by way of regional alternative approval process.

*Alternative 2*

The Regional Water Supply Commission recommends to the Capital Regional District Board:  
That Bylaw No. 4382 be deferred to a future meeting pending further information.

## **IMPLICATIONS**

### *Financial & Legislative Implications*

The loan authorization for the provisional Capital Plan is \$46 million and will support the planned five year capital plan expenditures commencing in January 2021. The estimated debt servicing costs for the borrowing are included in the 2021–2025 five-year operating budget. Capital funds on hand will provide additional funds as required.

This loan authorization covers planned spending contained within the next five years of the capital plan. Actual borrowings in each of the next five years will be based on the cash flow requirements for the year, subject to the availability of funds from consumption revenue (net of operating expenditures).

Long-term borrowing (i.e. loans with a term of more than 5 years) cannot be undertaken without the loan authorization bylaw being approved by the Inspector of Municipalities after the bylaw is given three readings by the local government. In addition, in accordance with the *Local Government Act*, elector approval is required in order to approve the loan authorization bylaw. Electoral approval can be obtained through consent on behalf of two-thirds of municipal participants' councils and by alternative approval process in the Juan de Fuca Electoral Area; or by alternative approval process for the entire service area. It is recommended that elector approval be obtained by alternative approval process for the entire service area, as this process will need to be run for the Juan de Fuca Electoral Area in any event. This can be initiated when the loan authorization bylaw has received third reading.

To ensure optimization of interest and timing of long term debt, issuance of a temporary borrowing will be proposed if municipal consent is received and Ministerial Approval is obtained. The timing of the debt issuance will be based on the timing of expenditures and will be dependent on prevailing interest rates at the time. Before long term debt issuance can be exercised, a security issuing bylaw will be brought forward for approval. The term of any debt issuances under such loan authorization will be 15 years.

## **CONCLUSION**

Capital program work on the Regional Water Supply system is planned for 2021 and ongoing. The work will be funded through a combination of capital funds on hand and borrowed funds. Timely access to the borrowed funds in 2021 is critical to meeting the capital program spending needs. To that end, a Capital Regional District (CRD) Board resolution is required to commence the loan authorization process for Bylaw No. 4382 for the purpose of financing the Regional Water Supply system five year 2021-2025 capital plan. An elector consent process will be undertaken to obtain elector approval and can be initiated once the loan authorization bylaw has received third reading.

## **RECOMMENDATION**

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

1. That Bylaw No. 4382 cited as "Regional Water Supply Water Works Facilities Loan Authorization Bylaw No. 5, 2020" be introduced and read a first, second and third time; and

2. That Bylaw No. 4382 be referred to the Inspector of Municipalities for approval, and if received, to proceed with elector approval by way of regional alternative approval process.

Submitted by:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

**ATTACHMENT(S)**

Appendix A: Bylaw 4382, "Regional Water Supply Facilities Loan Authorization Bylaw No. 5, 2020"

**CAPITAL REGIONAL DISTRICT**

**BYLAW NO. 4382**

\*\*\*\*\*  
**A BYLAW TO AUTHORIZE THE BORROWING OF FORTY SIX MILLION DOLLARS  
(\$46,000,000) FOR THE PURPOSE OF ACQUIRING, DESIGNING AND CONSTRUCTING  
WATER WORKS FACILITIES OF REGIONAL WATER SUPPLY**  
\*\*\*\*\*

**WHEREAS:**

- A. Under Bylaw No. 2537, "Water Supply Local Service Area Establishment Bylaw No. 1, 1997", the Board of the Regional District established a local service for the purpose of supplying water in the Regional District;
- B. It is deemed desirable to fund works relating to the acquiring, designing and constructing water distribution facilities in the Regional District water distribution system, and the work shall include the planning, study, public consultation, site selection, design, land and material acquisition, construction, supply and installation of all material, equipment and components and all construction necessary for the preparation and works relating to the acquiring, designing and constructing water distribution facilities in the Regional District water distribution system;
- C. The estimated cost of the works is the sum of forty-six million dollars (\$46,000,000) dollars;
- D. Pursuant to s. 407 of the *Local Government Act*, participating area approval is required for this borrowing and shall be obtained by alternative approval process under s. 345 of the *Local Government Act*;
- E. Financing is proposed to be undertaken by the Municipal Finance Authority of British Columbia pursuant to agreements between it and the Capital Regional District;

