



Notice of Meeting and Meeting Agenda Electoral Areas Committee

Wednesday, December 14, 2022

10:05 AM

6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7

P. Brent (Chair), G. Holman (Vice-Chair), A. Wickheim, C. Plant (Board Chair, ex-officio)

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. Territorial Acknowledgement

2. Approval of Agenda

3. Adoption of Minutes

3.1. [22-680](#) Minutes of the October 12, 2022, and November 23, 2022, Electoral Areas Committee Meetings

Recommendation: That the minutes of the Electoral Areas Committee meetings of October 12, 2022, and November 23, 2022, be adopted as circulated.

Attachments: [Minutes - October 12, 2022](#)
[Special Minutes - November 23, 2022](#)

4. Chair's Remarks

5. Presentations/Delegations

The public are welcome to attend CRD Board meetings in-person.

Delegations will have the option to participate electronically. Please complete the online application at www.crd.bc.ca/address no later than 4:30 pm two days before the meeting and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the CRD Board at crdboard@crd.bc.ca.

6. Committee Business

6.1. [22-673](#) Saturna Island Fire Protection Society (SIFPS) - Medical Patient Transportation

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

1. That Bylaw No. 4534, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993, Amendment Bylaw No. 3, 2022", be introduced and read a first, second, and third time;
(NWA)
2. That elector approval be obtained by the Electoral Area director consenting on behalf; and
3. That Bylaw No. 4534 be referred to the Inspector of Municipalities for approval.
(NWA)

Attachments: [Staff Report: SIFPS - Medical Patient Transportation](#)
[Appendix A: SIFPS Request Letter](#)
[Appendix B: Bylaw No. 4534](#)
[Appendix C: Bylaw No. 2165 Redlined](#)

6.2. [22-669](#) Salt Spring Island Local Community Commission - Implementation

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

1. That Bylaw No. 4507, "Salt Spring Island Local Community Commission Bylaw No. 1", be adopted;
(NWA)
2. That staff proceed with the planning and establishment of a local community commission election with a target date of May 27, 2023, and associated bylaw amendments to dissolve certain commissions which will be assumed by the Salt Spring Island Local Community Commission.
(NWA)

Attachments: [Staff Report: SSI LCC Implementation](#)
[Appendix A: Services assumed by LCC](#)
[Appendix B: Bylaw No. 4507, "SSI Local Community Commission Bylaw No. 1"](#)
[Appendix C: EAC Staff Report, July 13, 2022 Bylaws 4507&4508 Est. of LCC fo](#)

6.3. [22-607](#) Bylaw Nos. 4524 and 4525: Fees and Charges Bylaw Amendments for Utilities within the Three Electoral Areas

- Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District Board:
1. That Bylaw No. 4524, "Southern Gulf Islands and Juan de Fuca Electoral Areas Utilities and Street Lighting Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 11, 2022", be introduced and read a first, second, and third time.
(WP - JDF & SGI)
 2. That Bylaw No. 4524 be adopted.
(WP - JDF & SGI, 2/3rds on adoption)
 3. That Bylaw No. 4525, "Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 16, 2022", be introduced and read a first, second, and third time.
(NWA)
 4. That Bylaw No. 4525 be adopted.
(NWA, 2/3rds on adoption)

Attachments: [Staff Report: Bylaws 4524-4525 Fees & Charges Bylaws](#)
 [Appendix A: 4524 SGI JDF Utility Fees & Charges Amendment 11](#)
 [Appendix B: 4525 SSI Utility Fees & Charges Amendment 16](#)
 [Appendix C: Bylaws 4524-4525 Changes Summary](#)

6.4. [22-645](#) Electoral Areas "Fire Regulation Bylaw No. 2", Bylaw No. 4489

- Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District Board:
1. That Bylaw No. 4489, "Fire Regulation Bylaw No. 2, 2022", be introduced and read a first, second, and third time;
(WP - JDF & SGI)
 2. That Bylaw No. 4489 be adopted.
(WP - JDF & SGI, 2/3 on adoption)
 3. That Bylaw No. 4499, "Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 74, 2022", be introduced and read a first, second, and third time;
 4. That Bylaw No. 4499 be adopted.
(WP - JDF & SGI, 2/3 on adoption)
 5. That Bylaw No. 4523, "Capital Regional District Fire Protection Services Fees and Charges Bylaw No. 2, 2022", be introduced and read a first, second, and third time;
(WP - JDF & SGI)
 6. That Bylaw No. 4523 be adopted.
(WP - JDF & SGI, 2/3 on adoption)

Attachments: [Staff Report: Electoral Area Fire Regulation Bylaw No. 4489](#)
 [Appendix A: Bylaw #4489 Fire Regulation Bylaw No. 2, 2022](#)
 [Appendix B: Bylaw #4499 CRD Ticket Info Authorization Bylaw](#)
 [Appendix C: Bylaw #4523 CRD Fire Protect'n Svcs Fees & Charges Bylaw](#)
 [Appendix D: Draft Guide to Fire Regulation Bylaw No. 2](#)

- 6.5.** [22-646](#) British Columbia Structure Firefighter Minimum Training Standards
- Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District (CRD) Board:
To direct CRD staff to proceed with Electoral Area fire service consultation to determine requirements to comply with British Columbia Structure Firefighter Minimum Training Standards, implement an appropriate training program no later than Q1 2024, and adjust the future fire service budgets accordingly.
(NWA)
- Attachments:** [Staff Report: BC Structure Firefighter Minimum Training Standards](#)
[Appendix A: BC Structure Firefighter Minimum Training Standards](#)
- 6.6.** [22-647](#) Community Resiliency Initiative Grant: 2023 FireSmart Community Funding & Supports
- Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Board support an application to the Union of British Columbia Municipalities Community Resiliency Initiative Fund for the FireSmart Community Funding & Supports program and direct staff to provide overall grant management.
(NWA)
- Attachments:** [Staff Report: Community Resiliency Initiative Grant: FireSmart](#)
[Appendix A: UBCM 2023 FireSmart Community Funding & Support Application](#)
- 6.7.** [22-648](#) Community Emergency Preparedness Fund Grant: Volunteer & Composite Fire Department Training & Equipment
- Recommendation:** The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Board support an application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for the Fire Department Training and Equipment program and direct staff to provide overall grant management.
(NWA)
- Attachments:** [Staff Report: Community Emerg Prep Fund Grant: Volunteer & Composite](#)
[Appendix A: UBCM 2022 Volunteer & Composite Fire Dpt Equip & Training App](#)
- 6.8.** [22-657](#) Magic Lake Estates SCADA Communication Upgrades
- Recommendation:** The Magic Lake Estates Water and Sewer Committee recommends the Electoral Areas Committee recommends to the Capital Regional District Board:
That the provisionally approved Magic Lake Estates Water Service 2023-2027 Capital Plan and Budget be amended to include a new Capital Project for 2023 to complete communication improvements at all Magic Lake Estates Water sites with a budget of \$90,000 to be funded from the Water Service Capital Reserve Fund.
(WA)
- Attachments:** [Staff Report: Magic Lake Estates SCADA Communication Upgrades](#)
[Appendix A: SCADA Radio Path Analysis](#)

6.9. [22-634](#) Previous Minutes of Other CRD Committees and Commissions for Information

Recommendation: There is no recommendation. The following minutes are for information only:
a) Mayne Island Parks and Recreation Commission minutes of September 8, 2022
b) Mayne Island Parks and Recreation Commission minutes of October 13, 2022
c) Southern Gulf Islands Harbours Commission minutes of May 27, 2022

Attachments: [Minutes: Mayne Island Parks & Rec Commission - September 8, 2022](#)
 [Minutes: Mayne Island Parks & Rec Commission - October 13, 2022](#)
 [Minutes: SGI Harbours Commission - May 27, 2022](#)

7. Notice(s) of Motion

7.1. [22-676](#) Motion with Notice: Electoral Area Director Remuneration (Director Holman)

Recommendation: That the Electoral Area Director remuneration be maintained at 2022 levels for 2023.
(NWA)

7.2. [22-677](#) Motion with Notice: Sooke Basin Aquaculture Proposal (Director Wickheim)

Recommendation: Move that discussion relating to the aquaculture proposal for the Sooke basin be brought for discussion at the next board meeting.
(NWA)

8. New Business

9. Adjournment

The next meeting is January 11, 2022 at 10:00 am.

To ensure quorum, please advise Tamara Pillipow (tpillipow@crd.bc.ca) if you or your alternate cannot attend.

Meeting Minutes

Electoral Areas Committee

Wednesday, October 12, 2022

11:05 AM

6th Floor Boardroom

625 Fisgard St.

Victoria, BC V8W 1R7

PRESENT

Directors: M. Hicks (Chair), G. Holman (Vice-Chair), P. Brent, C. Plant (Board Chair, ex-officio)

Staff: R. Lapham, Chief Administrative Officer; N. Chan, Chief Financial Officer; K. Lorette, General Manager, Planning and Protective Services; K. Morley, General Manager, Corporate Services; T. Robbins, General Manager, Integrated Water Services; K. Campbell, Senior Manager, Salt Spring Island Administration (EP); S. Carby, Senior Manager, Protective Services; S. Henderson, Senior Manager, Real Estate; J. Starke, Manager, Service Delivery, Southern Gulf Islands Electoral Area; M. Taylor, Manager, Building Inspection; M. Lagoa, Deputy Corporate Officer; T. Pillipow, Committee Clerk (Recorder)

EP - Electronic Participation

The meeting was called to order at 11:31 am.

1. Territorial Acknowledgement

Chair Hicks provided a Territorial Acknowledgement.

2. Approval of Agenda

**MOVED by Alternate Director Brent, SECONDED by Director Holman,
That the agenda for the October 12, 2022 Electoral Areas Committee meeting be
approved as amended with the addition of New Business Item 8.1. Water
Conservation Bylaw Update.
CARRIED**

3. Adoption of Minutes

- 3.1. [22-609](#) Minutes of the July 13, 2022 and September 21, 2022 Electoral Areas Committee Meetings

**MOVED by Alternate Director Brent, SECONDED by Director Holman,
That the minutes of the Electoral Areas Committee meetings of July 13, 2022 and
September 21, 2022 be adopted as circulated.
CARRIED**

4. Chair's Remarks

Chair Hicks acknowledged that after 13 years this is his last meeting at the Capital Regional District, and thanked everyone in attendance.

5. Presentations/Delegations

There were no presentations or delegations.

6. Committee Business

6.1. [22-530](#) Bylaw No. 4514: Tax Exemption (Permissive) Bylaw, 2022

N. Chan spoke to Item 6.1.

MOVED by Director Holman, **SECONDED** by Alternate Director Brent,
The Electoral Areas Committee recommends to the Capital Regional District Board:

1. That Bylaw No. 4514, "Tax Exemption (Permissive) Bylaw, 2022", be introduced and read a first, second and third time;
2. That Bylaw No. 4514 be adopted.

CARRIED

6.2. [22-597](#) 2022/23 B.C. Active Transportation Infrastructure Grant Application - Merchant Mews Pathway

B. Lapham spoke to Item 6.2.

MOVED by Director Holman, **SECONDED** by Alternate Director Brent,
The Salt Spring Island Transportation Commission recommends that the Electoral Areas Committee recommend to the Capital Regional District Board:

That approval be given to submit a 2022/23 Active Transportation Infrastructure grant application for the Salt Spring Island Electoral Area Merchant Mew pathway project in the amount of \$130,000; and further that the project proceed as soon as project funding is approved and local weather conditions allow.

CARRIED

7. Notice(s) of Motion

7.1. [22-610](#) Saturna Island Fire Medical Patient Transportation (Alternate Director Brent)

Alternate Director Brent spoke to Item 7.1.

Discussion ensued on the Fire Society Board consulting with the community.

MOVED by Alternate Director Brent, **SECONDED** by Director Holman,
That staff be directed to report back with amendments to Bylaw No. 2165, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993" to include medical patient transportation.

CARRIED

8. New Business

8.1. Water Conservation Bylaw Update

T. Robbins provided a brief update on the Electoral Areas Water Conservation Bylaw No. 1, 2022 (Bylaw No. 4492).

9. Adjournment

**MOVED by Alternate Director Brent, SECONDED by Director Holman,
That the October 12, 2022 Electoral Areas Committee meeting be adjourned at
11:40 am.
CARRIED**

CHAIR

RECORDER

Meeting Minutes

Electoral Areas Committee

Wednesday, November 23, 2022

1:00 PM

**Suite 510
1675 Douglas St.
Victoria, BC V8W 2G5**

Special Meeting

PRESENT

Directors: P. Brent, G. Holman, A. Wickheim

Staff: T. Robbins, Chief Administrative Officer; N. Chan, Chief Financial Officer; L. Hutcheson, General Manager, Parks and Environmental Services; K. Lorette, General Manager, Planning and Protective Services; K. Morley, General Manager, Corporate Services; K. Campbell, Senior Manager, Salt Spring Island Administration; S. Henderson, Senior Manager, Real Estate and Southern Gulf Islands Administration; I. Lawrence, Senior Manager, Juan De Fuca Local Area Services; E. Sinclair, Senior Manager, Regional and Strategic Planning; F. Lopez, Manager, Strategic Planning; J. Starke, Manager, Service Delivery, Southern Gulf Islands Administration.

Guests: Natalie Hill and Hilary Farson, Consultants and Facilitators

The meeting was called to order at 1:17 pm.

1. Territorial Acknowledgement

N. Chan provided a Territorial Acknowledgement.

2. Approval of Agenda

**MOVED by Director Brent, SECONDED by Director Holman,
That the agenda for the November 23, 2022 Electoral Areas Committee special
meeting be approved.
CARRIED**

3. Presentations/Delegations

There were no presentations or delegations.

4. Special Meeting Matters

4.1. [22-636](#) Electoral Area 1st Strategic Planning Session

N. Hill facilitated the meeting.

Discussion ensued on the Electoral Areas Committee's priorities.

5. Adjournment

MOVED by Director Brent, **SECONDED** by Director Wickheim,
That the November 23, 2022 Electoral Areas Committee special meeting be
adjourned at 4:34 pm.

CARRIED

CHAIR

CERTIFIED CORRECT:

CORPORATE OFFICER

**REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, DECEMBER 14, 2022**

SUBJECT **Saturna Island Fire Protection Society (SIFPS) – Medical
Patient Transportation**

ISSUE SUMMARY

Consideration of Bylaw No. 4534, “Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993, Amendment Bylaw No. 3, 2022”, to enable a contribution to Saturna Island Fire Protection Society for medical patient transportation.

BACKGROUND

On October 12, 2022, in response to a Notice of Motion, the Capital Regional District (CRD) Board passed the following resolution:

That staff be directed to report back with amendments to Bylaw No. 2165, “Saturna Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No.1, 1993” to include medical patient transportation.

On November 21, 2022, consistent with the direction, the Saturna Island Fire and Protection Society (SIFPS) Board made a similar motion (Appendix A).

In 1993, Bylaw No. 2165, “Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993”, established a local contribution service for the purpose of funding the (SIFPS) to provide fire prevention/suppression and emergency response services on Saturna Island. A bylaw amendment is required for the CRD to contribute to SIFPS providing medical patient transportation as part of its emergency response service. Amending Bylaw No. 4534 is included as Appendix B. An unofficial consolidation showing changes is attached as Appendix C.

Within the Southern Gulf Islands, Mayne, Galiano North Pender, South Pender, and Salt Spring Islands all have Provincial Ambulance stations (BCEHS) located on island. On Saturna Island, there is no Provincial ambulance station; instead, residents have relied on Saturna Island Rescue, made up of Emergency Medical Responder (EMR) licensed volunteers, to provide emergency medical transport. These volunteers operate 24 hours a day, 7 days a week.

The scope involves transporting patients from their home or elsewhere on-island, to a helicopter pad, ferry, or government dock, where they await pickup by Provincial Ambulance attendants. Volunteers receive about 50 to 60 dispatch calls each year. Call volumes are growing, with more than 70 forecasted in 2022. With a depleting volunteer pool, they are in need of additional funding to support recruitment training and retention of new volunteers.

A proposed delivery model would enable financial support from the CRD, to supplement the financial support that is provided by the SIFPS, BCEHS and Island Health for medical patient transportation. This bylaw amendment is necessary to allow SIFPS to receive the CRD funding. Without amending Bylaw No. 2165, the SIFPS cannot use its CRD funding to support medical patient transportation. This will not affect the maximum requisition of the current fire service or

the delivery of fire protection by SIFPS.

ALTERNATIVES

Alternative 1:

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

1. That Bylaw No. 4534, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993, Amendment Bylaw No. 3, 2022", be introduced and read a first, second, and third time;
2. That elector approval be obtained by the Electoral Area director consenting on behalf; and
3. That Bylaw No. 4534 be referred to the Inspector of Municipalities for approval.

Alternative 2:

That the Electoral Areas Committee request staff report back with additional information.

IMPLICATIONS

Social Implications

The additional funding enabled through the proposed bylaw amendments will allow the preservation and sustainability of the medical response services on Saturna at similar levels to those provided by BCEHS on neighbouring islands. Without an amendment, the Saturna Island Rescue operating model cannot be sustained and A person in need of medical transportation on Saturna Island may not be provided timely transportation to a Provincial Ambulance attendant. This request supports previous CRD Board priorities and the corporate plan priorities for effective response to emergencies.

Financial Implications

This additional service will require the annual requisition to be increased from \$177,796 in 2022, to \$256,922 in 2023, however this change in bylaw authority will not have an impact on the maximum requisition permitted under Bylaw No. 2165. The maximum requisition is \$311,463 based on 2022 assessment data.

Service Delivery and Risk Implications

The SIFPS is an independent non-profit that operates the fire suppression and emergency response service on-island. CRD does not directly provide this fire service, but contributes towards its costs under Bylaw No. 2165, as regulated by a contribution agreement which may be amended to reflect the medical patient transportation service level change.

As such, CRD will not be a party to the BCEHS patient transportation contract. The contract will be between SIFPS, BCEHS and Island Health. SIFPS will be required to carry appropriate insurance for this work and to ensure it complies not only with its obligations under the fire

contribution agreement with CRD, but also the agreements for transportation with BCEHS and Island Health.

Governance Implications

In order to amend an establishing bylaw, participating area approval and approval from the Inspector of Municipalities is required. The Electoral Area Director can consent on behalf of electors to this change.

For Inspector approval, the Province reviews the bylaw for compliance with applicable local government laws, and looks at any tax implications that may impact the electors. Approval takes at least eight weeks, with most requests being processed within 12 weeks.

CONCLUSION

The proposed Bylaw No. 4534 will amend the existing Bylaw No. 2165 and enable the Saturna Island Fire Protection Society to receive CRD funding to provide medical patient transportation. This amendment will allow the preservation and sustainability of the medical response services on Saturna Island at levels that are similar to those provided by BCEHS on neighbouring islands.

RECOMMENDATION

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

1. That Bylaw No. 4534, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993, Amendment Bylaw No. 3, 2022", be introduced and read a first, second, and third time;
2. That elector approval be obtained by the Electoral Area director consenting on behalf; and
3. That Bylaw No. 4534 be referred to the Inspector of Municipalities for approval.

Submitted by:	Stephen Henderson, Senior Manager, Real Estate and Southern Gulf Islands
Concurrence:	Shawn Carby, Senior Manager Protective Services
Concurrence:	Steve Carey, B.Sc., J.D., Senior Manager, Legal Services & Risk Management
Concurrence	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT(S)

Appendix A: Saturna Island Fire Protection Society request letter

Appendix B: Bylaw No. 4534, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993"

Appendix C: Bylaw No. 2165 unofficial redlined consolidation

APPENDIX A

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: SIFPS endorsement of Bylaw change
Date: Tuesday, November 22, 2022 8:05:58 PM

CAUTION: This Email is from an EXTERNAL source. Ensure you trust this sender before clicking on any links or attachments.

Hi Stephen. As discussed during our telephone meeting November 10th, here is the motion passed by our Board at last evening's SIFPS meeting. Please let me know if you require anything further.

Thanks again!

Ron Monk
Vice President,
SIFPS

SATURNA ISLAND FIRE PROTECTION SOCIETY

Board of Directors Meeting

Monday, November 21st 2022

PRESENT: Ron Monk, Tony Marchigiano, Stephen Hardy, Keith Preston, Tex McLeod, John Wiznuk, Vanessa Verbitsky (SIR Chief), Ian Gaines, Peter Stolting, Melanie Watson, Peter Clark (Fire Chief)

7. Motion to amend CRD Bylaw 2165 to allow medical transport

Moved by Tex McLeod that the Directors of the SIFPS Board support the amendment of CRD bylaw 2165 to allow for medical transport.

2nd- Stephen Hardy, **CARRIED UNANIMOUSLY**

APPENDIX B

CAPITAL REGIONAL DISTRICT BYLAW NO. 4534

A BYLAW TO AMEND THE CONTRIBUTION TO THE SATURNA ISLAND FIRE PROTECTION SOCIETY TO FACILITATE PATIENT TRANSPORTATION (BYLAW NO. 2165)

WHEREAS:

- A. By Bylaw No. 2165, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No.1, 1993", the Regional Board established a contribution towards the cost of fire protection and emergency response services provided by others on Saturna Island In the Southern Gulf Islands Electoral Area; and
- B. The Saturna Island community is in need of emergency patient transportation services, and the current recipient of the contribution can provide these services but requires use of the CRD contribution to do so reliably;
- C. Participating area approval shall be obtained by electoral area director consenting on behalf;
- D. The Board wishes to amend Bylaw No. 2165 to enable the contribution from CRD to be utilize for to provide medical patient transportation as part of its response services;

NOW THEREFORE, the Capital Regional District Board in open meeting assembled hereby enacts as follows:

1. Bylaw No. 2165, "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No.1, 1993", is hereby amended as follows:
 - (a) In the preamble, at B, replacing the words "Electoral Area "G" (Outer Gulf Islands)" with the words "the Southern Gulf Islands Electoral Area" Replacing the words "Electoral Area G (Outer Gulf Islands)" whenever it appears with the words "Southern Gulf Islands Electoral Area";
 - (b) In section 1, inserting the words ", and medical patient transportation" after the words "emergency response services";
 - (c) In section 1, replacing the words "Electoral Area "G" (Outer Gulf Islands)" with the words "in the Southern Gulf Islands Electoral Area";
 - (d) In section 3, replacing the words "Electoral Area "G"" with the words "the Southern Gulf Islands Electoral Area";
 - (e) Replacing section 4 with the following:
 4. The annual cost of providing the Service, net of grants and other revenue, shall be recovered Section 378 of the *Local Government Act* by one or more of the following methods:
 - (a) property value taxes imposed in accordance with Division 3 [*Requisition and Tax Collection*], 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.
- (f) By removing section 7 and its content and renumbering section 8 as section 7;
- (g) By replacing Schedule "A" with the Schedule "A" attached to this bylaw and deleting Schedule "B" in its entirety";
- (h) In section 2, replacing the words "highwater mark." With the words "highwater mark, as shown in Schedule "A".";
- (i) This bylaw may be cited for all purposes as "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No.1, 1993, Amendment Bylaw No. 3, 2022".