**NOW THEREFORE** the Capital Regional District Board in open meeting assembled hereby enacts as follows:

1. The Board is hereby empowered and authorized to undertake and carry out or cause to be carried out the acquisition of land, planning, study, design and construction of buildings, plant, mains, dams, and other water works facilities and equipment herein before described and to do all things necessary in connection therewith and without limiting the generality of the foregoing:
  - a) to borrow upon the credit of the Regional District a sum not exceeding Forty Six Million Dollars (\$46,000,000);

- b) to acquire all such real property, easements, rights-of-way, leases, licenses, rights or authorities as may be requisite or desirable for or in connection with the acquisition of land, planning, study, design and construction to add, replace, upgrade water works facilities and all related ancillary works, studies and equipment deemed necessary by the Board.
2. The maximum term for which debentures may be issued to secure the debt intended to be created by this bylaw is 15 years.
3. This Bylaw may be cited as "Regional Water Supply Water Works Facilities Loan Authorization Bylaw No. 5, 2020".

READ A FIRST TIME THIS	___	day of	202_
READ A SECOND TIME THIS	___	day of	202_
READ A THIRD TIME THIS	___	day of	202_
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS	___	day of	202_
APPROVED BY ALTERNATIVE APPROVAL PROCESS PER S.345 OF THE LOCAL GOVERNMENT ACT THIS	___	day of	202_
ADOPTED THIS	___	day of	202_

---

CHAIR

---

CORPORATE OFFICER



**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION  
MEETING OF TUESDAY, NOVEMBER 10, 2020**

---

**SUBJECT**     **CRD Bylaw No. 4391 - Establishment of a New Harbours Environmental Action Service for Saanich Peninsula**

**ISSUE SUMMARY**

The Saanich Peninsula local governments requested a new service to support environmental stewardship on the Peninsula in response to increasing stressors on the marine environment.

**BACKGROUND**

Local government staff approached Capital Regional District (CRD) staff in the summer of 2020 to explore the potential for a CRD service to address increasing challenges in harbours and marine waters on the Saanich Peninsula. Further conversation at the Chief Administrative Office level indicated an interest in the use of regulatory approaches (e.g., a licence of occupation model) to control the presence and behaviours of boat owners in the near shore waters. The local governments have now made a formal request for the CRD to consider a new service (see appendices A, B and C).

The CRD currently provides a “Harbours Environmental Action” service for the core area local governments and First Nations, with an emphasis on environmental stewardship through education and outreach efforts, as well as facilitation and coordination between local government staff and community groups. This service meets a commitment under the core area’s Liquid Waste Management Plan and the service was expanded slightly in 2010 to include broader environmental stressors on the watersheds beyond liquid waste management.

Given the different authorities responsible for harbours oversight, the appropriate focus for a new regional service would include education and outreach, and coordination of efforts by various stakeholders (Appendix D).

**ALTERNATIVES**

The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

*Alternative 1*

1. That CRD Bylaw No. 4391 "Saanich Peninsula Waterways Environmental Action Service Establishment Bylaw No. 1, 2020" be introduced and read a first, second time and third time; and
2. That Bylaw No. 4391 be referred to the municipal councils of the participants for approval, and if two-thirds of approval is received, to the Inspector of Municipalities.

*Alternative 2*

That Bylaw No. 4391 be referred back to staff for further review.

## **IMPLICATIONS**

### *Environmental Implications*

There are multiple environmental risks associated with near shore waters, including contaminant runoff, bilge discharges, habitat alteration and illegal dumping. Local government actions to address these issues range from education and outreach, advocacy to senior levels of government for action, and the pursuit of new regulatory and enforcement options for local governments.

### *Intergovernmental Implications*

Current jurisdiction for overseeing boat owners and their respective actions lies with senior levels of government. Issues relating to vessel pollution rest with the federal government, under environmental legislation (*Fisheries Act, Migratory Birds Protection Act*, etc.), navigation legislation (*Canada Shipping Act, Small Vessel Regulations, Collision Regulations*), and compensation legislation (e.g., the Ship Source Oil Pollution Fund). Enforcement is performed by the relevant federal enforcement office, the Coast Guard, and in quasi-criminal areas, by police. Issues associated with contaminant run-off (e.g., stormwater, septage, spills) from land may lie with the local governments, health authorities, the Province (through environment and public health powers), or on the federal government (such as where spills and discharges impact wildlife).

In general, local governments may not regulate vessel liquid waste discharges, engine size, noise (if related to navigation), or short-term moorage. Vessel pollution is enforced by Transport Canada and the Coast Guard, via the *Vessel Pollution and Dangerous Chemicals Regulation*, which requires all vessels to: have a marine sanitation device or discharge three nautical miles from shore; use a holding tank and a pump out station; or use temporary storage and dispose of safely elsewhere.

Regulation of navigation and shipping, which includes temporary moorage, is within the exclusive jurisdiction of the federal government. Local governments have only been successful at regulation of moorage where they utilize their zoning powers in an area within the “jaws of the land”, such as an inlet, bay, or inland waterway, that they also have a licence of occupation over.<sup>1</sup> While the CRD could be contracted by the participating local governments to enforce zoning bylaws and share costs (for example, vessel and enforcement proceeding costs), the CRD cannot restrict moorage.

Initially, a new service would be similar to the efforts in the core area that provide a forum to bring senior levels of government together with local government staff and First Nations, along with community groups to discuss the issue and coordinate roles and responsibilities for action. The service would not likely achieve any regulatory powers but could dedicate effort and attention through public outreach and engagement, advocacy, pursuit of specific projects and coordination of any local government actions.

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<sup>1</sup> *City of Victoria v Zimmerman*, 2018 BCSC 321; *West Kelowna (District) v. Newcomb*, 2013 BCSC 1411, aff'd 2015 BCCA 5

### *Financial Implications*

Staff have based potential service costs (staff time, overhead, operating budget) on the existing core area Harbours Environmental Action service (which provides a similar function for the core area municipalities). Under that service, the annual cost for the service is apportioned on the basis of the population (as determined annually by the Regional Planning Service of the CRD) of the participating areas.

Staff time is based on a proposal of starting with one day/week with some supervisory support. Staff labour costs are based on one seven-hour day per week and are approximately \$42,000. Estimated operating costs are based on support for potential campaigns, stakeholder engagement, advertising, in-kind support for grant applications, etc. A range of \$15,000-\$20,000 is consistent with efforts in the core area but would be refined as staff discuss service levels and tasks with the local governments. The proposed cost apportionment for the District of Central Saanich, District of North Saanich and Township of Sidney is presented in Appendix E.

### **CONCLUSION**

The Saanich Peninsula local governments have asked the CRD to consider a new service to support ongoing issues with nearshore marine waters. Local and regional governments have limited jurisdiction and authority over the range of issues associated with these waters. The CRD could play a facilitating role that brings stakeholders together to coordinate actions and address environmental issues.

### **RECOMMENDATION**

The Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

1. That CRD Bylaw No. 4391 "Saanich Peninsula Waterways Environmental Action Service Establishment Bylaw No. 1, 2020" be introduced and read a first, second time and third time; and
2. That Bylaw No. 4391 be referred to the municipal councils of the participants for approval, and if two-thirds of approval is received, to the Inspector of Municipalities.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENTS**