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__
APPROVED BY THE ELECTORAL AREA DIRECTOR THIS	th	day of	20__
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS	th	day of	20__
ADOPTED THIS	th	day of	20__

CHAIR

CORPORATE OFFICER

Schedule "A"



APPENDIX C:

CAPITAL REGIONAL DISTRICT

BY-LAW NO. 2165

A BY-LAW TO ESTABLISH A LOCAL SERVICE ON SATURNA ISLAND TO PROVIDE A CONTRIBUTION TO THE COST OF FIRE PROTECTION AND EMERGENCY RESPONSE SERVICES

WHEREAS:

- A. A Regional District may, by bylaw, establish a local service under Section 788 (1)(j) of the Municipal Act to provide contributions to the costs of a service referred to in paragraph (g), interalia, of Section 788, that is provided within the service area by another person or association;
- B. The Regional Board of the Capital Regional District wishes to establish a local service for the purpose of contributing to the cost of fire protection and emergency response services provided by others on Saturna Island in the Southern Gulf Islands Electoral Area, referred to as the "Service Area"; and
- C. The Regional Board has obtained the assent of the electors under Section 796 of the Municipal Act.

NOW, THEREFORE, the Capital Regional Board, in open meeting assembled, ENACTS AS FOLLOWS:

1. The Capital Regional District hereby establishes a Local Service for the purpose of contributing to the costs incurred by the Saturna Island Fire Protection Society of providing fire prevention and suppression and emergency response services, and medical patient transportation on Saturna Island in the Southern Gulf Islands Electoral Area.
2. The boundaries of the Service Area known as "Saturna Island Fire Protection and Emergency Response Contribution Local Service Area" are described as follows:

All those lands known as Saturna Island located in the Cowichan Land District, together with the foreshore and land covered by water that lies between a line drawn two hundred feet (200') perpendicular distant and parallel to the highwater mark on the shore of Saturna Island and the said highwater mark, as shown in Schedule "A".
3. The part of the Southern Gulf Islands Electoral Area described in Section 2 is the sole participating area for the Local Service.
4. The annual cost of providing the Service, net of grants and other revenue, shall be recovered under Section 378 of the Local Government Act by one or more of the following methods:

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Deleted: (Outer Gulf Islands)

Deleted: "G" (Outer Gulf Islands)

Deleted: "G"

(a) property value taxes imposed in accordance with Division 3 [Requisition and Tax Collection], 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.

5. No apportionment of costs is necessary because there is only one participating area.

6. The maximum annual amount that may be requisitioned for the cost of the Local Services will be the greater of:

(a) Seventy Three Thousand and Five Hundred Dollars (\$73,500.00); or

(b) an amount equal to the amount that could be raised by a property value tax rate of \$0.85 per ONE THOUSAND (\$1,000.00) DOLLARS which, when applied to the net taxable value of land and improvements within the Local Service Area, will yield the maximum amount that may be requisitioned under Sections 816(1)(a) and (b) for the local service."

(Bylaw 2734)

Deleted: The annual cost of the Local Service shall be recovered by a requisition of monies under Section 804(l)(a) of the Municipal Act to be collected by a property value tax on land and improvements in the participating area.¶

7. This Bylaw may be cited for all purposes as the "Saturna Island Fire Protection and Emergency Response Local Service Contribution Establishment Bylaw No. 1, 1993".

Deleted: 7.

Deleted: The estimated property value tax rate is calculated as shown on Schedule "A" to this Bylaw.

Deleted: 8

READ A FIRST TIME THIS 8th day of September 1993

READ A SECOND TIME THIS 8th day of September 1993

READ A THIRD TIME THIS 8th day of September 1993

APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS 8th day of October 1993

ASSENT OF THE ELECTORS BY REFERENDUM obtained 20th day of November 1993

RECONSIDERED AND FINALLY ADOPTED THIS 24th day of November 1993

FILED WITH THE INSPECTOR OF MUNICIPALITIES THIS 29th day of November 1993

Signed by
Chairperson

Signed by
Secretary

Deleted: ¶

~~SCHEDULE "A" TO BYLAW NO. 2165~~

~~TAXATION IMPACT~~

~~The estimated taxation impact of providing a financial contribution for fire protection and emergency response services of THIRTY-SIX THOUSAND (\$36,000.00) DOLLARS would be as follows:~~

~~B.C. Assessment Value for 1993~~

~~Actual \$49,918,350. ————— Converted \$5,289,758.~~

~~Impact on a typical improved residential property assessed for taxation at \$100,000.00 would be a rate of .6806 per \$1,000.00 of actual assessment or \$68.06.~~

SCHEDULE "A" TO BYLAW NO. 2165
Map of Service Area

[[[This 2022 Version of the Map represents the same area with current GIS data]]]



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**REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, DECEMBER 14, 2022**

SUBJECT Salt Spring Island Local Community Commission – Implementation

ISSUE SUMMARY

To provide information on the implementation of the Salt Spring Island Local Community Commission.

BACKGROUND

On October 15, 2022, a majority of Salt Spring Island electors assented by referendum to the creation of a Local Community Commission (LCC), to be delegated certain responsibilities for a variety of Salt Spring Island local services. A local community commission is a body made up of elected, not appointed, individuals as well as the Electoral Area Director, with responsibility as delegated to it by the regional board.

The SSI LCC is detailed in Bylaw No. 4507, “Salt Spring Island Local Community Commission Bylaw No. 1”, and the proposed scope of delegated authority in Bylaw No. 4508, “Salt Spring Island Local Community Commission Delegation Bylaw No. 1, 2022”; the draft Bylaws were attached to the July 13, 2022 Electoral Areas Committee report - Appendix C. The purpose of the SSI LCC is to broaden SSI elected oversight and administration of SSI local services, making decision-making regarding these services more locally transparent and reflective of the broad public interest, and to consolidate service delivery oversight.

Bylaw No. 4507 received Provincial approval on August 12, 2022. After adoption, a local election for Salt Spring Island will be scheduled, with a tentative election date of May 27, 2023, with an anticipated first meeting of the LCC with quorum in mid-June, 2023. The new local elected officials will serve until the general election date in 2026.

Prior to the local election date, certain Salt Spring Island commissions will be dissolved, with final reports and transition materials provided to the incoming LCC. Changes will be necessary to various commission and delegation bylaws to complete the transition.

ALTERNATIVES

Alternative 1

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

1. That Bylaw No. 4507, “Salt Spring Island Local Community Commission Bylaw No. 1”, be adopted;
2. That staff proceed with the planning and establishment of a local community commission election with a target date of May 27, 2023, and associated bylaw amendments to dissolve certain commissions which will be assumed by the Salt Spring Island Local Community Commission.

Alternative 2

That this report be referred back to staff for additional information.

IMPLICATIONS

Transition Plan

The services and commissions currently to be assumed by the LCC are set out in Appendix B. Minor changes are also anticipated to Bylaw No. 4186, “Capital Regional District Delegation Bylaw No. 1, 2017”, relating to grants-in-aid; and Bylaw No. 1465, “Animal Regulation and Impounding By-law No. 1, 1986”, to clarify livestock injury claims over \$250 are referred to the LCC. Most commissions will be dissolved as of the date of the first LCC meeting with quorum.

Financial Implications

All costs of the election and administration of the LCC are costs of Salt Spring Island, including Commissioner remuneration. It is anticipated that other corporate resources may be drawn upon in the early days of the establishment of the LCC. If a heightened service level is required, there may be additional financial implications and staffing requests.

Intergovernmental Implications

While the LCC replaces a number of different commissions and will allow for on-island service priority setting, it does not have the fulsome decision making authority of the regional Board relating to bylaws; setting fees and charges; and making decisions regarding staffing.

It also does not have jurisdictional authority over land use matters, which are the realm of the Islands Trust, nor does it have authority to direct bylaw or regulatory enforcement over matters currently dealt with regionally such as nuisance, building inspection, and animal control. Its role will be to set strategic priorities for the services and make recommendations on budgets and long-term goals. Day to day operational decisions, service delivery, and purchasing will remain with CRD staff and designated volunteers per the standard policies and bylaws of the regional district.

Social & Service Delivery Implications

It is anticipated that an LCC will lead to more engagement in on-island matters by residents, due to the larger portion of elected rather than appointed officials.

No major service interruptions are anticipated. However, it may take some time for the LCC to fully learn and understand the scope of all the services it oversees. Once an LCC is established, it is expected there will be a slight delay in reviewing and issuing SSI grants-in-aid, as it is not anticipated the LCC will be able to respond as quickly as the Electoral Area Director acting alone.

CONCLUSION

The establishment of the Salt Spring Island Local Community Commission is ongoing. A local election is anticipated in May 2023 with a quorum of newly elected commissioners and the Electoral Area Director holding the first meeting of the SSI LCC in June 2023.

RECOMMENDATION

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

1. That Bylaw No. 4507, "Salt Spring Island Local Community Commission Bylaw No. 1", be adopted; and
2. That staff proceed with the planning and establishment of a local community commission election with a target date of May 27, 2023, and associated bylaw amendments to dissolve certain commissions which will be assumed by the Salt Spring Island Local Community Commission.

Submitted by:	Steven Carey, J.D., Senior Manager, Legal Services & Risk Management
Concurrence:	Karla Campbell, MBA, BPA, Senior Manager, Salt Spring Island Electoral Area
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT(S)

- Appendix A: Services assumed by LCC
Appendix B: Bylaw No. 4507, "Salt Spring Island Local Community Commission Bylaw No. 1"
Appendix C: EAC Staff Report, July 13, 2022, Bylaws 4507 and 4508: Establishment of Local Community Commission for Salt Spring Island

APPENDIX A

Service Authority	Current Commission	Current Commission Delegation	LCC Delegation
Economic Development Bylaw No. 1824, "Economic Development Commission Establishing Bylaw No. 1, 1990"	SSI Economic Development and Sustainability Commission Bylaw No. 3727, Salt Spring Island Community Economic Sustainability Commission Bylaw, 2010	Advisory	Administrative
Liquid Waste Bylaw No. 2118, "Salt Spring Island Liquid Waste Disposal Additional Local Service Establishment Bylaw No. 1, 1993"	SSI Liquid Waste Disposal Local Service Commission Bylaw No. 3693, "Salt Spring Island Water, Sewer and Liquid Waste Disposal Commission Bylaw No. 1, 2010"	Administrative	Administrative
Parks and Recreation Bylaw No. 4149, "Salt Spring Island Community Parks Services Conversion Bylaw No. 1, 2017" Bylaw No. 4151, "Salt Spring Island Community Recreation Services Conversion Bylaw No. 1, 2017" Bylaw No. 3206, "Salt Spring Indoor Swimming Pool Facility Service Establishment Bylaw No. 1, 2004"; Bylaw No. 2422, "Salt Spring Island Parks and Recreation Facilities Local Service Establishment Bylaw No. 1, 1996" Bylaw No. 2730, "Small Craft Harbour Facilities (Salt Spring Island) Local Service Establishment Bylaw No. 1, 1999";	Parks and Recreation Commission Bylaw No. 3763, "Juan de Fuca and Salt Spring Island Parks and Recreation Advisory Commissions Bylaw No. 1"	Advisory	Administrative
Transit and Transportation Bylaw No. 3438, "Salt Spring Island Community Transit and Transportation Service Establishment Bylaw No. 1, 2007"	Transportation Commission Bylaw No. 3450, "Salt Spring Island Transportation Commission Bylaw No.1, 2007"	Advisory	Administrative
Street Lighting Bylaw No. 3746, "Salt Spring Island Street Lighting Service Establishment Bylaw No. 1, 2011"	None	None	Administrative
Grants in Aid SLP Division XIX, OIC 1013/1977	None	EA director must consent in writing to award.	LCC will decide who to provide grants to. EA director must still consent.
Livestock Injury by Dogs Bylaw No. 4418, "Livestock Injury Compensation Service (Salt Spring Island) Bylaw No. 1, 2021"	None	Staff under \$250, Board over \$250	Staff under \$250, LCC over \$250
Arts Contribution Bylaw No. 3116, "Salt Spring Island Arts Contribution Service Establishing Bylaw No. 1, 2003";	None	None	Advisory
Salt Spring Island Public Library Bylaw No. 2725, "Salt Spring Island Public Library Local Service Area Establishment Bylaw No. 1, 1999";	None	None	Advisory
Salt Spring Island Search and Rescue Bylaw No. 3494, "Salt Spring Island Search and Rescue Service Establishment Bylaw, 2007"	None	None	Advisory

**CAPITAL REGIONAL DISTRICT
BYLAW NO. 4507**

**A BYLAW TO ESTABLISH A LOCAL COMMUNITY COMMISSION FOR
SALT SPRING ISLAND**

WHEREAS:

- A. Salt Spring Island Electoral Area has a number of local, sub-regional, and island-wide services;
- B. Under the *Local Government Act*, RSBC 2015 c 1, a regional district may establish, by bylaw, one or more local communities to be administered by local community commission, provided the electors in the area of the local community assent to the creation of the commission;
- C. The Capital Regional District Board wishes to establish a local community commission for Salt Spring Island, with the scope of authority as set out in this bylaw and such other bylaws as adopted from time to time;

NOW THEREFORE, the Capital Regional District Board in open meeting assembled hereby enacts as follows:

CREATION OF LOCAL COMMUNITY COMMISSION

1. A local community is hereby established, to be known as "Salt Spring Island", and a local community commission is hereby established, to be known as the "Salt Spring Island Local Community Commission" (hereinafter the "Commission").

BOUNDARIES

2. The boundaries of the Salt Spring Island local community are those of the Salt Spring Island Electoral Area.

SCOPE OF AUTHORITY

3. Subject to the policies and procedures of the Regional Board and limitations in its bylaws and the *Local Government Act*, the Commission may oversee and exercise powers and duties as set out by bylaw in relation to the following Salt Spring Island services:
 - (a) Economic development as set out in Bylaw No. 1824, "Economic Development Commission Establishing Bylaw No. 1, 1990", as it relates to Salt Spring Island;
 - (b) Wastewater disposal set out in Bylaw No. 2118, "Salt Spring Island Liquid Waste Disposal Additional Local Service Establishment Bylaw No. 1, 1993";
 - (c) Community parks service continued under Bylaw No. 4149, "Salt Spring Island Community Parks Services Conversion Bylaw No. 1, 2017";
 - (d) Community recreation service continued under Bylaw No. 4151, "Salt Spring Island Community Recreation Services Conversion Bylaw No. 1, 2017";
 - (e) Indoor swimming pool service in Bylaw No. 3206, "Salt Spring Indoor Swimming Pool Facility Service Establishment Bylaw No. 1, 2004";

- (f) Community parks and recreation facilities in Bylaw No. 2422, "Salt Spring Island Parks and Recreation Facilities Local Service Establishment Bylaw No. 1, 1996";
- (g) The Salt Spring Island Small Craft Harbour Facilities local service set out in Bylaw No. 2730, "Small Craft Harbour Facilities (Salt Spring Island) Local Service Establishment Bylaw No. 1, 1999";
- (h) Transportation service established under Bylaw No. 3438, "Salt Spring Island Community Transit and Transportation Service Establishment Bylaw No. 1, 2007";
- (i) Street lighting under Bylaw No. 3746, "Salt Spring Island Street Lighting Service Establishment Bylaw No. 1, 2011";
- (j) The issuance of grants-in-aid for Salt Spring Island initiatives under Supplementary Letters Patent Division XIX, OIC 1013/1977, subject always to the restriction on assistance to business under the *Local Government Act*;
- (k) Determination of compensation for livestock injury by dogs under Bylaw No. 4418, "Livestock Injury Compensation Service (Salt Spring Island) Bylaw No. 1, 2021";
- (l) The arts contribution service set out in Bylaw No. 3116, "Salt Spring Island Arts Contribution Service Establishing Bylaw No. 1, 2003";
- (m) The Salt Spring Island Public Library local service set out in Bylaw No. 2725, "Salt Spring Island Public Library Local Service Area Establishment Bylaw No. 1, 1999";
- (n) The Salt Spring Island Search and Rescue contribution as set out in Bylaw No. 3494, "Salt Spring Island Search and Rescue Service Establishment Bylaw, 2007";

ADVISORY COMMITTEES

- 4. The Commission may create advisory bodies, subject to prior approval of the Regional Board.

LOCAL COMMUNITY COMMISSION & ELECTORAL AREA DIRECTOR

- 5. The Electoral Area Director may consult with the Commission on matters of local importance, but is not bound by that advice or direction. The Commission cannot restrict the Electoral Area Director's decision-making authority at the Regional Board.

ELIGIBILITY

- 6. To be eligible for election as a commissioner, individuals must be eligible as a director under the *Local Government Act*.

COMPOSITION & TERM

- 7. The Commission shall have the following number of voting members, each having one vote:
 - (a) The Salt Spring Island Electoral Area Director; and
 - (b) Four individuals qualified in accordance with this bylaw to act as commissioners.
- 8. The local community shall elect commissioners at the end of each four year term in accordance with the manner provided in Part 3 [*Electors and Elections*] of the *Local Government Act*.
- 9. Commissioners are not permitted to appoint an alternate to act in their absence.

REMUNERATION AND EXPENSES

10. Commissioners shall receive an annual stipend or payment per meeting, and shall be reimbursed for necessary expenses incurred in the course of carrying out Commission business, as per applicable CRD Board policies.

DEATH, RESIGNATION, DISQUALIFICATION AND TERMINATION

11. A commissioner's appointment ends on the end of election term; resignation; death; incapacity; or ceasing to be qualified as a commissioner.
12. Resignation is effective on receipt of written notice of resignation to the Regional District's Corporate Officer.

ABSENCES

13. If a commissioner is absent for more than four consecutive regularly scheduled commission meetings or 60 consecutive days, subject to leave of the Regional Board or illness or injury, the commissioner may be removed by the Regional Board.

CONDUCT OF MEETINGS AND QUORUM

14. A quorum of the Commission is a majority of its members.
15. Regular meetings shall be held once per month at a time and date set by resolution of the Commission, in consultation with Regional District staff.
16. The Commission shall observe at its meetings the procedural rules set out in Bylaw No. 3828, "Capital Regional District Board Procedures Bylaw, 2012" (the "CRD Procedures Bylaw").
17. Each Commissioner shall have one vote.
18. The rules, policies, procedures and bylaws which govern the Regional Board shall apply to the Commission where applicable.
19. All meetings of the Commission must be held in a public facility and must be open to the public. Meetings may be closed, where authorized by law.
20. The Commission may meet by electronic means, where the requirements in the CRD Procedures Bylaw are met.
21. If, as a result of members of the Commission declaring a conflict of interest in relation to a matter, and as a consequence, there is no longer a quorum of members of the Commission to decide on a particular issue, the issue shall be referred to the Regional Board for a decision.

ANNUAL MEETING & OFFICERS

22. On or before the last day of January of each year, the Commission shall hold an annual meeting (the "Annual Meeting") for the purpose of electing a Chair and Vice-Chair from among its number, to hold such office until the next Annual Meeting. Voting shall be by show of hands, or, if a secret ballot is requested by a member present, by secret ballot.
23. In the event of a vacancy of an officer, the Commission may, by the methods set out in section 22, select another commissioner to fill the vacant officer role until the next Annual Meeting.

RECORD KEEPING

24. The Commission shall comply with all public record keeping requirements under the *Community Charter, Local Government Act*, and other applicable legislation.

CITATION

25. This bylaw may be cited for all purposes as "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022".

READ A FIRST TIME THIS	13 th	day of	July,	2022
READ A SECOND TIME THIS	13 th	day of	July,	2022
READ A THIRD TIME THIS	10 th	day of	August,	2022
APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS	12 th	day of	August	2022
APPROVED BY ELECTOR ASSENT THIS	15 th	day of	October	2022
ADOPTED THIS	th	day of		20__

CHAIR

CORPORATE OFFICER

**REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, JULY 13, 2022**

SUBJECT **Bylaws 4507 and 4508: Establishment of Local Community Commission for Salt Spring Island**

ISSUE SUMMARY

To create an elected body with a scope of authority over specified island-wide services for Salt Spring Island, known as a local community commission.

BACKGROUND

The Electoral Area Director for Salt Spring Island in consultation with a group of Salt Spring Island residents, has requested the Capital Regional District (CRD) advance the creation of a local community commission ("LCC") for Salt Spring Island. An LCC is a type of regional district commission with delegated authority over specified local services, comprised of elected, rather than appointed, membership. The purpose of this LCC proposal is to broaden CRD elected oversight and administration of certain delegated local services, make decision-making regarding these services more locally transparent and reflective of the broad public interest, and to consolidate the fragmented nature of CRD service delivery through appointed, individual commissions.

Bylaw No. 4507, "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022", has been prepared to allow consideration of the establishment of a new LCC for Salt Spring Island (Appendix A). To create the LCC, Bylaw No. 4507 must be introduced and given three readings by the Board, before being referred to the Ministry for approval and to electors for assent by referendum. The referendum question must be approved by the CRD Board to be placed on the ballot during the upcoming general voting day on October 15, 2022. If the electors are in favour, the bylaw may be adopted by the CRD Board and an election for the four public members of the LCC will be held in 2023 in accordance with the *Local Government Act* ("LGA"). After the LCC members are elected, CRD would adopt Bylaw No. 4508 and take steps to dissolve the other commissions who currently have delegated authority over the services intended to be administered by the LCC.

Proposed Bylaw No. 4508 sets out the scope of delegated authority over the services overseen by the proposed LCC. The scope of the LCC includes island-wide services currently overseen by existing commissions, such as parks and recreation, transportation, economic development, and liquid waste disposal. The scope also includes services currently overseen by staff and the EA Directors, including street lighting, determination of compensation of livestock injury by dogs, and the approval of grant-in-aid applications. The LCC would also have an advisory role to review and recommend budgets for SSI contribution services that receive CRD funding, including the arts contribution service, the public library service, and the search and rescue service. The full list of proposed services are included in Bylaw No. 4507 attached as Appendix A. Area-specific services, such as wastewater and water services, would continue to be overseen by commissions comprised of ratepayers from these service areas.

Should the Salt Spring Island community wish to expand the scope of services or dissolve the LCC in future, a referendum or Alternative Approval Process would be necessary to amend or repeal the LCC establishing bylaw, unless the Inspector of Municipalities consented to waiving the elector asset process, which is an alternative in section 244 of the *Local Government Act*.

The creation of an LCC will not alter the Salt Spring Island Electoral Area's relationship with Islands Trust, which is responsible for the local planning function under the *Islands Trust Act*, RSBC 1996, c 239.

ALTERNATIVES

Alternative 1

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

1. Bylaw No. 4507, "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022", be introduced and read a first, second, and third time;
2. That CRD staff be directed to implement the elector approval process by way of referendum;
3. That Kristen Morley be appointed Chief Election Officer with the power to appoint one or more Deputy Chief Election Officer(s);
4. That the wording of the referendum question for the purposes of the ballot shall be as follows:

Are you in favour of the Capital Regional District (CRD) Board adopting Bylaw No. 4507, "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022", authorizing the establishment of a local community commission for the Salt Spring Island Electoral Area, to be comprised of four elected commissioners and the Electoral Area Director, to oversee and advise on economic development, wastewater disposal, community parks and recreation, small craft harbour facilities, transit and transportation, street lighting, grants-in-aid, compensation for livestock injured by dogs, and the contribution services for arts, public library, and search and rescue?

YES or NO?

5. That general voting be held on Saturday, October 15, 2022, with Advance Voting opportunities held on dates and voting places to be determined by the Chief Election Officer;
6. That the synopsis of Bylaw No. 4507, attached as Appendix B, be approved for advertising purposes.
7. That Bylaw No. 4508, "Salt Spring Island Local Community Commission Delegation Bylaw No. 1, 2022", be introduced and read a first, second, and third time.

Alternative 2

The Electoral Areas Committee recommends to the Capital Regional District Board that this matter not proceed.

IMPLICATIONS

Governance Implications

Creation of an LCC, with an elected membership, is the highest form of delegated government contemplated in an electoral area under the *Local Government Act*. An LCC permits Salt Spring Island to elect individuals who will oversee certain local services giving the electoral area delegated authority over its services rather than having decisions made by the Board.

The LCC would be comprised of 5 members, one of which is the Electoral Area Director for SSI, and four other commissioners that would be elected by residents on Salt Spring Island. Elections for LCC members follow the same requirements as Director elections under the *LGA*. If approved, the first election would take place in late spring of 2023. In subsequent years, LCC members would be elected at the time of the General Local Election. The LCC will elect a Chair and Vice-Chair annually from its commissioners. Each LCC member has one vote. The EA Director has the same status and authority as all other members of the LCC on services delegated to the LCC. By legislation, only the EA Director is entitled to sit and vote at the Regional Board. On referral by the Regional Board, the LCC can make recommendations to the Director; however, the LCC cannot fetter the discretion of the Director on issues not delegated to the LCC.”

Should a vacancy occur in a commissioner’s term, the *Local Government Act* does permit alternatives to a general election provided they are set out in the LCC bylaw. Bylaw No. 4507 permits voting by mail, a less costly alternative to a general election; as well as appointment by the CRD Board after a public solicitation process and consultation with the current LCC. Both options would save the local community the cost of a by-election in certain circumstances, while also retaining the ability to hold a by-election based on costs, length of the remaining term, and other factors of importance to the community.

Given the wide scope of authority assigned to the LCC under the establishing bylaw, staff recommend that the LCC commissioners be remunerated for their services. On adoption of the LCC establishing bylaw, staff would bring forward amendments to the Board Remuneration and Travel Expense Policy to include remuneration for the LCC members, prior to starting the election process for the commissioners.

If the LCC wishes to make changes to its establishing bylaw in future, it requires elector approval, unless the Inspector of Municipalities waives this requirement. While the LCC is proposed to have a wide scope of authority over many island-wide services, the LCC is still subject to the same restrictions as other commissions with respect to the powers of the Regional Board including the adoption of bylaws or approval of budgets.

The level of delegation proposed for the LCC is set out in the draft delegation bylaw, Bylaw No. 4508, “Salt Spring Island Local Community Commission Delegation Bylaw No. 1, 2022”. Bylaw 4508 is not subject to elector approval, but is recommended for three reading by the Board, with adoption held pending adoption of the LCC bylaw and election of its membership.

If the LCC is established, the existing Salt Spring Island Liquid Waste Commission, Transportation Commission, and Parks and Recreation Commission, and Economic Sustainability Commission will be dissolved, with the current scope of authority falling to the LCC.

A number of other commissions with varying levels of delegated authority are already in place on Salt Spring Island, and throughout the CRD. CRD has authority under the *LGA* to create commissions that are delegated the powers, duties and functions of the Regional Board. One fundamental difference is that a non-LCC commission has appointed, rather than elected, membership, giving additional flexibility relating to appointments, and costly elections can be avoided. A benefit of a non-LCC commission is that its membership can be structured in creative ways defined by bylaw, to ensure its members provide a full range of community representation, such as including representation from interested First Nations, public authorities, community groups, or individual residents of a sub-local area. This is not possible with an LCC where the commissioners are elected and remunerated. That said, unlike an LCC, a traditional delegated commission created by bylaw may be altered or amended without an elector approval process. The process of elector assent to create the LCC and election of LCC commissioners does allow the maximum level of community input into creating a commission.

Financial Implications

There will be added administration and legislative services support if an LCC is established. An LCC will have commissioner remuneration and expenses and costs related to technological requirements. Capital upgrades may be required for SSI meeting facilities to facilitate public participation by webcasting and to allow for electronic meetings. It is anticipated that some of the legislative and administration support costs will be offset by dissolving some of the existing Commissions, however it is expected that there will be a significant increase in the activity of the LCC with respect to the additional number of other services included in their oversight.

The preliminary estimate for additional staffing, elections, remuneration, equipment, software and establishing an election and equipment replacement reserves are outlined below. Some of these costs are one-time costs and others are ongoing costs. LCC ongoing costs will be pro-rated depending on the timing of an election in 2023.

Costs	One-Time	Ongoing
1.2 FTE		\$106,110
Election	\$60,000	
Election reserve		\$15,000
Commissioner remuneration		\$40,000
Tablets	\$10,000	
Software		\$2,500
Transfer to equipment replacement reserve		\$5,000
Sub-total	\$70,000	\$168,610

Service Delivery Implications

The LCC will have purchasing authority in conjunction with the authority already delegated to staff by the Regional Board. It will also oversee approvals of grants-in-aid currently delegated to the Chief Financial Officer and Chief Administrative Officer, on the recommendation of the Electoral Area Director.

CONCLUSION

The creation of a local community commission for Salt Spring Island will permit greater elected representation for the electoral area and greater involvement in the administration of island-wide services, with the potential for elected members to advise on other on-island services or issues. The creation of such a commission is subject to elector assent or referendum vote.

RECOMMENDATION

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

1. Bylaw No. 4507, "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022", be introduced and read a first, second, and third time;
2. That CRD staff be directed to implement the elector approval process by way of referendum;
3. That Kristen Morley be appointed Chief Election Officer with the power to appoint one or more Deputy Chief Election Officer(s);
4. That the wording of the referendum question for the purposes of the ballot shall be as follows:

Are you in favour of the Capital Regional District Board adopting Bylaw No. 4507, "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022", authorizing the establishment of a local community commission for the Salt Spring Island Electoral Area, to be comprised of four elected commissioners and the Electoral Area Director, to oversee and advise on economic development, wastewater disposal, community parks and recreation, small craft harbour facilities, transit and transportation, street lighting, grants-in-aid, compensation for livestock injured by dogs, and the contribution services for arts, public library, and search and rescue?

YES or NO?

5. That general voting be held on Saturday, October 15, 2022, with Advance Voting opportunities held on dates and voting places to be determined by the Chief Election Officer;
6. That the synopsis of Bylaw No. 4507, attached as Appendix B, be approved for advertising purposes.
7. That Bylaw No. 4508, "Salt Spring Island Local Community Commission Delegation Bylaw No. 1, 2022", be introduced and read a first, second, and third time.

Submitted by:	Karla Campbell, MBA, BPA, Senior Manager, Salt Spring Island Electoral Area
Concurrence:	Steven Carey, B.Sc, J.D., Acting General Manager, Corporate Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

ATTACHMENTS

Appendix A: Bylaw No. 4507, "Salt Spring Island Local Community Commission Establishment Bylaw No. 1, 2022"

Appendix B: Synopsis of Bylaw No. 4507

Appendix C: Bylaw No. 4508, "Salt Spring Island Local Community Commission Delegation Bylaw No. 1, 2022"

**REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, DECEMBER 14, 2022**

SUBJECT **Bylaw Nos. 4524 and 4525: Fees and Charges Bylaw Amendments for Utilities within the Three Electoral Areas**

ISSUE SUMMARY

To update the utilities rates for the three electoral areas as recommended by the respective Commissions, and as included in the 2023 Financial Plan.

BACKGROUND

Annually, amendments to the Electoral Area utilities fees and charges bylaws are recommended to reflect the rates included in the service budgets and preliminary financial plan for the forthcoming year. All local service commissions have recommended their respective 2023 budgets, inclusive of the changes to fees and charges except Wilderness Mountain Water Service Commission.

Budget reviews were conducted with the Wilderness Mountain Water Service Commission twice on November 21 and 28, 2022 resulting in the Commission not recommending the presented 2023 Operating and Capital Budget, which received provisional approval from CRD Board on September 21, 2022. The Commission passed a motion which included recommending 0% increase in all 5 years 2023-2027, which would result in removal of funding for asset system maintenance and planned capital upgrades. Taking consideration of Commission's recommendation, staff are proceeding with a budget increase of 0% with projected future increase of 7%, 5%, 2% and 2% in subsequent years of 2024-2027. The Fees and Charges included in Bylaw No.4524 reflects 0% increase in 2023. The commission will be engaged for further discussion regarding sustainable service delivery and prudent financial planning for future years.

The proposed fee and charges amendments are intended to cover the projected net cost of service delivery inclusive of reserve contributions for the upcoming year. Board approval is required in advance of the effective billing period January 1 through December 31, 2023.

With final surplus and deficits not yet completed, results will be monitored to identify any material impact, and these would be incorporated into a rate adjustment and bylaw amendment after final year end results.

Appendix C contains a comparison of changes to rates contained in each of the two bylaws: Bylaw No. 4524 (Appendix A) and Bylaw No. 4525 (Appendix B).

Bylaw No. 4524 covers all Southern Gulf Islands and Juan de Fuca Electoral Areas Sewer, Water and Street Lighting Fees and Charges, and Bylaw No. 4525 covers all Salt Spring Island Electoral Area Sewer, Water and Liquid Waste Disposal Fees and Charges.

ALTERNATIVES

Alternative 1

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

1. That Bylaw No. 4524, "Southern Gulf Islands and Juan de Fuca Electoral Areas Utilities and Street Lighting Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 11, 2022", be introduced and read a first, second, and third time.
2. That Bylaw No. 4524 be adopted.
3. That Bylaw No. 4525, "Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 16, 2022", be introduced and read a first, second, and third time.
4. That Bylaw No. 4525 be adopted.

Alternative 2

That this report be referred back to staff for additional information.

IMPLICATIONS

Financial Implications

Changes in fees and charges are required in order for local utility services in the three Electoral Areas to maintain adequate levels of funding for annual operating costs inclusive of reserve contributions and debt servicing. The recommended rates are effective for January 1 through December 31, 2023 and reflect estimates of the 2022 surplus and deficit.

CONCLUSION

Utilities within the Electoral Areas require changes to fees and charges, to reflect user fees required to fund operating and capital budgets. The Commissions have recommended their respective 2023 service budget for Board approval; this approval is required prior to January 1, 2023, in order to attain the revenue targets specified in the 2023 service budgets.

RECOMMENDATION

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

1. That Bylaw No. 4524, "Southern Gulf Islands and Juan de Fuca Electoral Areas Utilities and Street Lighting Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 11, 2022", be introduced and read a first, second, and third time.
2. That Bylaw No. 4524 be adopted.
3. That Bylaw No. 4525, "Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 16, 2022", be introduced and read a first, second, and third time.
4. That Bylaw No. 4525 be adopted.

Submitted by:	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer
Concurrence:	Ian Jesney, Peng., Acting General Manager, Integrated Water Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT(S)

Appendix A: Bylaw No. 4524 and Schedules

Appendix B: Bylaw No. 4525 and Schedules

Appendix C: Changes to Fees & Charges Summary

CAPITAL REGIONAL DISTRICT

BYLAW NO. 4524

**A BYLAW TO AMEND BYLAW 3847 TO UPDATE FEES AND CHARGES FOR UTILITY
SERVICES WITHIN THE SOUTHERN GULF ISLANDS AND
JUAN DE FUCA ELECTORAL AREAS**

The Board of the Capital Regional District in open meeting assembled enacts as follows:

- 1. Bylaw No. 3847 "Southern Gulf Islands and Juan de Fuca Electoral Areas Utilities and Street Lighting Fees and Charges Bylaw No. 1, 2012" is amended as follows:
 - a) By removing SCHEDULE "C" in its entirety and replacing it with SCHEDULE "C" attached hereto.
- 2. Citation:

This Bylaw may be cited as "Southern Gulf Islands and Juan de Fuca Electoral Areas Utilities and Street Lighting Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 11, 2022".

READ A FIRST TIME THIS	th	DAY OF	202__
READ A SECOND TIME THIS	th	DAY OF	202__
READ A THIRD TIME THIS	th	DAY OF	202__
ADOPTED THIS	th	DAY OF	202__

CHAIR

CORPORATE OFFICER

SCHEDULE "C"1. Water, Sewer, and Port Renfrew Street Lighting

a) For Single Family Equivalent, the user fees payable by Service Area shall be:

Service Area	Annual Charge • 25% of which is billed each 3 months
Skana Water	\$1,181.80 per Single Family Equivalent connected to the water system
Surfside Park Estates Water	\$1,447.72 per Single Family Equivalent connected to the water system
Lyall Harbour/ Boot Cove Water	\$730.88 per Single Family Equivalent connected to the water system
Magic Lake Estates Sewer	\$416.04 per Single Family Equivalent connected to the sewer system
Magic Lake Estates Water	\$356.38 per Single Family Equivalent connected to the water system
	Quarterly Consumption Charge, effective as of July 1, 2013: $>50 \text{ m}^3 = \$0.50 \text{ m}^3$ $>80 \text{ m}^3 = \$1.00 \text{ per m}^3$
Sticks Allison Water	\$1,749.70 per Single Family Equivalent connected to the water system
	Excess Consumption Fee – for metered water use per service connection in excess of 110 cubic metres per three months: \$5.00 per cubic metre
Wilderness Mountain Water	Consumption Charge: \$20.00 per month for each Single Family Equivalent connected to the water system Annual User Charge: \$992.80 per annum for each Single Family Equivalent connected to the water system
Port Renfrew Water Annual User Charge	\$209.93 per Unit (see Section 1b) billed in four equal payments
Port Renfrew Sewer Annual User Charge	\$662.10 per Unit (see Section 1b) billed in four equal payments
Port Renfrew Street Lighting	\$41.78 per User

(Schedule "C" continued on next page)

- b) For other Consumers, the annual charge, 25% of which is billed each three months, is calculated as "N" times the total annual Single Family Equivalent. "N" is determined as outlined in the following chart, except as noted in Sections 1c and 1d.

Use	"N"
Bed and Breakfast – each building	1.00
Hotel/Motel – each housekeeping unit	1.00
Cabin – each unit	1.00
Mobile home park – per space	1.00
Commercial building housing 1 business	
Up to 3 employees	1.25
4 or more employees	1.50
Commercial building housing more than 1 business	
Each business up to 3 employees	1.25
Each business 4 or more employees	1.50
Restaurant	2.00
Church	1.00
School – for each classroom	1.00
Hospital – for each bed	1.00
Other – for each 1,360 litres of daily winter water consumption. Estimated flows will be based on regulations or guidelines issued pursuant to the BC <i>Health Act</i> .	1.00

- c) For the Lyall Harbour/Boot Cover Water Service Area

Use	"N"
Commercial building housing 1 business	
Up to 3 employees	1.00
4 or more employees	2.00
Commercial building housing more than 1 business	
Each business up to 3 employees:	1.00
Each business with 4 or more employees:	2.00

- d) For Port Renfrew Water and Sewer Service Areas:
If the Single Family Equivalent has not been designated in 1b, the unit calculation will be based on the **Minimum Daily Design Flow** as specified in the *Sewerage System Standard Practice Manual*, Version 2, September 21, 2007, prepared by the BC Onsite Sewage Association.

CAPITAL REGIONAL DISTRICT

BYLAW NO. 4525

**A BYLAW TO AMEND BYLAW 3864 TO UPDATE FEES AND CHARGES FOR UTILITY
SERVICES AND LIQUID WASTE DISPOSAL WITHIN THE
SALT SPRING ISLAND ELECTORAL AREA**

The Board of the Capital Regional District in open meeting assembled enacts as follows:

1. Bylaw No. 3864 "Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges Bylaw No. 1, 2012" is amended as follows:
 - a) By removing SCHEDULE "B" in its entirety and replacing it with SCHEDULE "B" attached hereto.
 - b) By removing SCHEDULE "C" in its entirety and replacing it with SCHEDULE "C" attached hereto.
2. Citation:

This Bylaw may be cited as "Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges Bylaw No. 1, 2012, Amendment Bylaw No. 16, 2022".

READ A FIRST TIME THIS	th	DAY OF	202__
READ A SECOND TIME THIS	th	DAY OF	202__
READ A THIRD TIME THIS	th	DAY OF	202__
ADOPTED THIS	th	DAY OF	202__

CHAIR

CORPORATE OFFICER

SCHEDULE "B"1. Water Service Turn On and Turn Off Fee

Pursuant to Section 4, the fee for turning on or turning off the water supply at the curb stop is the following. The fees payable herein shall be paid to the CRD on application for the service.

- | | | |
|-----|--|----------|
| (a) | During Normal Working Hours (07:30 – 16:00) Monday through Friday (non-inclusive of statutory holidays): | \$75.00 |
| | Fulford Water only | \$150.00 |
| (b) | During Non-Working Hours: | \$200.00 |

(Schedule "B" continued on next page)

2. Water and Sewer User Fees

The user fees payable shall include a fixed fee and a variable consumption charge based on the volume of water metered as outlined below:

(a) Fixed Fee

Service Area	Annual Charge, 25% of which is billed each three months
Cedars of Tuam	\$1,941.18 per single family dwelling unit or equivalent
Cedar Lane	\$1,417.95 per single family dwelling unit or equivalent
Beddis	\$1,021.02 per single family dwelling unit or equivalent
Highland	\$0 per single family dwelling unit or equivalent
Fernwood	\$0 per single family dwelling unit or equivalent
Highland and Fernwood	\$1,217.09 per single family dwelling unit or equivalent
Maliview	\$1,888.61 per single family dwelling unit or equivalent
Fulford	\$1,572.18 per single family dwelling unit or equivalent Other: No Fixed Fee

(b) Consumption Charge based on volume of water metered

The Consumption Charge for water or sewer will be the total volume of water metered to the water service connection, measured in cubic metres (or other units converted to cubic metres) over a three-month billing period, at a rate as follows:		
Service Area	Volume of Water	Charge
Cedars of Tuam	First 38.0 cubic metres or portion	\$7.00 per cubic metre
	Greater than 38.0 cubic metres	\$18.00 per cubic metre
Cedar Lane	First 30.0 cubic metres or portion	\$2.50 per cubic metre
	31.0 to 60.0 cubic metres or portion	\$9.00 per cubic metre
	Greater than 61 cubic metres	\$25.00 per cubic metre
Beddis	First 38.0 cubic metres or portion	\$3.10 per cubic metre
	Next 68.0 cubic metres or portion	\$6.30 per cubic metre
	Greater than 106 cubic metres	\$8.50 per cubic metre
Highland and Fernwood	First 38.0 cubic metres or portion	\$0.64 per cubic metre
	Next 68.0 cubic metres or portion	\$2.00 per cubic metre
	Greater than 106 cubic metres	\$5.13 per cubic metre
Maliview	\$1.75 per cubic metre of total water provided or delivered to the single family dwelling unit or equivalent served by the sewer connection to the CRD Highland Water System	
Fulford	Single Family Residential: No Consumption Charge	
	Other: \$3.27 per cubic metre	
	Minimum Consumption Charge per three months is \$393.04 per service connection.	