- Appendix A: Saanich Peninsula Harbour Initiative – Letter from Central Saanich (August 6, 2020)
- Appendix B: Saanich Peninsula Harbour Initiative – Letter from the District of North Saanich (September 8, 2020)
- Appendix C: Saanich Peninsula Harbour Initiative – Letter from Town of Sidney (September 15, 2020)
- Appendix D: Bylaw No. 4391 "Saanich Peninsula Waterways Environmental Action Service Establishment Bylaw No. 1, 2020"
- Appendix E: Proposed Cost-Share for Participating Municipalities and Apportion of Expenditures for Proposed Saanich Peninsula Harbours Service



August 6, 2020

File No. 0400-60/20

**CONFIDENTIAL**

Capital Regional District  
625 Fisgard Street, PO Box 1000  
Victoria, BC V8W 2S6

Attention: Kristen Morley, Corporate Officer

Dear Ms. Morley:

**Re: Request for Service: Saanich Peninsula Harbours Initiative**

---

At their July 27, 2020 Closed meeting, the Municipal Council of the District of Central Saanich passed the motion that the Capital Regional District (CRD) Board consider the following resolution:

*That Council endorse the Saanich Peninsula Harbour Initiative in principle and formally request support from the Capital Regional District for the establishment of a Saanich Peninsula (Central Saanich, Sidney, North Saanich, Willis Point) Harbours Initiative.*

It is our understanding that a similar resolution will be forthcoming from the Town of Sidney and the District of North Saanich.

Following staff discussions between the Town of Sidney, the District of North Saanich and the CRD, Council wishes to pursue the establishment of a CRD service similar to the Gorge Waterway Initiative (GWI), for the 2021 budget year. The primary goals of the Saanich Peninsula Harbour Initiative (SPHI) would be similar to the GWI: a forum for the exchange of sharing of information, the promotion of education and awareness programs on appropriate land and water use; to establish and encourage activities that show care and concern for the natural environment. Other stakeholders including First Nations, Coast Guard and Provincial and Federal agencies would be included.

A more formal structure, funding and support would provide clear direction, coordinated effort, defined outcomes and accountability through coordination and logistical assistance from the CRD.

...../2

As this matter was discussed by Council at a closed meeting under Section 90(1) (k) of the *Community Charter*, we ask that the CRD Board of Directors consider this request at a closed meeting.

As well, the Town of Sidney and District of North Saanich have not yet but will soon be considering the matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "L. Cornwell".

Liz Cornwell,  
Corporate Officer



September 8, 2020

File: 6630-50

Capital Regional District  
625 Fisgard Street  
PO Box 1000  
Victoria, BC  
V8W 2S6

Attention: Glenn Harris, Senior Manager Environmental Protection

Dear Glenn,

**RE: Request for Service: Saanich Peninsula Harbours Initiative**

On August 17, 2020 at closed meeting of Council, the District of North Saanich passed the motion that the Capital Regional District (CRD) Board consider the following resolution:

*That Council endorse the Saanich Peninsula Harbour Initiative in principle and formally request support from the Capital Regional District for the establishment of a Saanich Peninsula (Central Saanich, Sidney, North Saanich, Willis Point) Harbours Initiative.*

A similar request has already been made by the District of Central Saanich is also expected from the Town of Sidney.

Following staff discussions between the Town of Sidney, the District of Central Saanich and the CRD, Council wishes to pursue the establishment of a CRD service similar to the Gorge Waterway Initiative (GWI), for the 2021 budget year. The primary goals of the Saanich Peninsula Harbour Initiative (SPHI) would be similar to the GWI: a forum for the exchange of sharing of information, the promotion of education and awareness programs on appropriate land and water use; to establish and encourage activities that show care and concern for the natural environment. Other stakeholders including First Nations, Coast Guard and Provincial and Federal agencies would be included.

A more formal structure, funding and support would provide clear direction, coordinated effort, defined outcomes and accountability through coordination and logistical assistance from the CRD.

As this matter was discussed by Council at a closed meeting under Section 90(1) (k) of the Community Charter, we ask that the CRD Board of Directors consider this request at a closed meeting.