SCHEDULE “C”

Liquid Waste Receiving Facility

1. Disposal Fees and Charges

Every Hauler depositing Liquid Waste at the Liquid Waste Receiving Facility shall pay the following fees and charges:

Fees:	
Septage	\$104.49 per cubic metre (\$0.475 per imperial gallon)
Sewage	\$104.49 per cubic metre (\$0.475 per imperial gallon)
Facility User Permit	\$50.00 per Septage waste disposal truck per annum (valid for a period from January 1 of each year until December 31 of the subject year). This fee is not pro-rated in the first year of this schedule coming into force.
Charges:	
Call Out Charge	\$75.00 per hour; minimum charge \$150 first 2 hours
After Hours Call Out	\$75.00 per hour; minimum charge \$150 first 2 hours

2. Definitions:

The following terms, words and phrases when used in this schedule shall have the meanings set forth in this contained in this schedule:

“**CRD**” means the Capital Regional District.

“**Call Out Charge**” means a charge issued to any person who uses the Liquid Waste Receiving Facility due to an event directly attributable to a person(s) actions requiring CRD personnel to attend the Liquid Waste Receiving Facility.

“**Discharge**” means to directly or indirectly introduce a substance into a Sewer or sewage facility by spilling, disposing of, abandoning, depositing, leaking, seeping, pouring, draining, emptying or by any other means.

“**Facility Access Permit**” means a Facility Access Permit issued by the CRD.

“**Generator**” means an owner or occupier of property from which the Liquid Waste originates that is being trucked to a facility for disposal.

“**Hauler**” means a person or company who transports Liquid Waste from a Generator to a Liquid Waste facility for disposal.

“**Local Service Area**” means the Local Service Area established under bylaw 2118 Salt Spring Island Liquid Waste Disposal Additional Local Service Establishment Bylaw No. 1, 1993.

“**Load of Liquid Waste**” means the Liquid Waste being delivered by the hauling vehicle.

“**Liquid Waste**” means Septage and/or Sewage Sludge.

“**Liquid Waste Receiving Facility**” means the Salt Spring Liquid Waste facility that receives Trucked Liquid Waste, more particularly described as located off Burgoyne Bay Road, Salt

Spring Island (part of the North ½ of Section 4, Range 1, South Salt Spring Island, Cowichan District).

“Measured volume” means the actual volume of Liquid Waste Discharged at the designated Liquid Waste Receiving Facility as measured by the flow meter installed at the facility.

“Municipality” means a municipality or electoral area participating in the Local Service Area and/or the CRD itself.

“Prohibited Waste” means Hazardous Waste as defined by the *Hazardous Waste Regulation*.

“Septage” means a combination of liquid and solid wastes and/or settled solids from residences, businesses, institutions and industries normally collected in a Septic Tank or holding tank.

“Septic Tank” means a chamber made of concrete, fiberglass, PVC or plastic, through which domestic wastewater flows for primary treatment

“Sewage Sludge” means the primary or secondary Sewage Sludge from a sewage treatment plant.

“Sewer” means all pipes, conduits, drains and other equipment and facilities owned or otherwise under the control or jurisdiction of the CRD for collecting, pumping and transporting wastewater, either to a Sewage Facility or otherwise.

“Trucked Liquid Waste” means any Liquid Waste that is collected and transported from the site where the Liquid Waste originated by means other than Discharge to a Sewer, including but not limited to: Septic Tank waste, chemical toilet contents, oil and grease from interceptors or traps and other sludges of organic or inorganic origin.

“Trucked Waste Manifest” means a form provided by the CRD to be completed by the Generator, or agent acting on behalf of the Generator, and Hauler of Septage as a condition of using a Liquid Waste Receiving Facility.

3. User Fees:

- a) The Liquid Waste disposal fee set out in Section 1 will be imposed on every Hauler depositing Liquid Waste at the Liquid Waste Receiving Facility and shall be paid in accordance with this bylaw.
- b) The fees charged will be calculated by multiplying the measured volume of Liquid Waste Discharged by the unit rate set out in Section 1. Where no measured volume is available, the fees charged will be calculated by multiplying the unit rate by the volume of a full load of Liquid Waste from the Haulers truck as specified in the operator’s manual for the Haulers truck.

4. Credit:

- a) Persons depositing Liquid Waste at the Liquid Waste Receiving Facility on a regular basis may apply to the CRD for credit. If the CRD is satisfied of the credit worthiness of the

Hauler, credit may be granted, in which case payment of the user fees imposed under Section 3 shall be made and credit extended under the following conditions:

- i. The person receiving credit shall pay to the CRD all fees in full within thirty (30) days of the last day of the month for which an invoice has been submitted. The CRD will invoice monthly for Liquid Waste delivered during the preceding month. The invoice amount will be based on the total quantity of the waste delivered during the month, and the posted rates in effect at the time of delivery.
- ii. Late payment(s) will be subject to an interest penalty of 1.5% per month.
- iii. The CRD reserves the right to cancel, upon five (5) days' notice, the credit offered herein for late payment, non-payment or other justified cause as judged solely by the CRD.

5. Regulations:

- a) Persons, including Generators or Haulers of Liquid Waste, shall only use the Liquid Waste Receiving Facility upon the following conditions:
 - i. That they agree to comply with all provisions within this Bylaw.
 - ii. They have received a Facility Access Permit from the CRD.
 - iii. That the Liquid Waste meets the operating criteria to be received and processed at the facility.
 - iv. That they agree to comply with all operating protocols governing the use of the Liquid Waste Receiving Facility as prescribed in Section 6, as stated on any signage or materials published by the CRD, or as directed by an employee or agent of the CRD.
- b) Any person making a Discharge at the Trucked Liquid Waste Receiving Facility shall immediately stop the Discharge at the instructions of an employee of the CRD if that employee has reasonable grounds to believe the Discharge does not meet the provisions of this bylaw or any other enactment.
- c) A Hauler or other person is liable for any damage to a Liquid Waste Receiving Facility or CRD property caused by the Hauler or other person or caused by the functioning or operation of a Hauler or other person's vehicle, tank, or equipment.
- d) The CRD may suspend or revoke a permit to access and use of the Liquid Waste Receiving Facility if the Generator or Hauler falsifies or omits information on a Trucked Waste Manifest.
- e) Sections 5 (a) to 5 (d) do not apply to a Municipality or agent of a Municipality, where Liquid Waste is removed from a water, Sewer or sewage facility or the Liquid Waste Receiving Facility for purposes of maintenance activities on the water, Sewer or sewage facility or the Liquid Waste Receiving facility.

6. Operating Protocols:

- a) The Liquid Waste Receiving Facility is an unattended facility and is controlled by a locked gate. In order to access the site a Hauler must have a valid Facility Access Permit.
 - i. Permits can be obtained by making application to the CRD on the application form attached hereto in Schedule “E”, and paying the annual fee as set out in section 1.
 - ii. Each vehicle owned by the Hauler that is used for the purposes of Septage waste disposal at the Liquid Waste Receiving Facility must be listed on the Facility Access Permit.
 - iii. Once approved a Facility Access Permit sticker, gate access key and/or codes will be issued to the Hauler.
 - iv. A Facility Access Permit Sticker will be issued for each vehicle listed on the Facility Access Permit.
 - v. The CRD may suspend or revoke a Facility Access Permit:
 - (1) for any or all vehicles licensed to any one Hauler for any violation of, or noncompliance with, the terms and conditions of this bylaw, or any enactment applicable to the Discharge of waste into a Liquid Waste Receiving Facility, when the violation or noncompliance interferes with the operation of the Liquid Waste Receiving Facility.
 - (2) if a Generator or Hauler falsifies or omits information regarding the source, type, or quality of Septage Discharged at the Liquid Waste Receiving Facility.
 - (3) for any or all vehicles licensed to any one Hauler for failure to pay fees described in this bylaw within 60 days of being invoiced by the CRD or the Operator.
- b) While on site at the Liquid Waste Receiving Facility, all Haulers, persons, employees, and agents of the CRD shall abide by WorkSafeBC and CRD protocols and regulations, and conduct their activities in a safe and respectful manner.
- c) The designated intake connection at the Liquid Waste Receiving Facility must be used. Discharging Liquid Waste directly or indirectly into any other point at the Liquid Waste Receiving Facility is strictly prohibited and may result in suspension or revocation of a Facility Access Permit.
- d) Information regarding the Liquid Waste to be Discharged including the waste manifest must be properly entered into the log-in Hauler’s panel or may result in suspension or revocation of a Facility Access Permit.
- e) The solid to Liquid Waste content shall not contain any solid rocks or debris larger than 38mm in diameter. Failure to comply with this requirement may lead to Call Out Charges as set out in Section 1, if CRD staff are required to attend the Liquid Waste Receiving Facility, and could result in liability to repair the facility if damage is caused.
- f) Should the Liquid Waste Receiving Facility alarm go into effect and the inlet valve close, Haulers must wait until the Liquid Waste Receiving Facility has been reset before

continuing to off-load. No Liquid Waste shall be deposited anywhere else on site while waiting for CRD personnel to respond.

- g) All hauling vehicles using the site must have connection devices compatible with those of the facility.
- h) The Hauler is responsible for connecting and disconnecting hoses from the hauling vehicle to the facility Discharge coupling, and the operation of the equipment associated with the hauling vehicle.
- i) The Discharge of Liquid Waste shall be conducted without spillage. Hoses shall not be drained to the ground. In the event that an environmental spill occurs, the Hauler must immediately discontinue discharging and contact the CRD and report the a) date / time; b) volume; c) material spilled.
- j) Each vehicle owned by the Hauler that is used for the purpose of waste disposal at the Liquid Waste Receiving Facility must provide sufficient containment of loads to prevent spillage in transit, including spillage from hoses and other appurtenances.
- k) Parking for Haulers' or other persons' vehicles on site is permitted only while discharging Liquid Waste.
- l) There is a limited supply of water to operate the Liquid Waste Receiving Facility. No person shall use water for washing or servicing their vehicles.
- m) The Hauler shall designate on the Trucked Waste Manifest the type of Liquid Waste being Discharged.
- n) Users shall observe and comply with all posted speed limit requirements on the road access and on the Liquid Waste Receiving Facility.
- o) Hours of Operation:
 - i. Liquid Waste will only be accepted at the Liquid Waste Receiving Facility during regular hours of operation.
 - ii. The regular hours of operation at the Liquid Waste Receiving Facility are as follows:

Monday to Friday, excluding statutory holidays	7:30 am to 4:00 pm
--	--------------------
 - iii. During the regular hours of operation, the Liquid Waste Receiving Facility will be open for Haulers to dispose of Liquid Waste. CRD staff will only be available to respond to any issues or alarms during regular hours of operation.
 - iv. After hours access may be considered under emergency situations.
 - v. No person shall make use of the Liquid Waste Receiving Facility at any time other than the regular hours and days of operation, unless:
 - (1) that person is an employee, contractor or agent of the CRD; or

- (2) there is an emergency situation, and the person using the Liquid Waste Receiving Facility pays the after hour charges as set out in Section 1.
- p) A flow meter is provided and shall be used to measure the volume of each Discharge. The CRD will bill each Hauler based on the total volume of Liquid Waste Discharged.

7. Offences and Penalties:

- a) A person who contravenes this bylaw is guilty of an offence and is liable, upon conviction, to a fine not exceeding \$10,000.
- b) Where an offence is committed, or continues on for more than one day, a person shall be deemed to have committed separate offences for each day on or during which an offence occurs or continues, and separate fines, each not exceeding \$10,000, may be imposed for each day on or during which an offence occurs or continues.

Nothing in this bylaw shall limit the CRD from utilizing any other remedy that would otherwise be available to the CRD at law.

Appendix C

Changes to Fees & Charges, Bylaws No. 4524 and 4525

Purpose: To summarize changes to Fees and Charges for 2023 in the three Electoral Areas.

Bylaw No. 4524:

To Amend Southern Gulf Islands and Juan de Fuca Electoral Areas Utilities and Street Lighting Fees and Charges

Changes to Schedule "C" (1) a) Water, Sewer and Port Renfrew Street Lighting

Service Area	2023 Annual Charge	2022 Annual Charge	Committee/Commission Recommendation
Skana Water	\$1,181.80 (per SFE)	\$1,073.02 (per SFE)	Skana Water Service Committee November 22, 2022
Surfside Park Estates Water	\$1,447.72 (per SFE)	\$1,394.22 (per SFE)	Surfside Park Estates Water Service Committee November 24, 2022
Lyall Harbour/Boot Cove Water	\$730.88 (per SFE)	\$684.78 (per SFE)	Lyall Harbour/Boot Cove Water Local Services Committee November 22, 2022
Magic Lake Estates Sewer	\$416.04 (per SFE)	\$405.70 (per SFE)	Magic Lake Estates Water and Sewer Committee November 29, 2022
Magic Lake Estates Water	\$356.38 (per SFE) No Change	\$334.56 (per SFE) Consumption Charge >50 m ³ = \$0.50/m ³ >80 m ³ = \$1.00/m ³	
Sticks Allison Water	\$1,749.70 (per SFE) No Change	\$1,744.56 (per SFE) > 110 m ³ per 3 months = 5.00/m ³	Sticks Allison Water Local Service Committee November 24, 2022
Wilderness Mountain Water	No Change No Change	\$992.80 (per SFE) Consumption Charge = \$20.00 (Monthly per SFE)	Wilderness Mountain Water Service Commission November 21 & 28, 2022
Port Renfrew Water Annual User Charge	\$209.93 (per Unit)	\$204.41 (per Unit)	Port Renfrew Utility Services Committee November 21, 2022
Port Renfrew Sewer Annual User Charge	\$662.10 (per Unit)	\$640.23 (per Unit)	
Port Renfrew Street Lighting	\$41.78 (per User)	\$40.60 (per User)	

Bylaw No. 4525:
To Amend Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges

Changes to Schedule "B" (2) a) Water and Sewer User Fees - Fixed Fees

Service Area	2023 Annual Charge (per SFE)	2022 Annual Charge (per SFE)	Committee/Commission Recommendation
Cedars of Tuam Water	\$1,941.18	\$1,941.18	Cedars of Tuam Water Service Commission October 25, 2022
Cedar Lane Water	\$1,417.95	\$1,345.35	Cedar Lane Water Service Commission October 31, 2022
Beddis Water	\$1,021.02	\$900.46	Beddis Water Service Commission October 31, 2022
Highland Water	No Change	\$0	Fernwood and Highland Water Service Commission October 17, 2022
Fernwood Water	No Change	\$0	
Highland & Fernwood Water	\$1,217.09	\$1,182.53	
Maliview Sewer	\$1,888.61	\$1,826.73	Maliview Sewer Local Service Commission October 17, 2022
Fulford Water	\$1,572.18	\$1,480.40	Fulford Water Service Commission October 3, 2022

Bylaw No. 4525:**To Amend Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges**

Changes to Schedule “B” (2) b) Water and Sewer User Fees - Consumption Charge based on volume of water metered

Service Area	2023 Consumption Charge	2022 Consumption Charge	Committee/Commission Recommendation
Cedars of Tuam Water	First 38 m ³ = \$7.00/m ³ >38 m ³ = \$18.00/m ³	First 38 m ³ = \$3.50/m ³ >38 m ³ = \$9.00/m ³	Cedars of Tuam Water Service Commission October 25, 2022
Cedar Lane Water	No Change	First 30 m ³ = \$2.50/m ³ >30 m ³ = \$9.00/m ³ >61 m ³ = \$25.00/m ³	Cedar Lane Water Service Commission October 31, 2022
Beddis Water	No Change	First 38 m ³ = \$3.10/m ³ Next 68 m ³ = \$6.30/m ³ >106 m ³ = \$8.50/m ³	Beddis Water Service Commission October 31, 2022
Highland and Fernwood Water	No Change	First 38 m ³ = \$0.64/m ³ Next 68 m ³ = \$2.00/m ³ >106 m ³ = \$5.13/m ³	Fernwood and Highland Water Service Commission October 17, 2022
Maliview Sewer	No Change	\$1.75/m ³ of total water provided or delivered to the single family dwelling unit or equivalent served by the sewer connection to the CRD Highland Water System	Maliview Sewer Local Service Commission October 17, 2022
Fulford Water	Single Family Residential: No Consumption Charge Other: \$3.27/m ³ Minimum Consumption Charge per three months is \$393.04 per service connection.	Single Family Residential: No Consumption Charge Other: \$3.27/m ³ Minimum Consumption Charge per three months is \$370.10 per service connection.	Fulford Water Service Commission October 3, 2022

Bylaw No. 4525:**To Amend Salt Spring Island Liquid Waste, Sewer, and Water Fees and Charges**

Changes to Schedule “C” (1) Disposal Fees and Charges

Service Area	2023 Fees	2022 Fees	Committee/Commission Recommendation
Septage	\$104.49 per cubic metre (\$0.475 per imperial gallon)	\$100.09 per cubic metre (\$0.455 per imperial gallon)	Salt Spring Island Liquid Waste Disposal Local Service Commission October 7, 2022
Sewage	\$104.49 per cubic metre (\$0.475 per imperial gallon)	\$100.09 per cubic metre (\$0.455 per imperial gallon)	Salt Spring Island Liquid Waste Disposal Local Service Commission October 7, 2022



Making a difference...together

REPORT TO ELECTORAL AREAS COMMITTEE MEETING OF WEDNESDAY, DECEMBER 14, 2022

SUBJECT Electoral Areas “Fire Regulation Bylaw No. 2”, Bylaw No. 4489

ISSUE SUMMARY

The Capital Regional District (CRD) regulates open fire use within Electoral Area (EA) Fire Protection Service Areas through bylaws. An update to existing Bylaw No. 3452, “Fire Regulation Bylaw No. 1, 2007”, is introduced to better align with updated provincial regulations and to increase clarity for residents and fire departments.

BACKGROUND

The CRD provides 11 fire protection services in Juan de Fuca (JdF) and Southern Gulf Islands (SGI) EAs. Under the *Wildfire Act*, local governments can regulate the use of open fire in established fire service areas for wildfire prevention and forest protection. Open burning occurs in recreational, household, cultural, and industrial contexts, but mishandling fire can lead to damaging wildfires. Regional District open burning bylaw regulations do not apply outside fire service areas of the Regional District, such as improvement districts or areas without fire protection and prevention services.

Fire Chiefs from JdF and SGI EAs have advocated for modernization of existing Bylaw No. 3452, “Fire Regulation Bylaw No. 1, 2007”. The previous bylaw employs non-standard fire definitions; is silent on common uses such as outdoor wood-fire ovens; and is inconsistent with recent *Wildfire Act* and *Open Burning Smoke Control Regulations* updates. Current fire regulations are challenging for residents and fire departments to interpret and apply.

The proposed bylaw (Appendix A) repeals Bylaw No. 3452 and puts in place a set of modern fire use regulations. Changes include:

- Enabling consistency with neighbouring jurisdictions and the Province;
- Clarifying powers of local Fire Chiefs to restrict fire use and high-risk industrial activities due to local conditions;
- Aligning local fire protection with provincial regulations, such as *Open Burning Smoke Control Regulations*;
- Including solid fuel appliances (e.g., outdoor wood-fire ovens) in the sphere of regulation.

Bylaw No. 4489 is the result of a comprehensive fire department consultation process. The effective date of this amendment is April 1, 2023.

A modernized Fire Regulation Bylaw requires corresponding updates to Bylaw No. 1857, “Capital Regional District Ticket Information Authorization Bylaw, 1990” (Appendix B) and Bylaw No. 3491, “Capital Regional District Fire Protection Services Fees and Charges Bylaw No. 1, 2007” (Appendix C). No change to existing fees or charges is proposed. Fire services will continue to issue free permits to encourage public compliance.

A draft interpretive guide (Appendix D) on open burning and industrial activities is attached. If Bylaw No. 4489 is adopted, this guide will be finalized and included in a public communications strategy.

ALTERNATIVES

Alternative 1

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

- 1) That Bylaw No. 4489, “Fire Regulation Bylaw No. 2, 2022”, be introduced and read a first, second, and third time;
- 2) That Bylaw No. 4489 be adopted.
- 3) That Bylaw No. 4499, “Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 74, 2022”, be introduced and read a first, second, and third time;
- 4) That Bylaw No. 4499 be adopted.
- 5) That Bylaw No. 4523, “Capital Regional District Fire Protection Services Fees and Charges Bylaw No. 2, 2022”, be introduced and read a first, second, and third time;
- 6) That Bylaw No. 4523 be adopted.

Alternative 2

That the Electoral Area “Fire Regulation Bylaw No. 2”, Bylaw No. 4489 report be referred back to staff for additional information based on Electoral Areas Committee direction.

IMPLICATIONS

Social & Environmental Implications

Open fire use plays important roles in recreational, household, cultural, and industrial contexts. Local fire departments and the CRD FireSmart program collaborate to provide accessible alternatives to burning in EA communities, such as community chipping days. This bylaw provides a safe framework for the responsible use of open fire where reasonable alternatives are not available.

Air quality concerns from open burning are beyond the scope of this bylaw and the *Wildfire Act* and are regulated through provincial *Open Burning Smoke Control Regulations* and regional district nuisance bylaws, which permit the regulation of smoke and effluvia. However, this bylaw is focussed on fire regulation, and is intended to decrease wildfire damage by providing a safe framework for fire use in electoral area communities.

Financial Implications

No change to fire department resources, staff time, or violation fees are anticipated due to adoption of this bylaw.

Legal Implications

The CRD is empowered to regulate open fire use in fire service areas under the *Wildfire Act*. The proposed bylaw has undergone thorough internal and external legal review to ensure consistency with the legislative framework and enforceability.

CONCLUSION

CRD bylaws provide regulations for responsible fire use within CRD EA Fire Protection Service Areas. The proposed Bylaw No. 4489 and its associated amending bylaws modernizes regulations within those services areas and ensures consistency with provincial legislation. If passed, the bylaw will come into force April 2023.

RECOMMENDATION

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

- 1) That Bylaw No. 4489, “Fire Regulation Bylaw No. 2, 2022”, be introduced and read a first, second, and third time;
- 2) That Bylaw No. 4489 be adopted.
- 3) That Bylaw No. 4499, “Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 74, 2022”, be introduced and read a first, second, and third time;
- 4) That Bylaw No. 4499 be adopted.
- 5) That Bylaw No. 4523, “Capital Regional District Fire Protection Services Fees and Charges Bylaw No. 2, 2022”, be introduced and read a first, second, and third time;
- 6) That Bylaw No. 4523 be adopted.