Sincerely,

  
**Tim Tanton**  
Chief Administrative Officer



# TOWN OF SIDNEY

2440 Sidney Avenue, Sidney, British Columbia V8L 1Y7  
Phone: 250-656-1184 Fax: 250-655-4508  
Email: [admin@sidney.ca](mailto:admin@sidney.ca) Website: [www.sidney.ca](http://www.sidney.ca)

APPENDIX C



September 15, 2020

VIA EMAIL: [kmorley@crd.bc.ca](mailto:kmorley@crd.bc.ca)

Kristen Morley  
General Manager, Corporate Services  
Capital Regional District  
625 Fisgard Street  
Victoria, BC V8W 1R7

Dear Ms. Morley:

**Subject: Saanich Peninsula Harbour Initiative**

This is to advise you that Town Council, at a closed meeting held on September 14, 2020, considered options for addressing the management of Tsehum Harbour and resolved as follows:

*That Council endorse the Saanich Peninsula Harbour Initiative in principle and direct staff to formally request support from the Capital Regional District (CRD) for the establishment of a Saanich Peninsula (Central Saanich, Sidney, North Saanich, Willis Point) Harbours Initiative.*

Please contact the undersigned should you have any questions regarding the above.

Yours truly,



Sandi Nelson  
Corporate Officer



**CAPITAL REGIONAL DISTRICT  
BYLAW NO. 4391**

\*\*\*\*\*

**A BYLAW TO ESTABLISH THE SAANICH PENINSULA HARBOURS AND WATER  
MONITORING AND COORDINATION SERVICE**

\*\*\*\*\*

**WHEREAS:**

- A. The Board of the Capital Regional District wishes to establish a waterways and waterbodies monitoring and coordination service on the Saanich Peninsula (the "Service"), and to coordinate the public authorities and groups sharing jurisdiction over these watercourses under s. 263(1)(a) of the *Local Government Act*;
- B. Participating area approval is required and assent of the electors has been obtained by municipal council consent on behalf pursuant to s. 342(2)(c) of the *Local Government Act*; and
- C. The approval of the Inspector of Municipalities has been obtained under s. 343(1)(a) of the *Local Government Act*.

**NOW THEREFORE** the Board of the Capital Regional District in open meeting assembled enacts as follows:

**Service**

- 1. The Service established is a service for the purpose of coordinating and implementing harbours, waterbodies, and watercourses environmental protection and improvement initiatives on and surrounding the Saanich Peninsula, namely Sidney, North Saanich, and Central Saanich, including:
  - a. monitoring, mapping, reporting and public education on issues relating to the marine and shore area environments;
  - b. coordination and collaboration with public authorities and other persons on issues relating to the marine and shore area environments; and
  - c. implementing programs related to rehabilitation and improvement of the marine and shore area environments.

**Boundaries**

- 2. The boundaries of the Service Area are the municipal boundaries of Sidney, North Saanich, and Central Saanich.

**Participating Area**

- 3. The participating area for this service are the whole of the Township of Sidney, the District of North Saanich, and the District of Central Saanich.

**Cost Recovery**

- 4. As provided in Section 378 of the *Local Government Act*, the annual costs of providing the Service may be recovered by one or more of the following:



- a. parcel taxes imposed in accordance with Division 2 of Part 11 of the Local Government Act;
- b. fees and charges imposed under Section 397 of the Local Government Act;
- c. revenues raised by other means authorized under the Local Government Act or another Act;
- d. revenues received by agreement, enterprise, gift, grant or otherwise.

### Maximum Requisition

5. In accordance with Section 339(1)(e) of the *Local Government Act*, the maximum amount that may be requisitioned annually for the cost of the Service is the greater of:
  - a) Seventy five thousand (\$75,000); or
  - b) An amount equal to the amount that could be raised by a property value tax rate of \$0.0049 per One Thousand Dollars (\$1,000) that, when applied to the net taxable value of land and improvements in the Service Area, will yield the maximum amount that may be requisitioned for the Service.

### Citation

6. This Bylaw may be cited as the "Saanich Peninsula Waterways Environmental Action Service Establishment Bylaw No. 1, 2020".