Submitted by:	Shawn Carby, CD, BHSc, MAL, Senior Manager, Protective Services
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: Bylaw No. 4489, “Fire Regulation Bylaw No. 2, 2022”

Appendix B: Bylaw No. 4499, “Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 74, 2022”

Appendix C: Bylaw No. 4523, “Capital Regional District Fire Protection Services Fees and Charges Bylaw No. 2, 2022”

Appendix D: Draft Guide to Fire Regulation Bylaw No. 2

**CAPITAL REGIONAL DISTRICT
BYLAW NO. 4489**

**A BYLAW TO REGULATE OPEN BURNING WITHIN JUAN DE FUCA ELECTORAL AREA AND
SOUTHERN GULF ISLAND ELECTORAL AREA**

WHEREAS:

- A. By Bylaw No. 3452, "Fire Regulation Bylaw No. 1, 2007", the Capital Regional District continued a program of fire regulation in the district pursuant to its powers under the *Local Government Act*; and
- B. The Capital Regional District Board wishes to enact a revised bylaw that relates to the lighting, fuelling and use of open fires for fire prevention and forest protection in the Juan de Fuca and Southern Gulf Islands Electoral Areas where local fire services are operated;

NOW THEREFORE the Regional Board of the Capital Regional District in open meeting assembled enacts as follows:

PART I – DEFINITIONS:

- 1. In this bylaw:
 - a. "BC Wildfire Act" or "Wildfire Act" refers to the *Wildfire Act*, SBC 2004, c 31 as amended.
 - b. "BC Wildfire Regulation" refers to *Wildfire Regulation*, BC Reg 38/2005, as amended and enacted under the *Wildfire Act*, SBC 2004, c 31.
 - c. "BC Wildfire Service" means that part of the government of British Columbia that is mandated to administer the *BC Wildfire Act* and BC Wildfire Regulation.
 - d. "Campfire" is defined by the BC Wildfire Regulation as amended from time to time.
 - e. "Category 2 Open Fire" is defined by the BC Wildfire Regulation as amended from time to time.
 - f. "Category 3 Open Fire" is defined by the BC Wildfire Regulation as amended from time to time.
 - g. "Coastal Fire Centre – South Island" means fire centre created by the BC Wildfire Service to administer the *BC Wildfire Act* and BC Wildfire Regulation within the Regional District.
 - h. "Commercial Incinerator" means any device constructed or erected, designed and used for the destruction by fire of industrial, commercial or institutional waste materials, but does not include any crematorium operated in accordance with the *Cremation, Interment and Funeral Services Act*, SBC 2004, c.35.
 - i. "Demolition Waste" means any waste resulting from or produced by the complete or partial destruction or tearing down of any structure other than material prohibited in the *Open Burning Smoke Control Regulation*.
 - j. "Domestic Waste" means food waste and household materials targeted for disposal, other than paper or cardboard.
 - k. "Domestic Incinerator" means any metal or masonry container, including a burn barrel, fitted with a metal screen or grill of not more than 9.5 millimetres (3/8") mesh to restrict any sparks or flying debris and used to serve any dwelling unit occupied by a single family or any two-family dwelling.

- l. "Fire Chief" means the Fire Chief for the applicable Service Area or the Fire Chief's designate.
 - m. "Fire Chief's Designate" means a member of the fire department designated by the Fire Chief and acting on the authority of the Fire Chief in the absence of, or as directed by, the Fire Chief.
 - n. "Fire Danger Rating" for a Service Area is as defined by the Coastal Fire Centre – South Island from time to time.
 - o. "Fire Department" means the volunteer fire department established for a Service Area by bylaw of the Regional District or by agreement between the Regional District and a duly incorporated society that by contract provides fire service within a Service Area.
 - p. "Fire Fighting Hand Tool" means a shovel, axe, Pulaski, hand tank pump or fire extinguisher.
 - q. "Fuel Break" means a barrier or a change in fuel type or condition, or a strip of land that has been modified or cleared to prevent fire spread.
 - r. "Incinerator" includes a Commercial Incinerator and a Domestic Incinerator.
 - s. "Industrial activity" is as defined by the *BC Wildfire Act* as amended from time to time.
 - t. "Mill waste" includes bark, chips, sawdust and any other discarded wood products piled for uses other than residential gardens, parks, trails and playgrounds.
 - u. "Open Burning" and "Open Fire" have the same meaning, referring to any outdoor burning, of any material that is not contained within a building or certified Incinerator, and without limitation includes a Category 2 Open Fire, a Category 3 Open Fire, and a Campfire.
 - v. "Open Burning Smoke Control Regulation" means the *Open Burning Smoke Control Regulation*, BC Reg 152/2019, as amended, under the *Environmental Management Act*.
 - w. "Regional District" means the Capital Regional District.
 - x. "Service Area" means a fire protection and suppression service area within the Regional District established under the *Local Government Act*.
 - y. "Solid Fuel Burning Appliance" means an appliance installed outside of a dwelling unit that burns solid fuel and is used for cooking or heating purposes. These appliances include, but are not limited to, barbecues, chimineas, pizza ovens, hot tubs, food smokers, or any other devices, that burn solid fuel in an outdoor environment.
 - z. "Utility" means the works or facilities for the provision of a service provided by a public authority, a public utility or a similar person, such as water, electricity, natural gas, septic, transportation or communication.
 - aa. "Waste" means as defined by the *Environmental Management Act* as amended from time to time.
- 1.2 Except as otherwise defined in this bylaw, words and phrases herein are to be interpreted consistently with the *Community Charter*, the *Local Government Act*, the *Open Burning Smoke Control Regulation* and the *Fire Services Act* or *Fire Safety Act*, as the context and circumstances may require.

PART II - APPLICATION

2. This bylaw applies within Service Areas of the Regional District.

PART III – SEVERABILITY

3. If any section, subsection, paragraph, clause, word or phrase in this bylaw is declared invalid by a court of competent jurisdiction, the invalid portion is severed and the remainder of this bylaw remains valid and effective.

PART IV - GENERAL REGULATIONS

4.1 No person shall:

- (a) in any way hinder any member of the Fire Department or any other person under the direction of the Fire Chief at any fire;
- (b) enter any burning building or within the lines established by the Fire Chief marked by ropes, guards, tape or other means at a fire, without the permission of the Fire Chief;
- (c) drive, run over or into any fire hose or any other equipment with any vehicle unless bridging adequate to protect the hose or other equipment is provided for that purpose;
- (d) place or maintain any object or matter on a street, or road which interferes with free access or approach to any fire hydrant, stand-pipe or reservoir which is available for fire protection;
- (e) damage, render unusable or interfere with any equipment, Utility or property which is owned, leased or used by the Fire Department.

- 4.2 An owner or occupier of real property in a Service Area shall remove any matter or thing situated in or on any building or premises which, in the opinion of the Fire Chief, is a fire hazard or increases the danger of fire.

- 4.3 An owner of any unoccupied building shall ensure that it is properly secured against entry by unauthorized persons.

General Regulations on Open Fires

- 4.4 A person must not ignite, burn or continue to burn an Open Fire except in accordance with this Bylaw, the *Open Burning Smoke Control Regulation*, and the *Wildfire Act and Regulation*. Where a provision of any such enactments is stricter than that of another, the stricter provision applies.

- 4.5
- a) No person shall ignite, burn or continue to burn an Open Fire of any kind while a prohibition on Open Fires or the category of Open Fire ordered by the Province or by the Fire Chief or other Officer of the Fire Department for the Service Area is in effect.
 - b) No person shall ignite, burn or continue to burn an Open Fire without a valid and continuing permit issued by the Fire Chief or the Fire Chief's Designate.
 - c) A person must comply with the terms of any permit and any direction by the Fire Chief written on or further to the permit, or any further restriction on the fire imposed under section 7 of this Bylaw.
 - d) If a permit is cancelled, expires, or is not complied with, a person must not ignite, burn, or continue to burn an Open Fire and must extinguish such Open Fire forthwith.
 - e) Prior to igniting an Open Fire, undertaking an Industrial Activity, using a Solid Fuel Appliance or igniting a fire in an Incinerator, the person must determine whether there are any restrictions or prohibitions issued under section 7 of this Bylaw.

Permit Requirements for the Categories of Open Fires

- 4.6 a) A Campfire does not require a permit, unless a Fire Chief or Fire Chief's designate invokes a permit requirement.
- b) A Category 2 Open Fire requires a permit, unless a Fire Chief or Fire Chief's designate rescinds the permit requirement.
- c) A Category 3 Open Fire requires a permit year round.

Fire Safety and Supervision

- 4.7 Every person who ignites, burns or uses an Open Fire must ensure all of the following requirements are met:
- (a) the person must comply with any and all requirements of this Bylaw that pertain to the Open Fire;
- (b) the person must comply with any and all requirements contained in any permit issued for the Open Fire under this Bylaw;
- (c) the person must comply with any further restrictions on Open Fires and the relevant category of Open Fire issued by the Fire Chief;
- (d) the person must ensure that the fire is authorized or permitted by the land owner, and if the person is not the owner of the land where the fire is to occur, the person must provide proof to the Fire Chief's satisfaction of the land owner's consent;
- (e) the person must maintain an adequate Fuel Break around the burn area of sufficient size to ensure that the Open Fire originating in the burn area does not escape the burn area;
- (f) the person must ensure that the fire is watched and patrolled by a competent person to prevent fire spread or escape;
- (g) the person must ensure that the person watching the fire has a Fire Fighting Tool, ready access to water, and a container carrying at least 8 litres of water;
- (h) the person must ensure that before leaving the area, the fire is completely extinguished; and
- (i) if the fire spreads beyond the burn area or otherwise becomes out of control, the person must immediately report the fire to the Fire Department; attempt to control the spread and to extinguish the fire, and comply with all directions of the Fire Chief.

Prohibited Materials

- 4.8 No person shall ignite or burn, or cause, allow or suffer to be burned or used as fuel, any of the following material, whether in an Open Fire or in an Incinerator or other container:
- (a) rubber, tires, plastic materials, or polystyrene foam;
- (b) fiberglass or other fibre-reinforced materials;
- (c) asphalt or asphalt products or tar paper;
- (d) construction materials, drywall or demolition waste;
- (e) carpets, furniture, appliances or domestic waste;

- (f) railway ties;
- (g) treated lumber or wood products;
- (h) manure, animal carcasses or waste from animal slaughtering;
- (i) paint, varnish, used oil, or fuel or lubricant containers;
- (j) batteries or electrical wire; or
- (k) biomedical or other hazardous waste.

Compliance with Orders

- 4.9 A person who has been ordered or directed by the Fire Chief or the Fire Chief's Designate to reduce, suspend or cease activity under this Bylaw must immediately do so, and in a safe manner carry out all measures and comply with all conditions and restrictions for ceasing or resuming the activity as directed by the Fire Chief or the Fire Chief's Designate.

PART V – ADDITIONAL REGULATIONS FOR CATEGORIES OF OPEN FIRES, SOLID FUEL APPLIANCES, INCINERATORS, INDUSTRIAL ACTIVITIES AND MILL WASTE

Campfires

- 5.1 In addition to complying with the general regulations on Open Fires contained in this Bylaw, a person who lights, ignites or maintains a Campfire must ensure the Campfire burns material in one pile no larger than 0.5 m in height and 0.5 m in width.
- 5.2 A person must not light, ignite or maintain a Campfire:
- (a) within 7.5 metres of any building, structure, fence, property line;
 - (b) within 3 metres of any driftwood, dry vegetation, grass or any other combustible material;
 - (c) to dispose of Domestic Waste; or
 - (d) if a Campfire prohibition has been established by the Fire Chief or the Fire Chief's Designate.

Category 2 Open Fires

- 5.2.2 In addition to complying with the general regulations on Open Fires contained in this Bylaw, no person shall conduct a Category 2 Open Fire:
- (a) within 10 metres of any building, structure, fence, tree or hedge;
 - (b) that is fuelled by green debris or leaves;
 - (c) for more than 4 consecutive days; or
 - (d) by adding additional materials to a fire within two (2) hours of sunset of each day of the fire.

Category 3 Open Fires

- 5.2.3 For certainty before lighting, igniting or maintaining a Category 3 Open Fire, a person must comply with the general regulations on Open Fires contained in this Bylaw.

Category 3 Open Fires – Exemption from the Open Burning Smoke Control Regulation

5.2.4 Where a Category 3 Open Fire is for burning vegetative debris less than 10 cm in diameter as defined in section 5(a) of the *Open Burning Smoke Control Regulation*, no person shall conduct such open fire:

- (a) within 15 metres of any building, structure, fence, tree or hedge;
- (b) that is fuelled by green debris or leaves;
- (c) for more than 4 consecutive days; or
- (d) by adding additional materials to a fire within two (2) hours of sunset of each day of the fire.

Solid Fuel Appliances

5.3 Before installing, erecting, or operating a Solid Fuel Burning Appliance, a person must first obtain a permit issued by the Fire Chief or Fire Chief's Designate, and must pay the applicable fees, if any.

5.4 A person shall only install, erect or operate a Solid Fuel Burning Appliance in accordance with any:

- (a) permit requirements; or
- (b) additional restrictions or prohibitions pertaining to the installation and operation of Solid Fuel Appliances issued by a Fire Chief or Fire Chief's Designate.

Incinerators

5.5 Before installing, erecting or operating an Incinerator, or lighting, igniting or maintaining any fire in an Incinerator, a person must first obtain a permit issued by the Fire Chief or Fire Chief's Designate, and must pay the applicable fees, if any.

5.6 A person shall only install, erect or operate a Commercial or Domestic Incinerator in accordance with any:

- (a) permit requirements; or
- (b) additional restrictions or prohibitions pertaining to the installation and operation of Incinerators.

5.7 The owner of an Incinerator shall ensure that:

- (a) the Incinerator is maintained in a condition that provides for the proper combustion of any material burned;
- (b) while it is in use a competent person continuously supervises any burning and ensures sufficient fire extinguishing equipment necessary for fire control is available;
- (c) a Domestic Incinerator is located at least:
 - i. 1.5 metres from any combustibles such as grass, shrubbery or wooden fencing; and
 - ii. 7.6 metres from any building or fuel storage area;
- (d) a Commercial Incinerator is located at least:
 - i. 3 metres from any combustibles such as grass, shrubbery or wooden fencing; and
 - ii. 10 metres from any building or fuel storage area.

Industrial Activities

- 5.8 Where the Fire Chief or Officer of the Fire Department has prohibited or restricted an Industrial Activity, no person shall initiate or continue such activity.

Mill Waste

- 5.9 Where any person deposits any mill waste, he or she shall ensure that:
- (a) the Fire Chief is notified at least forty-eight (48) hours before the deposit;
 - (b) no deposit has a depth greater than 3 metres; and
 - (c) within one week, cover material at least 305 millimetres in thickness is applied to any deposit unless otherwise approved by the Fire Chief.

PART VI - EXEMPTION

- 6.1 This bylaw does not apply to:
- (a) a fire used for the training of firefighters;
 - (b) a burn carried out by or under the direction of the Wildfire Service (British Columbia) pursuant to the *Wildfire Act*; or
 - (c) a burn authorized by the Fire Chief to reduce fuel build-up or decrease a fire hazard.
- 6.2 As an exception to the permit requirements contained in sections 5.2.2 [*Category 2 Open Fires*], 5.3 [*Solid Fuel Burning Appliances*], 5.5 [*Incinerators*], and 5.8 [*Industrial Activities*], a Fire Chief or Fire Chief's Designate can institute, rescind, or re-institute a permit requirement for one or more of such fire types, within all or a portion of the service area that the Fire Chief or Fire Chief's Designate has responsibility for.
- 6.3 In relation to sections 4.6(a) and 5.1 [*Campfires*], a Fire Chief or Fire Chief's Designate may institute or rescind a permit requirement for campfires in all or part of a portion of the service area that the Fire Chief or Fire Chief's Designate has responsibility for, where, in their opinion, institution of permit requirements are necessary but a ban is not yet appropriate.
- 6.4 (a) When a permit requirement is rescinded, existing permits continue in force and the holder of such a permit is expected to comply with such existing permits and conditions on them, unless they receive written authorization from the Fire Chief or the Fire Chief's Designate cancelling their existing permit and confirming no permit is needed for their activity.
- (b) When a permit requirement is required, existing activities conducted or currently in-progress without a permit require a permit to continue.

PART VII - POWERS OF THE FIRE CHIEF AND OFFICERS

- 7.1 The Fire Chief for each Service Area is authorized to administer and enforce this Bylaw within that Service Area.
- 7.2 The Fire Chief or Officer of the Fire Department may:
- (a) enter on property and inspect premises to ascertain whether the provisions of this bylaw are being met;
 - (b) take measures to prevent or suppress the spread of Open Fires;

- (c) issue orders directing the owners or occupiers of premises to bring Open Fires into compliance with this bylaw or with a permit under this bylaw;
- (d) issue permits for Open Fires, Solid Fuel Appliances and Incinerators under this bylaw, and impose such conditions, restrictions and requirements as the Fire Chief or Fire Chief's Designate deems to be warranted to avoid the creation of a hazard or nuisance, due to weather, wind or other circumstance related to Fire Safety;
- (e) In writing, refuse to issue a permit for an Open Fire, Solid Fuel Appliance or Incinerator if in the opinion of the Fire Chief or Fire Chief's Designate the proposed activity is likely to create a hazard or nuisance because of adverse weather, wind or other circumstance;
- (f) suspend or cancel a permit, and impose conditions on resuming activity that was suspended, if:
 - i. the Fire Chief or Fire Chief's Designate believes the permitted activity cannot be carried out safely or without creating a nuisance due to changes in weather, wind or other circumstances related to fire safety changing since permit issuance, or is not being carried out safely or in accordance with permit conditions, an order under paragraph (c), a provision of this bylaw, or another applicable enactment; or
 - ii. the Fire Chief or Fire Chief's Designate has received a complaint by a person in relation to the emission of smoke, sparks, ash, soot, cinders or fumes, and considers that fire extinction or control measures are warranted to address a nuisance or undue irritation or annoyance to other persons;
- (g) impose additional conditions or restrictions on any permit or class of permits if in the opinion of the Fire Chief or Fire Chief's Designate weather, wind or other circumstances related to fire safety have changed since the issuance of the permit, and the conditions or restrictions are required to address the changed circumstances;
- (h) authorize an Open Fire to reduce fuel build-up or decrease a fire hazard;
- (i) restrict or prohibit any Open Fire, and impose a ban on all Open Fires for a period of time (including Open Fires for which permits have been issued), if the Fire Chief considers the Fire Danger Rating warrants the restriction, prohibition or ban;
- (j) restrict or prohibit any Industrial Activity, if the Fire Chief considers the restriction or prohibition is necessary due to weather, wind or other circumstance related to fire safety;
- (k) where, in the opinion of the Fire Chief, an Incinerator or Solid Fuel Appliance is likely to create or become a fire hazard due to damage, deterioration, lack of maintenance, construction or location, or due to adverse, weather, wind or other circumstance related to fire safety, the Fire Chief may order the owner of the Incinerator or Solid Fuel Appliance to:
 - i. alter, renovate, repair or relocate the Incinerator or Solid Fuel Appliance, or
 - ii. discontinue its use.

This section 7.2(k) applies regardless of whether a permit has been issued for the Incinerator or Solid Fuel Appliance.

- 7.3 A person must not obstruct, prevent or interfere with the Fire Chief or Fire Chief's Designate acting under the authority of the Fire Chief from conducting an inspection pursuant to this bylaw.

PART VIII – OFFENCE AND PENALTY

8.1 A person who:

- (a) contravenes this bylaw;
- (b) causes or allows any act or thing to be done in contravention of this bylaw; or
- (c) fails or neglects to do anything required under this bylaw;

commits an offence, and where the offence is a continuing one, each day that the offence continues amounts to a separate offence.

8.2 Any person who violates any provision of this bylaw shall be liable, upon summary conviction, to a fine of not less than \$50.00 and not greater than \$2,000.00, and such other amounts as may be ordered by the court for the costs of investigation and prosecution, and to compensate the District or another person for damages or loss sustained resulting from the commission of the offence.

8.3 The Fire Chief, a bylaw enforcement officer, a peace officer, and a police officer as an agent of the Regional District are authorized to enter onto and into property for the purposes established by sections 284 and 419 of the *Local Government Act* in accordance with the provisions of section 16 of the *Community Charter* or other conditions of entry, if any, set out in the *Local Government Act*, *Community Charter* or another enactment.

8.4 If a Fire Chief finds that any provision of this bylaw has been contravened or has not been complied with, or has been complied with improperly or only in part, or that conditions exist in or upon a building or property to which the bylaw applies and which, in his opinion, constitutes a fire hazard or otherwise constitutes a hazard to life or property the Fire Chief may:

- (a) make to the owner or occupier of the building or property such recommendations as deemed as necessary to correct the contravention or to ensure compliance with this bylaw or to remove the hazards referred to in the bylaw or,
- (b) make orders with respect to any of the matters referred to in this bylaw in accordance with the *Local Government Act* or, where applicable, the *Fire Services Act*.

8.5 An order made under this bylaw shall be in writing and shall be directed to the owner, occupier or lessee of the building or property in respect of which the order is made or to both.

8.6 An order made under this bylaw shall be served by:

- (a) delivering it or causing it to be delivered to the person to whom it is directed, or
- (b) sending the order by return registered mail to the last known property owner.

8.7 Where an owner or occupier is in default of an order made pursuant to this bylaw, the Regional District, by its workers or others, may enter the property and effect such work as required in the order at the expense of the owner or occupier so defaulting in accordance with section 418 of the *Local Government Act*, and any charges so incurred and remaining unpaid on December 31 of that year shall be added to and form part of the taxes payable on the real property as taxes in arrears.