READ A FIRST TIME THIS \_\_\_\_\_ day of \_\_\_\_\_

READ A SECOND TIME THIS \_\_\_\_\_ day of \_\_\_\_\_

READ A THIRD TIME THIS \_\_\_\_\_ day of \_\_\_\_\_

APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS \_\_\_\_\_ day of \_\_\_\_\_

RECEIVED PARTICIPATING AREA  
APPROVAL UNDER SECTION 342(2)  
OF THE *LOCAL GOVERNMENT ACT* THIS \_\_\_\_\_ day of \_\_\_\_\_

ADOPTED THIS \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
CORPORATE OFFICER

FILED WITH THE INSPECTOR OF MUNICIPALITIES THIS \_\_\_\_\_ day of \_\_\_\_\_

**PROPOSED COST-SHARE FOR PARTICIPATING MUNICIPALITIES  
AND APPORTION OF EXPENDITURES FOR  
PROPOSED SAANICH PENINSULA HARBOURS SERVICE  
November 2020**

	Sidney	District of North Saanich	District of Central Saanich	Total
<b>Cost Share Parameter</b>				
Population (2019 Estimate)	12,235	11,876	18,089	42,195
% of population	29%	28%	43%	100%
<b>Potential Expenditures</b>				
Staffing (1 d/wk x 52 wk x \$115/hr)	\$12,140	\$11,720	\$18,000	\$41,860
Project Costs	\$5,800	\$5,600	\$8,600	\$20,000
<b>Total Estimated Costs for 2021</b>	<b>\$17,940</b>	<b>\$17,320</b>	<b>\$26,600</b>	<b>\$61,860</b>

**REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION  
MEETING OF THURSDAY, OCTOBER 15, 2020**

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**SUBJECT**     **Bylaw No. 4372, Transfer of Funds from Development Cost Charges Reserve to Related Capital Reserve**

**ISSUE SUMMARY**

A bylaw is required to transfer funds from the Saanich Peninsula Wastewater Development Cost Charge (DCC) reserve to its related capital reserve fund.

**BACKGROUND**

The Capital Regional District (CRD) established a combined water and wastewater development cost charges program with the intent of funding growth and capacity related improvements to the CRD Saanich Peninsula water and wastewater systems, initially under, now-repealed, *Bylaw No. 2569, Capital Regional District Sewage Facilities Development Cost Charge Bylaw No 1, 1998* and its current successor, *Bylaw No. 3208, Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 1, 2004*.

The current Saanich Peninsula Wastewater (SPWW) system was constructed in 1999 and included spare capacity to accommodate future growth. The justification for establishment of the wastewater DCC program was to collect funds from development to pay for the additional capacity and capital cost that was built into the SPWW system. The total value of the additional capacity and capital cost is \$9.205 million.

In July 2018, the Saanich Peninsula Wastewater Commission received a DCC Program Review Report prepared by Kerr Wood Leidal Associates (KWL) which applied updated growth projections to 2037. The result of the report was a DCC rate update, and a DCC capital program covering 2018 to 2037. This capital program totals \$0.73 million and includes a strategic plan update in 2019, a replacement of the Turgoose Pump Station in 2019, and a subsequent DCC update in 2023. KWL recommended that remaining funds left over in the DCC reserve fund be transferred into the SPWW capital reserve fund to pay for the additional capacity and capital cost built into the system.

The SPWWC service has completed its strategic plan update and is finalizing the Turgoose Pump Station replacement project. Combined, these project make up \$0.68 million of the DCC eligible project to 2037. The DCC reserve fund opening balance in 2020 is \$1.5 million. The only project left in the DCC capital program is the DCC update in 2023 estimated at \$50,000. Following the recommendations in the 2018 DCC program review and, consistent with the objective of the DCC initiation, the attached DCC's transfer bylaw (Appendix A) will establish the authority to transfer funds and requires approval by the Inspector of Municipalities.