PART IX – NO LIABILITY

9.1 This bylaw shall not create a duty of the Regional District, its officers, employees or persons acting on its behalf pursuant to this Bylaw, including Fire Chiefs and Fire Chief's Designates, concerning enforcement or failure to enforce any matter contained in this bylaw.

- 9.2 No act, error, omission or other neglect of the Regional District in relation to any matter contained in this bylaw shall give rise to a cause of action or liability to any person.

PART X REPEAL AND CITATION

- 10.1 Effective April 1, 2023, Bylaw No. 3452, "Fire Regulation Bylaw No. 1, 2007", is repealed.
- 10.2 Effective April 1, 2023, this Bylaw No. 4489 comes into force.
- 10.3 This Bylaw may be cited for all purposes as "Fire Regulation Bylaw No. 2, 2022".

READ A FIRST TIME THIS	th	day of	2022
READ A SECOND TIME THIS	th	day of	2022
READ A THIRD TIME THIS	th	day of	2022
ADOPTED THIS	th	day of	2022

CHAIR

CORPORATE OFFICER

CAPITAL REGIONAL DISTRICT
BYLAW NO. 4499

A BYLAW TO AMEND BYLAW NO. 1857, "CAPITAL REGIONAL DISTRICT
TICKET INFORMATION AUTHORIZATION BYLAW, 1990"

WHEREAS:

- A. The Capital Regional District Board is adopting Bylaw No. 4489, "Fire Regulation Bylaw No. 2, 2022", and replacing Bylaw No. 3452, "Fire Regulation Bylaw No. 1, 2007"; and
- B. The Board wishes to amend Bylaw No. 1857 to reflect the provisions of Bylaw No. 4489;

NOW THEREFORE, the Capital Regional District Board in open meeting assembled hereby enacts as follows:

- 1. Effective April 1, 2023:
 - (a) In Schedule 1 of Bylaw No. 1857, "Capital Regional District Ticket Information Authorization Bylaw, 1990", the reference at section 32 to "Fire Regulation Bylaw No. 1, 2007" is replaced with "Fire Regulation Bylaw No. 2, 2022";
 - (b) In Schedule 1 of Bylaw No. 1857, inserting at section 32 in column 2, Designated Bylaw Enforcement Officer, the words "Peace Officer" after the words "Royal Canadian Mounted Police Officer"; and
 - (c) By replacing Schedule 33 to Bylaw No. 1857 with the Schedule 33 attached to this Bylaw.
- 2. This Bylaw may be cited for all purposes as "Capital Regional District Ticket Information Authorization Bylaw, 1990, Amendment Bylaw No. 74, 2022".

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

SCHEDULE 33 TO BYLAW NO. 1857
FIRE REGULATION BYLAW NO. 2, 2022

WORDS OR EXPRESSIONS DESIGNATING OFFENCE	SECTION	FINE
1. Hinder officer	4.1(a)	\$200.00
2. Cross fire line	4.1(b)	\$100.00
3. Drive over hose or equipment	4.1(c)	\$500.00
4. Obstruct hydrant	4.1(d)	\$100.00
5. Damage fire department property	4.1(e)	\$300.00
6. Fail to remove fire hazard	4.2	\$100.00
7. Fail to properly secure unoccupied building	4.3	\$100.00
8. Open Fire while prohibited	4.5(a)	\$200.00
9. Open Fire without permit	4.5(b)	\$100.00
10. Breach permit conditions	4.5(c)	\$200.00
11. Cat 3 Fire without permit	4.6(c)	\$300.00
12. Fail to maintain fuel break	4.7(e)	\$100.00
13. Fail to monitor fire	4.7(f)	\$100.00
14. Inadequate equipment	4.7(g)	\$100.00
15. Failure to extinguish an open fire	4.7(h)	\$300.00
16. Failure to notify fire department	4.7 (i)	\$300.00
17. Burn Prohibited Material	4.8	\$500.00
18. Non-Compliance Order	4.9	\$300.00
19. Improper Campfire - size	5.1	\$100.00
20. Improper Campfire - structure	5.2(a)	\$100.00
21. Improper Campfire - combustible material	5.2(b)	\$100.00
22. Improper Campfire - domestic waste	5.2(c)	\$100.00

23. Improper Cat 2 Fire - location	5.2.2(a)	\$200.00
24. Improper Cat 2 Fire - green debris	5.2.2(b)	\$200.00
25. Improper Cat 2 Fire - duration	5.2.2(c)	\$200.00
26. Improper Cat 2 Fire - materials	5.2.2(d)	\$200.00
27. Improper Cat 3 Fire - location	5.2.4(a)	\$200.00
28. Improper Cat 3 Fire - green debris	5.2.4(b)	\$200.00
29. Improper Cat 3 Fire - duration	5.2.4(c)	\$200.00
30. Improper Cat 3 Fire - materials	5.2.4(d)	\$200.00
31. Appliance without permit	5.3	\$100.00
32. Appliance contrary to permit	5.4	\$100.00
33. Incinerator without a permit	5.5	\$100.00
34. Incinerator contrary to permit	5.6	\$100.00
35. Incinerator – Unmaintained	5.7(a)	\$100.00
36. Incinerator – Supervision	5.7(b)	\$100.00
37. Incinerator – Location	5.7(c)	\$100.00
38. Commercial Incinerator – Location	5.7(d)	\$100.00
39. Industrial activity contrary to notice	5.8	\$300.00
40. Mill waste – failure to notify	5.9(a)	\$100.00
41. Mill waste – depth	5.9(b)	\$100.00
42. Mill waste – cover	5.9(c)	\$100.00

CORPORATE OFFICER

Schedule "A"

PERMIT CHARGES

Fire Department	Class	Fee
East Sooke Fire	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0
North Galiano	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0
Otter Point	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0
Pender Island	"Campfire"	\$ 5
	"Category 2"	\$ 5
	"Category 3"	\$25
	"Appliance"	\$ 0
Port Renfrew	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0
Shirley	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0
South Galiano	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0
Willis Point	"Campfire"	\$ 0
	"Category 2"	\$ 0
	"Category 3"	\$ 0
	"Appliance"	\$ 0

Guide to Fire Regulation Bylaw No.2

DRAFT



Captial Region Electoral Area
Fire Departments

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Electoral Area Fire Protection

The CRD provides fire protection services in many Electoral Area communities through a network of commissions, societies, and service contracts. Most fire department members are volunteers from within the communities they serve.

Municipal Fire Protection

Municipalities are responsible for provision of fire protection through their local fire departments.

CRD Fire Dispatch

The CRD provides emergency fire dispatch for Juan de Fuca, Salt Spring Island, Southern Gulf Islands, Metchosin, Sooke, Highlands and Langford. The service operates out of Langford Fire Hall #1 utilizing contracted Langford Fire Department staff. Back-up services for the fire dispatch are provided through the BCAS dispatch centre in Langford.

The CRD Board delegates authority to the Planning, Transportation, and Protective Services Committee (PTPS) for emergency fire dispatch for the three the Juan de Fuca, Salt Spring Island, Southern Gulf Islands, Metchosin, Sooke, Highlands and Langford.



Introduction

In 2019, representative fire chiefs from CRD electoral area fire departments requested the Fire Regulation Bylaw No.1, 2007 be updated. A review confirmed that recent provincial updates to wildfire and waste management legislation effectively rendered some sections of the CRD bylaw invalid. Fire Regulation No.2, 2022 is aligned with all applicable and current provincial legislation and will remain effective and valid through future updates to provincial legislation.

Understanding what's new for Fire Regulation #2

- Better alignment with provincial regulations related to fire prevention and forest protection
- Enhanced autonomy for fire departments to implement or rescind fire prevention measures within their defined service areas
- Improved clarity around permit and enforcement programs
- Introduction of permits for outdoor wood-burning appliances

This guide is designed to help with the interpretation of **CRD Fire Regulation Bylaw No.2, 2022**, and contains information specific to:

- Communities affected by the bylaw
- Explanation of the fire danger rating system
- Categories of open fires (campfires, category 2 and 3 open fires)
- Outdoor wood-burning appliances (chimineas, pizza ovens, wood-burning hot tubs)
- Industrial and high-risk activities
- Prohibited materials
- Powers of fire chiefs
- Enforcement of the bylaw (approaches and tools)



Application of Fire Regulation No.2

CRD Fire Regulation Bylaw No.2 is applicable in specified fire protection service areas within the Juan de Fuca and Southern Gulf Island electoral areas.

Juan de Fuca communities with CRD fire protection areas include:

- Willis Point
- Otter Point
- East Sooke
- Shirley
- Port Renfrew

Southern Gulf Islands with CRD fire protection services areas include:

- Pender Island
- North Galiano Island
- South Galiano Island
- Saturna Island

This bylaw does not apply to First Nation communities, municipalities, or improvement districts within the CRD.

In addition to this bylaw, the **BC Wildfire Act** and Wildfire Regulation apply in all non-defined areas within the CRD. This includes any area not located within a defined CRD fire protection area, municipality, or improvement district.

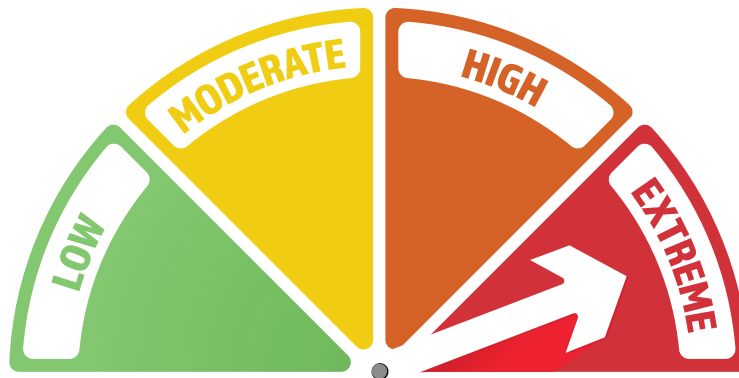


How is the Fire Danger Rating Determined?

The weather significantly impacts how wildfires start, how aggressively they spread and how long they burn. By referencing provincial and federal weather stations in your local area, fire chiefs, or designates, will determine the appropriate fire danger rating.

The BC Wildfire Service operates about 260 weather stations, which send hourly reports. These observations, supplemented by data from other agency stations, support fire weather forecasting.

This information is used for making fire prevention, preparedness and suppression, and other general fire management decisions.



Fire Danger

In case of fire call 911



Low:

Forest fuels are drying, and there is an increased risk of surface fires. Therefore, carry out any forest activities with caution.



Moderate:

Fires may start easily and spread quickly, with minimal involvement of deeper fuel layers or larger fuels.



High:

Forest fuels are very dry, and the fire risk is serious. New fires may start easily, burn vigorously, and challenge fire suppression efforts. Extreme caution must be used. Open burning and industrial activities may be restricted.



Extreme:

Extremely dry forest fuels, and the fire risk is severe. New fires will start easily, spread rapidly, and challenge fire suppression efforts. General forest activities may be restricted, including open burning, industrial activities and campfires.



General Fire Safety Regulations

All fires must be authorized by the land owner.



Establish a fuel break around Category 2 or 3 burn or **fire guard** around with a campfire.



Ensure someone is **continuously monitoring the fire** so it does not spread beyond its intended size. At least one person must watch the fire at all times and be equipped with a firefighting hand tool, at least 8 litres of water, or ready access to water.



Determine if any **restrictions or prohibitions** for the service area before igniting an open fire, undertaking an industrial activity, using a solid fuel appliance or igniting a fire in an incinerator.



Ensure the fire is **authorized or permitted** by the landowner.



Ensure the fire is **completely extinguished** before leaving the area.



Categories of Open Fires

The CRD covers a large and geographically diverse area. Therefore, decisions on when and where to implement fire bans and restrictions are to be made by the fire chiefs appointed to defined fire protection areas.

Multiple factors are considered when assessing wildfire hazards and deciding whether to implement an open fire ban, including current and forecasted weather conditions and the availability of firefighting resources.

Knowing your category before you burn.



Category 1



Category 2



Category 3

Campfires



- A campfire is any fire smaller than 0.5 metres high by 0.5 metres wide (a fire larger than this is considered a Category 2 fire).
- Any person may use a campfire for recreational purposes or by a First Nation for ceremonial purposes.

Regulations

- CRD Fire Regulation Bylaw 2 is the regulation to be administered by fire chiefs and followed by persons who ignite a campfire campfire operators. A campfire ban or restriction implemented within the Coastal Fire Centre in the surrounding area of a CRD fire service area does not automatically apply within the defined CRD fire service area. It is the discretion of the fire chief, or fire chief's designate to follow, or not follow any campfire bans or restrictions that have been applied or rescinded by the Coastal Fire Centre.

Permit Requirements

- Generally, a permit for a campfire is not required. However, the fire chief, or fire chief's designate, has the discretion to establish or rescind permit requirements for campfires within their defined fire service area.
- It is not recommended to charge a fee for a campfire permit.

Setbacks

- At least 7.5 metres from any building, structure, fence or property line.
- At least 3 metres from any trees, shrubs, structures and debris.

Campfires

- Obtain a permit from the fire department when required for the service area.
- Avoid having a campfire when it's windy.
- Never leave a campfire unattended for ANY amount of time.
- Never use a campfire for the disposal of domestic waste or prohibited materials.
- Never ignite a campfire if a campfire ban is in place.

Enforcement

- A fire chief, or fire chief's designate, is responsible for enforcing campfire regulations within their service area.
 - Educating people on campfire safety and current restrictions is key to gaining compliance. Issuing warnings or Municipal Ticket Information should always be a last resort.
-

1. If all the vegetative debris open burned is branches or other pieces of vegetative debris, with or without leaves, each branch or piece of which is less than 10 cm in diameter but of which at least some of the individual branches or pieces are 3 cm or greater, only sections 9, 12 and 30 of the Open Burning Smoke Control Regulation apply.

Category 2 Fire



- A Category 2 (CAT 2) fire is larger than a campfire and used for disposing of vegetative debris. A landowner or occupant that ignites a CAT 2 fire must follow any applicable CRD and Province of BC regulations.
- This category refers to open fires, other than a campfire, that burn:
 - Material in one pile not exceeding 2 metres in height and 3 metres in width.
 - Material concurrently in two piles, each not exceeding 2 metres in height and 3 metres in width.
 - Stubble or grass over an area that does not exceed 0.2 hectares.

Regulations

- CRD Fire Regulation Bylaw No. 2; and the [Open Burning Smoke Control Regulation](#) (OBSCR), are to be followed, where applicable.
- The following vegetation size exemptions for agricultural or domestic purposes apply.

Open Burn Smoke Control Regulations (OBSCR)

- If all the vegetative debris is under 3 cm in diameter, an operator is exempt from the OBSCR.
- If all vegetative debris is between 3 cm and 10 cm in diameter, the operator is exempt from most sections¹ of the OBSCR with the following conditions:
 - It can burn if the collected debris is from within 5 km of the burn site and there are no burn bans.
 - If all the vegetative debris open burned is branches or other pieces of vegetative debris, with or without leaves, of which at least some of the individual branches or pieces are 10 cm or greater, the Open Burning Smoke Control Regulation applies.
- Note: A fire chief, or fire chief's designate, does not have the discretion to exempt the requirements to follow the Open Burning Smoke Control Regulation except under specified circumstances (e.g. FireSmart activities).

Permit Requirements

- Generally, a permit for a Category 2 fire is required. However, fire chief or fire chief's designate has the discretion to establish or rescind permit requirements for Category 2 fires within their defined fire service area.
- It is not recommended to charge a fee for a Category 2 permit.

Setbacks

- At least 10 metres from any building, structure, fence, tree or hedge or property line.
-

Fire Operators

- Obtain a permit from the fire department if required for the service area.
 - Ensure that every reasonable alternative for reducing, reusing or recycling the vegetative debris is used to minimize the amount being open burned.
 - If required, follow the Open Burning Smoke Control Regulation, including the [Venting Index for Southern Vancouver Island](#).
 - [Information Fact Sheet for All Open Burners](#)
 - Avoid conducting an open fire when it's windy.
 - Choosing a proper location.
 - Do not burn green debris or leaves.
 - Do not use an open fire for the disposal of domestic waste or prohibited materials.
 - Never leave an open fire unattended.
 - Never ignite a campfire if a ban has been established by the fire chief or fire chief's designate.
-

Enforcement

- A fire chief, or fire chief's designate, is responsible for enforcing Category 2 fire regulations within their service area.
 - It is recommended to focus on education for Category 2 Fire operators. Warnings and Municipal Ticket Information should be a last resort.
 - It is the responsibility of the BC Conservation Officer service to enforce the Open Burning Smoke Control Regulation.
-

Category 3 Fire



- A permit for a Category 3 fire is required year-round. A fire chief, or fire chief's designate, does not have the discretion to rescind permit requirements for Category 3 fires within their defined fire service area.
- It is not recommended to charge a fee for a Category 3 permit.

Regulations

- CRD Fire Regulation Bylaw No. 2; and where applicable, the Open Burning Smoke Control Regulation, also known as the OBSCR.
- The following are vegetation size exemptions for agricultural or domestic purposes.
- If all the vegetative debris is under 3 cm in diameter, an operator is exempt from the OBSCR.
- If all vegetative debris is between 3 cm and 10 cm in diameter, the operator is exempt from most sections of the OBSCR with the following condition:
- A person can burn if the collected debris is from within 5 km of the burn site and there are no burn bans.
- If all of the vegetative debris open burned is branches or other pieces **of vegetative debris, with or without leaves, of which at least some of the individual branches or pieces are 10 cm or greater, the Open Burning Smoke Control Regulation applies.**
- **Note:** A fire chief, or fire chief's designate, does not have the discretion to exempt the requirements to follow the Open Burning Smoke Control Regulation except under specified circumstances (e.g. FireSmart activities)

Permit Requirements

- A permit for a Category 3 fire is required year-round. A fire chief, or fire chief's designate, does not have the discretion to rescind permit requirements for Category 3 fires within their defined fire service area.
- It is not recommended to charge a fee for a Category 3 permit.

Setbacks

- The Open Burning Smoke Control Regulation prescribes setbacks for Category 3 Fires.
- In the unlikely event, where there is an exemption to the Open Burning Smoke Control Regulation. The minimum setbacks are 15 metres from any building, structure, fence, tree or hedge.
- In some cases there may be exemption from OBSCR whereas the setback is 100m from residences and 500m from public buildings.

Fire Operators

- Obtain a permit from the fire department
- Obtain a Burn Registration Number from the BC Wildfire Service
- Ensure that every reasonable alternative for reducing, reusing or recycling the vegetative debris is used to minimize the amount of the vegetative debris to be open burned.
- Follow the Open Burning Smoke Control Regulation, including the Venting Index for Southern Vancouver Island
- Information Fact Sheet for All Open Burners
- Avoid conducting an open fire when it's windy.
- Choose a proper location.
- Do not burn green debris or leaves.
- Do not use an open fire for the disposal of domestic waste or prohibited materials.
- Never leave an open fire unattended.
- Never ignite a Category 3 fire if a prohibition has been established by the fire chief, or fire chief's designate.

Enforcement

- A fire chief, or fire chief's designate, is responsible for issuing and rescinding permits for Category 3 fires.
 - It is recommended education be the main focus of enforcement with warnings or Municipal Ticket Information the last resort.
 - The BC Conservation Officer enforces the Open Burning Smoke Control Regulation.
-

Outdoor Solid Fuel (Wood-Burning) Appliances

Before installing, erecting, or operating a solid fuel appliance, a property owner or occupant should check with the fire department for any permit requirements and restrictions for the service area.

Incinerators

Before installing, erecting, or operating an Incinerator, a property owner or occupant should check with the fire department for any permit requirements and restrictions for the service area.

Permits

Except for a campfire, permits are usually required for all open fires, incinerators, and solid fuel appliances. Before lighting or igniting any open fire, a property owner or occupant should check with the fire department for any permit requirements, restrictions or bans in place for the service area.

A fire chief, or fire chief's designate, can rescind or re-institute a permit requirement for any type of open fire, including within all or a portion of their service area.

They may also institute or rescind a permit requirement for campfires in all or part of a portion of their service area where, in their opinion, the institution of permit requirements is necessary, but a ban is not yet appropriate.

Agricultural Burning

Farmers may use open burning to control crop residues as a management tool in grass seed production and in the control of weeds, residue and brush on pasture, range and non-crop areas such as right-of-ways, ditches and dyke banks. Burning is also done to dispose of orchard and vineyard prunings, tree stumps, spoiled hay and straw, diseased crop material, and brush piles from land which has been cleared.

As a general rule, before any open burning is carried out, all farmers should check with local authorities to determine if there is a bylaw that affects agricultural burning activities. If a local burning ban is in place, the ban takes precedence over any Open Burning Smoke Control Regulation exemptions.

The following links will redirect you to the BC government website:

[Farm Practice and Burning](#)

[Farm Practice and Land Clearing](#)

[Open Burning Smoke Control Regulation](#)

Prohibited Materials

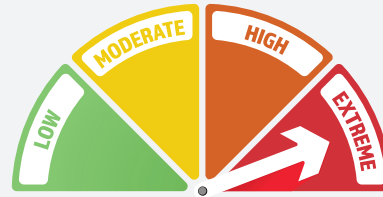
Never burn garbage or construction debris. It is illegal unless specifically authorized as it releases toxic chemicals in the air. Effects of these toxins include cancer, lowered immunity, disorders of the nervous system, and interfere with childhood development. Reduce waste and recycle instead.

CRD Fire Regulation No.2, 2022 specifically prohibits the burning or incineration of the following materials:

- Rubber, tires, plastic materials, or polystyrene foam;
- Fibreglass or other fibre-reinforced materials;
- Asphalt or asphalt products or tar paper;
- Construction materials, drywall or demolition waste;
- Carpets, furniture, appliances or domestic waste;
- Railway ties;
- Treated lumber or wood products;
- Manure, animal carcasses or waste from animal slaughtering;
- Paint, varnish, used oil, or fuel or lubricant containers;
- Batteries or electrical wire; and
- Biomedical or other hazardous waste.