## **IMPLICATIONS**

### *Financial Implications*

As detailed in the fund continuity schedule below, staff recommend an initial transfer of \$1.7 million to be completed in 2020. Until such time as the capital cost of the additional capacity is covered by DCC fund transfers to capital reserve, staff will put forward additional bylaws to transfer funds as the DCC capital program allows. Without the recommended transfer, the service would have to borrow funds to maintain current capital project spending.

**Figure 1:** Development Cost Charges Reserve Continuity

DCC Portion Fund: 1012 Fund Center: 101356	Estimate	Budget				
	2020	2021	2022	2023	2024	2025
Beginning Balance	1,534,961	35,004	205,004	375,004	545,004	65,004
Planned Capital Expenditure (Based on Capital Plan)	-	-	-	-	(50,000)	-
Transfer OUT - To Capital Reserve	(1,700,000)	-	-	-	(600,000)	(200,000)
Transfer IN - DCC Funding	170,000	170,000	170,000	170,000	170,000	170,000
Interest Income	30,043	-	-	-	-	-
Ending Balance \$	35,004	205,004	375,004	545,004	65,004	35,004

## **RECOMMENDATION**

That the Saanich Peninsula Wastewater Commission recommends to the Capital Regional District Board:

1. That Bylaw No. 4372 cited as "Saanich Peninsula Water and Wastewater Development Cost Charges Transfer to Capital Reserve Bylaw No. 1, 2020" be introduced and read a first, second, and a third time.
2. That Bylaw No. 4372 be referred to the Inspector of Municipalities for review as required by the *Local Government Act* and *Community Charter*.

Submitted by:	Ted Robbins, B. Sc., C. Tech., General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

## **ATTACHMENT**

Appendix A: Bylaw No. 4372

## CAPITAL REGIONAL DISTRICT

## BYLAW NO. 4372

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**A BYLAW TO AUTHORIZE FUND TRANSFERS FROM SAANICH PENINSULA WASTEWATER  
DEVELOPMENT COST CHARGE RESERVE TO THE SAANICH PENINSULA WASTEWATER  
CAPITAL RESERVE**

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**WHEREAS:**

- A. By Supplementary Letters Patent, Division VII dated December 28, 1967, the Capital Regional District was granted the function of acquisition, design, construction, operation, maintenance, renewal and administration of trunk sewers and sewage disposal facilities within all member municipalities of the Regional District, except the then electoral areas of Sooke and Outer Gulf Islands;
- B. Under Bylaw No. 2569, Capital Regional District Sewage Facilities Development Cost Charge Bylaw No 1, 1998, and its successor Bylaw No. 3208, Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 1, 2004, the Regional District imposed development cost charges for the Saanich Peninsula Wastewater System, and under Bylaw No. 2760, Saanich Peninsula Wastewater System Capital Reserve Fund Bylaw No. 1, 2000, established a capital reserve fund to hold the development cost charge monies for wastewater system upgrades and other related capital expenses;
- C. Pursuant to sections 377 and 559 of the *Local Government Act* and section 189 of the *Community Charter*, the Regional District desires to transfer monies to the capital reserve fund.

**NOW THEREFORE**, the Board of the Capital Regional District enacts as follows:

- One million seven hundred thousand dollars (\$1.7 million) shall be transferred from the Saanich Peninsula Wastewater System Development Cost Charge reserve fund established by Saanich Peninsula Water and Wastewater Development Cost Charges Bylaw No. 1, 2004 (Bylaw No. 3208) to the Saanich Peninsula Wastewater System Capital reserve fund established by Saanich Peninsula Wastewater System Capital Reserve Fund Bylaw No. 1, 2000 (Bylaw No. 2760);
- This bylaw may be cited as the "Saanich Peninsula Water and Wastewater Development Cost Charges Transfer to Capital Reserve Bylaw No. 1, 2020".

READ A FIRST TIME THIS	—	day of	2020
READ A SECOND TIME THIS	—	day of	2020
READ A THIRD TIME THIS	—	day of	2020
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS	—	day of	2020
ADOPTED THIS	—	day of	2020

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 CHAIR

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 CORPORATE OFFICER