Industrial and High-Risk Activities

Fire watch, early shift or
cease high-risk activity
(shutdown)



Fire Danger
In case of fire call 911

Fire Danger Class	Worker Restrictions	Duration
 <p>After 3 consecutive days of MODERATE fire risk</p>	<ul style="list-style-type: none"> Workers must maintain a 1-hour FIRE WATCH with appropriate firefighting tools 	<ul style="list-style-type: none"> Until after the fire danger fall below MODERATE
 <p>Once a HIGH fire risk begins</p>	<ul style="list-style-type: none"> FIRE WATCH increases to 2-hours 	<ul style="list-style-type: none"> Until after the fire danger fall below MODERATE
 <p>After three 3 days of HIGH fire risk</p>	<ul style="list-style-type: none"> EARLY SHIFT (cease HIGH-RISK activities by 1 p.m.) FIRE WATCH remains at 2-hours 	<ul style="list-style-type: none"> Until after the fire danger fall below MODERATE for 2 consecutive days or falls below MODERATE
 <p>Once a EXTREME fire risk begins</p>	<ul style="list-style-type: none"> EARLY SHIFT FIRE WATCH remains at 2-hours 	<ul style="list-style-type: none"> Until after the fire danger falls below HIGH for 2 or more consecutive days
 <p>After 3 days of EXTREME fire risk</p>	<ul style="list-style-type: none"> CEASE HIGH-RISK activity in the forest and grassland (shutdown) 	<ul style="list-style-type: none"> Until after the danger class falls below EXTREME for 3 or more consecutive days or falls below HIGH

High-risk activities

- Mechanical brushing (example: industrial scale brushing)
- Disk trenching (example: mechanical preparation of logged site)
- Preparation or use of explosives (example: blasting)
- Using fire- or spark-producing tools, including cutting tools (example: cutting torches, and metal grinders)
- Using or preparing fireworks or pyrotechnics (example: fireworks display)
- Grinding, including rail grinding (example: angle grinder)
- Mechanical land clearing (example: excavator or skidder logging or digging out stumps)
- Clearing and maintaining rights of way, including grass mowing (example: commercial right of way mowing; BC hydro brushing. Not residential lawn mowing)

Any of the following activities carried out in a cutblock excluding a road, landing, roadside work area or log sort area in the cutblock.

- Operating a power saw (example: cutting firewood off a road in a combustible area)
- Mechanical tree felling, woody debris piling or tree processing, including de-limbing (example: logging activity or cutting firewood off a road in a combustible area)
- Welding (example: any welding off a road)
- Portable wood chipping, milling, processing or manufacturing (example: these activities when done outside of an industrial worksite within a fire protection district)
- Skidding logs or log forwarding unless it is improbable that the skidding or forwarding will result in the equipment contacting rock (example: logging activity)
- Yarding logs using cable systems (example: any logging activity that uses cable yarding equipment)

What is early shift, and when does it start?

- **WHAT:**
Early shift means all high-risk activities must stop by 1 p.m.
- **WHEN:**
After 3 consecutive days of HIGH all high-risk activities must cease by 1 p.m.
- **HOWEVER:**
After 3 consecutive days of EXTREME cease all activities.

What is a fire watcher?

- A person who, in accordance with subsection (3) (a) and Schedule 3, is required to maintain a fire watcher. The fire watcher must ensure:
- Can reasonably see the site of the high-risk activity during the time the fire watcher is required.
- Has at least one firefighting hand tool.
- Actively watches and patrols for sparks and fires on the site of the high-risk activity.
- Immediately carries out fire control and extinguishes the fire, if practicable.
- Has the means on-site to report the fire.



Exemptions in the Bylaw and Powers of a Fire Chief

This bylaw does not apply to a:

- Fire used for the training of firefighters.
- Burn carried out by or under the direction of the BC Wildfire Service.
- Burn authorized by the fire chief to reduce fuel build-up or decrease a fire hazard.

The fire chief is authorized to administer and enforce this bylaw within their service area and may also:

- Enter on the property and inspect the premises to determine if the bylaw provisions are being met.
- Take measures to prevent or suppress the spread of open fires.
- Issue orders directing the owners or occupiers of premises to bring open fires into compliance with this bylaw or with a permit under this bylaw.
- Issue permits for open fires, solid fuel appliances and incinerators under this bylaw, and impose such conditions, restrictions and requirements as the fire chief, or fire chief's designate, deems to be warranted to avoid the creation of a hazard or nuisance, due to weather, wind or other circumstance related to fire safety.
- In writing, refuse to issue a permit for an open fire, solid fuel appliance or incinerator if, in the opinion of the fire chief or fire chief's designate, the proposed activity is likely to create a hazard or nuisance because of adverse weather, wind or other circumstance;

- Suspend or cancel a permit, and impose conditions on resuming activity that was suspended, if:
 - the fire chief, or fire chief's designate, believes the permitted activity cannot be carried out safely or without creating a nuisance due to changes in weather, wind or other circumstances related to fire safety changing since permit issuance, or is not being carried out safely or in accordance with permit conditions, an order under paragraph (c), a provision of this bylaw, or another applicable enactment; or
 - the fire chief, or fire chief's designate, has received a complaint in relation to the emission of smoke, sparks, ash, soot, cinders or fumes and considers that fire extinction or control measures are warranted to address a nuisance or undue irritation or annoyance to other persons.
- Impose additional conditions or restrictions on any permit or class of permits if, in the opinion of the fire chief or fire chief's designate, weather, wind or other circumstances related to fire safety have changed since the issuance of the permit, and the conditions or restrictions are required to address the changed circumstances;
- Authorize an open fire to reduce fuel build-up or decrease a fire hazard;
- Restrict or prohibit any open fire, and impose a ban on all open fires for a period of time (including open fires for which permits have been issued) if the fire chief considers the fire danger rating warrants the restriction, prohibition or ban;
- Restrict or prohibit any Industrial activity if the Fire Chief considers the restriction or prohibition is necessary due to weather, wind or other circumstance related to fire safety;
- Where, in the opinion of the fire chief, or fire chief's designate, an incinerator or solid fuel appliance is likely to create or become a fire hazard due to damage, deterioration, lack of maintenance, construction or location, or due to adverse, weather, wind or other circumstance related to fire safety, the fire chief, or fire chief's designate, may order the owner to alter, renovate, repair or relocate the incinerator or solid fuel appliance, or discontinue its use.



Enforcement – Approaches and Tools

Public education is the preferred approach for enforcement of this bylaw over penalties. On an escalating basis, and depending on the severity of any infraction, a fire chief, or fire chief's designate, has both the discretion and authority to administer warnings or fines within the scope of the bylaw. This can include rescinding of a permit.

The typical order of approach for addressing concerns and issues as follows:

- Education
- Issuance of warning document
- Rescinding of permit
- Issuance of [Municipal Ticket Information](#)

An exception is the application of the Open Burning Smoke Control Regulation which is enforced by the BC Conservation Officer Service. An example is where infractions are observed regarding a Category 3 Open Fire.

An operator of a Category 3 open Fire can and should expect:

- Fire chief, or fire chief's designate, requesting the operator correct the infraction.
- If the infraction is not corrected, the permit may be rescinded.
- If the operator continues to burn without a valid permit the fire chief, or fire chief's designate, may issue Municipal Ticket Information and notify the BC Conservation Officer Service.

Appendix A - Summary Example

Summary of prohibited activities, restrictions and permit requirements



Permitted/
unrestricted













































Bans and
restrictions apply
to some areas
(check with local fire
department)



Permit
required



Ban or prohibition
in effect

October 1, 2022	Fire Danger Rating	Campfires 	Category 2 Fires 	Category 3 Fires 	High-Risk Industrial Activities
Juan de Fuca					
East Sooke	EXTREME				
Otter Point	EXTREME				
Port Renfrew	EXTREME				
Shirley	EXTREME				
Willis Point	EXTREME				
Southern Gulf Islands					
Pender Island	EXTREME				
Galiano (North)	EXTREME				
Galiano (South)	EXTREME				
Saturna Island	EXTREME				
Coastal Fire Centre					

Appendix B - Sample Permit

Sample Permit

Appendix C - FAQ

Frequently Asked Questions During Restricted High-Risk-Activity Day

Can residents mow their lawn?

Yes. If the lawn is green and requires cutting, and has been irrigated, it is fire-resistant. If residents want to mow their lawn when it is dry and dead, we recommend holding off or using preventative measures such as pre-wet and post-wet lawn; and remaining on-site after mowing to watch out for smouldering fires. Have a garden hose nearby and a way to contact 9-1-1.

Can residents use a weed eater?

Using the same principles as lawn mowing, but extra precautions should be discussed with the fire department if using metal disk blades.

Can farmers hay their fields?

Yes. However, during a shutdown, there may be special fire prevention measures required. If not a critical job, we suggest holding off haying until the fire danger decreases. There are irrigated fields that are fairly safe to hay even, in extreme conditions.

Is excavating a high-risk activity?

Not as long as the excavation is being done on rock, dirt or mineral soil. Examples of excavating could be construction-sites, septic tanks, driveway work, etc. Excavating doesn't include land clearing.

Can residents use a chainsaw on a landing?

Chainsaw use is only permitted on non-combustible surfaces during shutdown, such as green grass, gravel, dirt, and roadway.

Is drilling a high-risk activity?

No. Contractors can drill in rock under no restrictions. Blasting is only permitted in early shift or regular shift.

However, no blasting is permitted during shutdown. Summary of prohibited activities, restrictions and permit requirements

Appendix D -General Fire Safety Regulations

Before lighting a fire, even if the burn category is not currently prohibited, make sure you are prepared, aware of the conditions and following open burning regulations:



Establish a fuel break around your Category 2 or 3 burn or **fire guard** around your campfire.



Ensure someone is **continuously monitoring the fire** so it does not spread beyond its intended size. At least one person must watch the fire at all times and be equipped with a firefighting hand tool, at least 8 litres of water, or ready access to water.



Check whether the fire department has issued any **restrictions or prohibitions** for the service area before igniting an open fire, undertaking an industrial activity, using a solid fuel appliance or igniting a fire in an incinerator.



Ensure the fire is **authorized or permitted** by the landowner.



Ensure the fire is **completely extinguished** before leaving the area.



Call the fire department if the fire spreads beyond the burn area or is out of control. The person must also attempt to control the spread and extinguish the fire and comply with all directions of the Fire Chief.

Appendix E - Fire Danger Rating

What is a local fire hazard, what does it mean, and how is it determined?

The weather significantly impacts how wildfires start, how aggressively they spread and how long they burn. This is why it's important to find out your area's fire danger rating and other information about fire weather.



**Know your
fire area**



**Understand your
rules in place**



**Know your
category**

The BC Wildfire Service operates about 260 weather stations, which send hourly reports. These observations, supplemented by data from other agency stations, support fire weather forecasting.

This information is used for making fire prevention, preparedness and suppression, and other general fire management decisions.



Capital Region Electoral Area
Fire Departments



Making a difference...together

REPORT TO ELECTORAL AREAS COMMITTEE MEETING OF WEDNESDAY, DECEMBER 14, 2022

SUBJECT **British Columbia Structure Firefighter Minimum Training Standards**

ISSUE SUMMARY

The Province of British Columbia updated minimum training standards for fire services in September 2022 (Appendix A). These standards reinforce the Regional District's role as Authority Having Jurisdiction (AHJ) for 11 Electoral Area (EA) fire services. Staff, commissions, societies, and departmental leadership are working together to support firefighter safety, understand regulatory implications, and plan for implementation.

BACKGROUND

The Office of the Fire Commissioner (OFC) recently amended the *British Columbia Structure Firefighter Minimum Training Standards*. Under the *Fire Services Act*, the OFC establishes standards for training of fire service personnel in BC. Previous standards (known as the 'Playbook') were established in 2015. These apply to the 11 Capital Regional District (CRD) fire services in the Southern Gulf Island and Juan de Fuca EAs. Fire services must begin training to meet the new standards by March 2024.

Although the service level framework remains consistent, there are notable changes to roles and responsibilities. Levels of service categories are unchanged: Exterior (activities external to a building), Interior (entry into simple structures), and Full-Service Operations (full range of activities). However, permitted activities within the categories have been revised. New competencies were added for Drivers, Safety Officers, and Incident Commanders and additional occupational health and safety standards are required.

The OFC also clarified expanded responsibilities for Local Government in fire service compliance. Previously, it was unclear whether CRD or a not-for-profit society would be held responsible for regulatory compliance as AHJ where there is a contract for service (e.g., Pender and South Galiano Island Fire Services), or contribution service (e.g., Saturna Island Fire Service). OFC Policy 3.200 designates the AHJ as "the Local Authority that has decided to provide with voted approval from residents and has defined a fire department service through an establishment bylaw, service bylaw or statute that provides expenditure of collected tax funds...". AHJ designation places new liabilities and obligations on the CRD. Implications will be considered during an upcoming review of fire service delivery models.

Meeting the new standards will require a collaborative approach between CRD staff, commissions, societies, and chief officers. Previous reviews of CRD fire training programs in 2015 and 2020 found deficiencies across all departments. Staff are currently assessing training equivalencies with each department to understand training and curriculum needs. Once a baseline is established, all parties will contribute to determining a strategy for compliance. Approaches may include pooling departmental resources, establishing training agreements with neighboring fire services, expanding training officer capacity, and employing third-party educators.

ALTERNATIVES

Alternative 1

The Electoral Areas Committee recommends to the Capital Regional District (CRD) Board:
To direct CRD staff to proceed with Electoral Area fire service consultation to determine requirements to comply with British Columbia Structure Firefighter Minimum Training Standards, implement an appropriate training program no later than Q1 2024, and adjust the future fire service budgets accordingly.

Alternative 2

That the Fire Minimum Training Standards report be referred back to staff for additional information based on Electoral Areas Committee direction.

IMPLICATIONS

Financial Implications

No initiatives to increase fire service requisition are proposed in this report. However, it is reasonable to expect compliance with new regulations to require additional expenses on fire services in future years.

Service Delivery Implications

Community volunteers in fire departments, societies, and commissions are subject to a growing administrative burden exacerbated by expanding provincial regulations. Staff have several initiatives to reduce the burden and support the vital work they do. The modernized Fire Records Management System project, beginning Q1 2023, will help facilitate training and record-keeping compliance.

CONCLUSION

The CRD supports firefighter and resident safety in its EAs as AHJ for 11 fire services. Staff, commission, societies, and chief officers are working together to understand and comply with new provincial regulations on firefighter training. This report summarizes the changes and ongoing implementation work.

RECOMMENDATION

The Electoral Areas Committee recommends to the Capital Regional District (CRD) Board:
To direct CRD staff to proceed with Electoral Area fire service consultation to determine requirements to comply with British Columbia Structure Firefighter Minimum Training Standards, implement an appropriate training program no later than Q1 2024, and adjust the future fire service budgets accordingly.

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ATTACHMENTS

Appendix A: British Columbia Structure Firefighter Minimum Training Standards

British Columbia

Structure Firefighter

Minimum Training Standards



Office of the
Fire Commissioner
Emergency Management BC



Third Edition: September 2022

Table of Amendments

Description	Effective Date
Original document issued	September 2014
Amended	May 2015
Amended	September 2022

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Introduction

In 2014, the British Columbia Structure Firefighter Minimum Training Standards (formerly referred to as “Playbook”) replaced the previous OFC firefighter training standards (a Minister Order that made the full National Fire Prevention Association (NFPA) firefighter 1001 the standard) that was effective as of January 1, 2003. The “Playbook” introduced revised and appropriate training requirements for the Authority Having Jurisdiction (AHJs) for their established fire departments, which continues with this updated version of the **BC Structure Firefighter Minimum Training Standards** (the ‘Training Standards’).

Office of the Fire Commissioner (OFC) - the Fire Commissioner is the senior provincial fire prevention authority in BC. Under the *Fire Services Act* the Fire Commissioner must support the fire prevention and suppression activities of local governments specifically by establishing the standards for selection and training of fire service personnel.

Local Governments - local authorities, as defined in OFC policy, (also referred to as Authority Having Jurisdiction - AHJ) have the role and responsibility to determine and deliver fire suppression and fire protection services to the residents in all or in any defined area of their community or jurisdiction. The establishment and provision of fire services is typically based on the community’s desire and willingness (normally through property taxes) to support this important local government service.

Fire Service - this term encompasses all structure fire suppression and prevention activities provided by local fire departments and individual firefighters of a local authority fire department.

Authority and Purpose

Under paragraph 3(3)(b) of the *Fire Services Act*, the Fire Commissioner must establish the minimum standards of training required for fire services personnel in British Columbia.

Amendments shall be shared by being posted to the Province of BC website.

The Office of the Fire Commissioner has a unique and separate mandate within the organization of Emergency Management BC (EMBC). All Policies, Principles, Concepts, Terms and Definitions formerly embedded within this Training Standards document have been removed, updated, and are now found on the OFC Policy webpage.

The objective for the Training Standards is to identify the competencies and skills that all structure firefighters must have to enhance their personal safety and wellbeing while performing the functions of a firefighter for their community.

Other Important Statutes

It is recognised that there are other statutory or regulatory requirements on fire services that have influence; by legislation and from organizations other than the OFC. While some important statutes are listed below, this is not an exhaustive list. Local governments, the owners and employers of the fire department and personnel, should maintain familiarity with all relevant legislations, regulations and standards that affect the management of fire services in their jurisdiction.

Motor Vehicle Act

Understanding that fire departments may be operating large fire apparatus vehicles, it was determined that minimum driving requirements be included in the Training Standards. There are significant driver licensing and insurance considerations that must be addressed for a structure firefighter to operate this equipment effectively and safely for their department. These items are referenced in the Apparatus Driver sections of the Exterior and Interior Operations level competency matrix charts.

Workers Compensation Act and Occupational Health & Safety Regulations

In BC, all employers are required to ensure that their employees are properly trained for their assigned jobs and properly supervised while performing their jobs or tasks. There are clear expectations identified by WorkSafeBC regarding the roles and responsibilities of Employers and Workers (AHJ and fire service members) in the *Workers Compensation Act (WCA)* and relevant *Occupational Health and Safety regulations (OHS Regulations)*.

The responsibility for providing workers with the necessary information, instruction, training, and supervision generally rests with the employer (WCA s. 21(2)(e)). There are also circumstances where an employer will have a general duty to ensure the health and safety of other workers at a workplace (WCA s.21(1)(a)(ii)).

WorkSafeBC OHS Regulation has some core worker safety requirements that apply to all workplaces including:

- Part 3: Rights and Responsibilities -- a workplace health and safety program, investigations and reports, workplace inspections, the right to refuse work and first aid.
- Part 4: General Conditions -- workplace safety, building and equipment safety, emergency preparedness, preventing violence, working alone, ergonomics, illumination, indoor air quality, smoking, and lunchrooms.
- Parts 5-19: General Hazard Requirements deal with general hazards found in several workplaces, usually higher-hazard operations. Topics include the safe use of chemicals, confined space entry procedures, guarding of machinery and the use of mobile equipment.

The OFC Training Standards is focussed on the expectations identified by WorkSafeBC regarding workers involved in structure firefighting – OHS Regulation Part 31: Firefighting which can be found here:

<https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-31-firefighting>

With particular focus on:

- Sec 31.2 – Application;
- Sec 31.4 – Instruction and Direction: The employer must ensure the adequate instruction and direction of structure firefighters in the safe performance of their duties;
- Sec 31.5 – Procedures: Outlines written procedures that must be established and followed by a fire department;
- Sec 31.10 to 31.18 - outline provisions for Personal Protective Clothing and Equipment;
- Sec 31.18 to 31.26 - outline provisions for Respirators, which includes the requirements for use of SCBA and corresponding requirements for Entry into Buildings;
- Sec 31.27 to 31.32 - outline provisions for Transportation;
- Sec 31.33 to 31.37 - outlines provisions for Aerial Devices and Ground Ladders; and
- Sec 31.38 to 31.39 - outlines provisions for Other Equipment including flashlights, hand lanterns, plaster hooks and pike poles.

In addition, WorkSafeBC provides associated OHS Guidelines for many of the OHS Regulation sections that are intended to assist users of their documents in the interpretation and application.

Amendments to the Criminal Code of Canada

Bill C-45 (Westray Mines Bill) amended the Canadian *Criminal Code* (section 217.1) and established legal duties for workplace health and safety and imposed serious penalties for violations that result in worker injuries or death. The Bill introduced rules attributing criminal liability to organizations, including corporations, their representatives and those who undertake, or have the authority, to direct how another person does work or performs a task.

This implication imposes significant importance upon the AHJ, fire service leaders and the individual firefighter to establish, implement and enforce these Training Standards.

Important Considerations for Authority Having Jurisdiction

The current edition of the Training Standards includes more detailed lists of training competencies in specific skill areas required for a local government's fire department to safely operate at an emergency fire incident. Skills related to the functions of Apparatus Driver, Team Leader (Exterior and Interior), Incident Safety Officer, and Incident Commander (Exterior and Interior) are addressed to enable a fire department to deliver safe fire services at the AHJ's intended service levels and within the firefighter safety OHS Regulation requirements.

It is recognized that some of the competencies may not be applicable for all jurisdictions (e.g., fire hydrants). Therefore, the AHJ can identify the competencies that do or do not have application in their jurisdiction. Where the firefighter training is to be reduced based on local circumstances, these reductions must be identified in the fire department's training program and testing processes as well as in departmental Operating Guidelines. If these reductions affect the fire department's service capacity or service level, they must be reflected in the AHJ's Fire Service Level Declaration.

The determination and declaration of a service level for a local government fire department is intended to assist in the development of a training program for their structure firefighters. The training program is expected to enable the department personnel that attends a fire scene will have the skills and abilities to safely and effectively deliver, fire services to the declared service level.

BC Structure Firefighters Minimum Training Standards Manual

Competency Matrix

This summary is provided to assist fire departments and AHJs when examining the Competency Matrix defined in the Training Standards for developing or modifying their respective structure firefighter training program. Readers should review the more detailed explanations of these individual requirements and refer to the appropriate identified NFPA standards, the *Workers Compensation Act*, the *Motor Vehicle Act*, and any other referenced regulations.

- Determination by the AHJ of the service level appropriate to their community needs is critical and the Training Standards document is based on three general service level categories:
 - Exterior Operations Level;
 - Interior Operations Level; and,
 - Full-Service Operations Level.
- Ensure the service level is correctly identified and declared in bylaw, policy statement, statute, or contract establishing a fire department's authority and anticipated capability.
- Ensure a training program to match the declared service level is in place that includes a comprehensive process for recording and retaining training records and at least meets the intent of the OHS Regulations 3.22 to 3.25.
- AHJ has registered with WorkSafeBC for structure firefighter coverage.
- WorkSafeBC worker safety and functional requirements are in place (*e.g., firefighter fitness records, Employer/Worker joint safety committee (or worker representative), OH&S program, OGS covering fundamental operational procedures, etc.*).
- Appropriate equipment, apparatus, personnel, and training is provided to deliver the declared service level capabilities and requirements.

The specific nature of an emergency fire incident will have a direct influence on the type of roles/positions and numbers of personnel required to manage a given incident. The typical roles or positions required on the "fire ground" to manage most fire-involved structures incidents are common from one situation to another.

The Training Standards has established a functional Competency Ladder (see Appendix A) that identifies the minimum competencies necessary to perform many of the typical roles or functions required for fire departments to effectively provide structural fire suppression services to their community at each of the defined service levels.

Function Competency Ladder:

Exterior Operations Service Level

- Exterior Operations Firefighter
- Apparatus Driver/Operator (Exterior)
- Team Leader (Exterior)
- Incident Commander (Exterior)

Interior Operations Service Level

- Interior Operations Firefighter
- Apparatus Driver/Operator (Interior)
- Team Leader (Interior)
- Incident Safety Officer (Interior)
- Incident Commander (Interior)

Full-Service Operations Level

- Full-Service Operations Firefighter
- Company Fire Officer
- Training Officers

Each function in the competency ladder is listed with the requisite minimum firefighter training requirements that must be met to achieve proficiency (job performance requirement – JPR) at that given function in the competency ladder.

In addition, there are also requirements related to WorkSafeBC (WCA and OHS Regulations) and other important statutes added to each function as a reference and to be considered in the training programs.

The format of the function JPR tables:

In each table that is listed in this manual the reader will find a listing of relevant NFPA standard JPRs. The listing provides the chapter identifier followed by a full colon (:) to assist the reader in searching in the NFPA catalogue. The specific JPR related to the functional competency is then listed and is the applicable JPR that is required to be trained on.

Example - NFPA 1500 (2018 edition) - 8.1,
8.2: 8.2.1 to 8.2.5.2

For this example, the required JPRs are the entire chapter 8.1 and the sub-chapters of 8.2.1 to 8.2.5.2 inclusive, not the entire chapter of 8.2.

All Levels of Fire Services

Risk Management Function:

The responsibility for the Risk Management function typically is encompassed within the Fire Chief position/role. However, recognizing the challenge that this may pose on many small AHJs, this function may be delegated to another member of the fire department or even shared by the AHJ OHS staff, depending on the composition and structure of the department and local government. This individual(s) needs to have significant structure firefighting experience and/or appropriate training to ensure that they understand the administrative functions, structures and processes that must be in place to guide a fire department's training, safety programs and resultant operational capabilities.

The Risk Management function is not an operational role in a fire incident response but must be formally addressed by all fire departments. The individual(s) who fulfil this function is responsible for ensuring that the department has in place Operational Guidelines (OGs), training programs and other oversight processes that ensure safe and effective operations at all fire department involved incidents. In the Training Standards, the term Risk Management is applied to identify the individual responsible for overseeing the development and implementation of any processes which are necessary to ensure a fire department's practices are planned for, safe, and effective at any fire ground operations as a matter of principle.

Risk Management – JPRs/Competencies

SCOPE: The Risk Management Role is an administrative function that provides guidance and oversight to ensure compliance with the Training Standards and other firefighter safety regulations and requirements. While these duties are typically performed by the fire chief, the responsibilities can be distributed among more than one person where required.

REQUIREMENTS:

All applicable Firefighter competencies based upon the declared level of service plus, completion of the following:

NFPA 1250 (2020) - 4.1, 4.3, 4.4, 4.5, 4.6, 4.7, 7.1, 8.1, 9.1, 9.2, 9.3, 9.4, 9.5

NFPA 1500 (2018) - 4.1, 4.2

NFPA 1500 (2018 edition) - 5.1, 5.2, 5.3, 5.4, 5.5, 5.6

NFPA 1401 (2019) - Recommended Practice for Fire Service Training Reports and Records

In-depth Knowledge of:

OHS Regulation Part 3.1, 3.2, 3.3 (OHS Program) 3.22, 3.23, 3.24, 3.25

OHS Regulation Part 31.5 Procedures

OHS Regulation Part 31 - General: 31.12, 31.13, 31.14, 31.15, 31.16, 31.17 and 31.18

OHS Regulation Part 31 - Respiratory Program: 31.19, 31.20, 31.21, 31.22, 31.23, 31.24, 31.25 and 31.26

OHS Regulation Part 31 - Other Equipment: 31.27, 31.28, 31.29, 31.32, 31.33, 31.34, 31.35, 31.36 and 31.37

General knowledge of:

British Columbia *Interpretation Act, Community Charter, or Local Government Act*

- Fire department bylaw
- Bylaw reflecting services provided by the fire department
- Fire protection district boundaries
- Emergency Health Services regarding First Responder Program
- Fire service-related agreements for:
 - inspections, investigations, rescue services, etc.
- Written Mutual Aid agreements
- Automatic Aid agreements

Local Government Management Association (LGMA) Records Management Records (2017), Retention and Scheduling

Local government requirements for writing the hiring and evaluation policy or practices for new recruits.

Exterior Operations Level

All functions within the Exterior Operations Level conduct structure firefighting activities from the outside of structures and are not provided with any training to safely enter any structure in an active fire incident. Exterior Operations Firefighters must not perform any fire suppression activity that requires entry into any structure, building, vehicle, dumpster, or other object regardless of an Immediately Dangerous to Life or Health (IDLH) or harmful atmosphere is present or not. Exterior Operation Firefighters must only engage in external fire suppression and/or mitigation activities. Operational Guidelines that restrict them to Exterior Operations must be written and enforced by the local fire department, even though they may possess equipment that would otherwise permit them to respond in a more complex manner.

In all fire scenes where there is a potential risk of an IDLH atmosphere developing, or risk of exposure exists from smoke, particulate matter, or products of combustion, even when conducting external operations, SCBA must be worn in accordance with WorkSafeBC OHS Regulation requirements.

Team leaders (Exterior) and Incident Commanders (Exterior) are trained to supervise exterior operations only.

The Exterior Operations Service Level applies to all external fire ground operational functions except support positions such as, but not restricted to: first aid, first medical responder, critical incident stress support, hazardous spill response, etc. Specific training is required for these functions, applicable to the hazards involved, and must be addressed elsewhere in departmental training programs.

Exterior Operations Firefighter – JPRs/Competencies
Scope: Operating outside of a structure at the task level, the Exterior Operations Firefighter applies the following competencies to perform fire ground tasks as assigned by the Team Leader (Exterior) or Incident Commander (Exterior) in accordance with the Incident Action Plan (IAP).
Requirements: <i>Must meet the following NFPA Job Performance Requirements and related competencies below:</i>
General Knowledge, Safety and Communications: NFPA 1001 (2019 edition) – 4.1: 4.1.1, 4.1.2 4.2: 4.2.1, 4.2.2, 4.2.3, 4.2.4 4.3: 4.3.2 NFPA 1500 (2018 edition) – 8.1 8.2: 8.2.1 to 8.2.5.2 8.5
Personal Protective Clothing & Equipment, Self Contained Breathing Apparatus: NFPA 1001 (2019 edition) – 4.1: 4.1.2 4.3: 4.3.1, 4.3.2 4.5: 4.5.1 WorkSafeBC OHS Regulations Part 31 (31.10 to 31.26 & 31.38)
Water Supply: NFPA 1001 (2019 edition) – 4.3: 4.3.15 4.5: 4.5.1, 4.5.2
Hose Lines, Nozzles and Appliances, and Fire Streams: NFPA 1001 (2019 edition) – 4.3: 4.3.7, 4.3.8 4.5: 4.5.1, 4.5.2
Ground Ladders: NFPA 1001 (2019 edition) – 4.3.6 4.5.1 WorkSafeBC OHS Regulations Part 31: 31.37
Scene Lighting and Utilities: NFPA 1001 (2019 edition) – 4.3: 4.3.17, 4.3.18
Ropes and Knots – Hoisting Tools and Equipment: NFPA 1001 (2019 edition) – 4.1.2 4.3.20 4.5.1

Apparatus Driver/Operator (Exterior) – JPRs/Competencies
<p>Scope: The Apparatus Driver/Operator (Exterior) drives a variety of small utility vehicles and large fire trucks to and from incident scenes and in non-emergency situations. They may also operate complex vehicles and features such as fire pumps, aerial devices, water tenders, etc. upon meeting additional competencies.</p>
<p>Requirements: <i>Preference for all Exterior Operations Firefighter competencies; plus, must meet all the following NFPA Job Performance Requirements and competencies to drive any fire department vehicle:</i></p>
<p>WorkSafeBC OHS Regulation Part 31: 31.5 (1) (e) and 31.27 to 31.32.</p> <p>Driver's License requirements in the Fire Service based on the size of apparatus Class 5 Vehicle licence (single axle) Class 3 Commercial vehicle license Air brake endorsement</p>
<p>Speciality Requirements: <i>Must meet all Apparatus Driver/Operator (Exterior) competencies above; plus, the NFPA Job Performance Requirements for each additional function that they perform below;</i></p>
<p>Additional Competencies for Drivers/Operators</p> <p>Emergency Vehicle Driver – EVD: <i>(for drivers of large fire apparatus)</i> NFPA 1002 (2017 edition) – 4.2 4.3</p> <p>Emergency Vehicle Operator – EVO: For apparatus equipped with a fire pump: <i>(only for drivers operating a fire pump)</i> NFPA 1002 (2017 edition) – 4.2 5.1 5.2</p> <p>For apparatus equipped with an aerial device: <i>(only for drivers operating aerial devices)</i> NFPA 1002 (2017 edition) – 4.2 6.1 6.2</p> <p>For mobile water supply apparatus: <i>(only for drivers operating water tenders)</i> NFPA 1002 (2017 edition) – 4.2 10.1 10.2</p>

Team Leader (Exterior) – JPRs/Competencies for those leading Exterior Ops Activities or Groups
SCOPE: Operating outside of a structure at the task level, the Team Leader (Exterior) applies the following competencies within the scope of supervising Exterior Operations Firefighters in the performance of specific tasks as assigned by the Incident Commander (Exterior) in accordance with the Incident Action Plan (IAP), including task size-up, action planning, communications, and personnel accountability.
REQUIREMENTS: <i>Must meet all Exterior Operations Firefighter competencies; plus, completion of the following:</i>
Incident Management: NFPA 1001 (2019 edition) – 5.1: 5.1.1, 5.1.2 5.2: 5.2.2 5.3: 5.3.4
Personnel Management and Supervision: NFPA 1021 (2020 edition) – 4.1: 4.1.1
Task Size-up: NFPA 1021 (2020 edition) – 4.2: 4.2.1, 4.2.2, 4.2.3
Action Planning: NFPA 1021 (2020 edition) – 4.6: 4.6.1 & 4.6.2
Personnel Accountability: NFPA 1500 (2018 edition) – 8.5: 8.5.2, 8.5.3, 8.5.5, 8.5.6, 8.5.7, 8.5.8, 8.5.9 8.6: 8.6.4, 8.6.5, 8.6.6 WorkSafeBC OHS Regulation Part 31.5(1)(a)
ICS 100

Incident Commander (Exterior) – JPRs/Competencies
SCOPE: Operating outside of a structure, the Incident Commander (Exterior) manages the overall incident by applying the following competencies within the scope of tactical size-up; tactical action planning; and developing an Incident Action Plan (IAP). This function establishes Incident Command; manages communications; ensures scene safety; and supervises and accounts for all emergency responders operating at the incident in the implementation of the IAP.
REQUIREMENTS: <i>Must meet all Team Leader (Exterior) Competencies; plus, completion of the following:</i>
Personnel Management and Supervision: NFPA 1021 (2020 edition) – 4.1: 4.1.1
Tactical Size-up: NFPA 1021 (2020 edition) – 4.5: 4.5.2, 4.5.3
Tactical Action Planning: NFPA 1021 (2020 edition) – 4.6: 4.6.1 & 4.6.2
Emergency Service Delivery: NFPA 1021 (2020 edition) – 4.1: 4.1.2
Initiate the Incident Command System – ICS: NFPA 1500 (2018 edition) – 8.1: 8.1.5, 8.1.6, 8.1.7, 8.1.8
Incident Size-up: NFPA 1500 (2018 edition) – 8.6.8.1
Personnel Accountability: NFPA 1500 (2018 edition) – 8.3 8.4 8.5: 8.5.4, 8.5.12 8.6 8.7 8.9
WorkSafeBC OHS Regulations Part 31: 31.5(1)(a)
Incident Safety Officer: NFPA 1521 (2020 edition) – 5.2: 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.2.12, 5.2.13, 5.2.14, 5.2.15
WorkSafeBC OHS Regulations Part 31: 31.6
ICS 200

Interior Operations Level

Interior Operation Level structure firefighters may engage in fire suppression activities within simple structures (as described in BC Building Code Part 9 – buildings of 3 stories or less with maximum of 600 sq metres of living space) or objects such as a vehicle, single family dwelling or other small structures. Interior Operations may also operate inside larger or more complex structures (multi-story, high-rises, commercial complexes, etc.) that the AHJ has allowed to be developed and constructed, where the fire department has pre-planned the structure and determined it safe for internal operations by appropriately qualified firefighters. Firefighters must be trained specifically to the risks associated with each large or complex structure.

Interior Operations Level fire services must have Operational Guidelines written and enforced by the local department, that describe the advanced training and procedures that allow for a safe fire attack within permitted structures and objects. This includes skills such as firefighter self-rescue and calling a “Mayday”.

Interior operations must be undertaken in accordance with the requirements of WorkSafeBC (especially sections 31.19 and 31.23 of the OHS Regulation; accompanied by the OHS Guideline G31.23). The Incident Commander (Interior) must recognize the need, and coordinate staff appropriately, for adherence to the OHS Regulations, including the establishment of a Rapid Intervention Team (RIT) with appropriately trained and equipped firefighters, and following the time limit requirements also outlined by WorkSafeBC OHS Regulations.

Interior Operations Firefighter – JPRs/Competencies
Scope: Capable of operating inside of a structure at the task level, the Interior Operations Firefighter applies the following competencies to perform fire ground tasks as assigned by the Team Leader (Interior) or Incident Commander (Interior) in accordance with the Incident Action Plan (IAP).
Requirements: <i>Must meet all Exterior Operations Firefighter competencies; plus, the following NFPA Job Performance Requirements and related competencies below:</i>
Communications: NFPA 1001 (2019 edition) – 5.2.2
Exit a Hazardous Area: NFPA 1001 (2019 edition) – 4.3.5
Conduct a Search and Rescue: NFPA 1001 (2019 edition) – 4.3.9
Loss Control – Overhaul and Salvage: NFPA 1001 (2019 edition) – 4.3: 4.3.13, 4.3.14
Pre-Incident Planning: NFPA 1001 (2019 edition) – 5.5.3 NFPA 1620 (2020 edition) Standard for Pre-Incident Planning – familiarity requirement
Interior Fire Attack/Extinguishment: (accomplished with or without involvement of “live fire”) NFPA 1001 (2019 edition) – 4.3: 4.3.9, 4.3.10, 4.3.13 5.3: 5.3.1, 5.3.3 (control of flammable gas cylinder)
Rapid Intervention Team Member – RIT: NFPA 1407 (2015 edition) – Chapters 4,5,7,8 WorkSafeBC OHS Regulation Part 31: 31.23

Apparatus Driver/Operator (Interior) – JPRs/Competencies
<p>Scope: The Apparatus Driver/Operator (Interior) drives a variety of small utility vehicles and large fire trucks to and from incident scenes and in non-emergency situations. They may also operate complex vehicles and features such as fire pumps, aerial devices, water tenders, etc. upon meeting additional competencies.</p>
<p>Requirements: <i>Preference for all Interior Operations Firefighter competencies; plus, must meet all the following NFPA Job Performance Requirements and competencies to drive any fire department vehicle:</i></p>
<p>WorkSafeBC OHS Regulation Part 31: 31.5 (1) (e) and 31.27 to 31.32.</p> <p>Driver's License requirements in the Fire Service based on the size of apparatus Class 5 Vehicle licence (single axle) Class 3 Commercial vehicle license Air brake endorsement</p>
<p>Specialty Requirements: <i>Must meet all Apparatus Driver/Operator (Interior) competencies above; plus, the NFPA Job Performance Requirements for each additional function that they perform below:</i></p>
<p>Additional competencies for Drivers/Operators: Emergency Vehicle Driver – EVD: <i>(for drivers of large fire apparatus)</i> NFPA 1002 (2017 edition) – 4.2 4.3</p> <p>Emergency Vehicle Operator – EVO: For apparatus equipped with a fire pump: <i>(only for drivers operating a fire pump)</i> NFPA 1002 (2017 edition) – 4.2 5.1 5.2</p> <p>For apparatus equipped with an aerial device: <i>(only for drivers operating aerial devices)</i> NFPA 1002 (2017 edition) – 4.2 6.1 6.2</p> <p>For mobile water supply apparatus: <i>(only for drivers operating water tenders)</i> NFPA 1002 (2017 edition) – 4.2 10.1 10.2</p>

Team Leader (Interior) – JPRs/Competencies
<p>Scope: Capable of operating inside of a structure at the task level, the Team Leader (Interior) applies the following competencies within the scope of supervising Interior Operations Firefighters in the performance of specific tasks as assigned by the Incident Commander (Interior) in accordance with the Incident Action Plan (IAP), including task size-up, action planning, communications, and personnel accountability.</p>
<p>Requirements: <i>Must meet all Interior Operations Firefighter competencies; plus, completion of the following:</i></p>
<p>Incident Management: NFPA 1001 (2019 edition) – 5.1: 5.1.1, 5.1.2 5.2: 5.2.1</p>
<p>Personnel Management and Supervision: NFPA 1021 (2020 edition) – 4.1: 4.1.1 4.2: 4.2.1, 4.2.2, 4.2.3</p>
<p>Tactical Size-up: NFPA 1021 (2020 edition) – 4.5: 4.5.2, 4.5.3</p>
<p>Risk Management: NFPA 1500 (2018 edition) – 4.2 8.4 8.5</p>
<p>Tactical Action Planning: NFPA 1001 (2019 edition) – 5.3.2 NFPA 1021 (2020 edition) – 4.6: 4.6.1 & 4.6.2</p>
<p>Implement the Tactical Action Plan: NFPA 1001 (2019 edition) – 5.3.4 NFPA 1500 (2018 edition) – 8.6: 8.6.4, 8.6.5, 8.6.6</p>
<p>Communications: NFPA 1001 (2019 edition) – 5.3.2</p>
<p>Rapid Intervention Team (RIT) NFPA 1500 (2018 edition) – 8.8</p>
<p>Personnel Accountability: NFPA 1500 (2018 edition) – 8.5: 8.5.2, 8.5.3, 8.5.4, 8.5.5, 8.5.6, 8.5.7, 8.5.8, 8.5.9, 8.5.10, 8.5.11 WorkSafeBC OHS Regulations Part 31.5(1)(a)</p>

Incident Safety Officer

NFPA 1521 (2020 edition) – 5.2

ICS 200**Incident Safety Officer (ISO) (Interior Operations) – JPRs/Competencies**

Scope: The Incident Safety Officer (Interior Operations), when activated by the Incident Commander (Interior), monitors the safety of all emergency responders operating at an emergency incident including altering or suspending unsafe activities. This function also supports the Incident Commander (Interior) in ongoing incident size-up and the development of the Incident Action Plan (IAP).

Requirements:

Must meet all Team Leader (Interior) competencies; plus, completion of the following:

NFPA 1521 (2020 edition) – 5.3: 5.3.1, 5.3.2, 5.3.3, 5.3.4

Incident Commander (Interior) – JPRs/Competencies
<p>Scope: The Incident Commander (Interior) manages the overall incident by applying the following competencies within the scope of tactical size-up; tactical action planning; and developing an Incident Action Plan (IAP). This function establishes Incident Command; manages communications; ensures scene safety; and supervises and accounts for all emergency responders operating at the incident in the implementation of the IAP.</p>
<p>Requirements: <i>Must meet all Team Leader (Interior) and Incident Safety Officer (Interior) competencies; plus, completion of the following:</i></p>
<p>Risk Management: NFPA 1500 (2018 edition) – 8.6.8.1 8.7: 8.7.1, 8.7.4.4.1, 8.7.4.4.4, 8.7.5 8.8: 8.8.1, 8.8.4.1, 8.8.7</p>
<p>Initiate the Incident Command System – ICS: NFPA 1500 (2018 edition) – 8.1: 8.1.1, 8.1.2, 8.1.3, 8.1.5, 8.1.6, 8.1.7, 8.1.8</p>
<p>Develop an Incident Action Plan – IAP: NFPA 1021 (2020 edition) – 4.6: 4.6.1</p>
<p>Implementation of the Tactical Action Plan: NFPA 1021 (2020 edition) – 4.6: 4.6.2 NFPA 1500 (2018 edition) – 8.6: 8.6.1.3, 8.6.13, 8.6.13.1, 8.6.13.2</p>
<p>Communications: NFPA 1500 (2018 edition) – 8.6.15.6 8.7: 8.7.2, 8.7.3</p>
<p>Personnel Accountability: WorkSafeBC OHS Regulations Part 31.5(1)(a)</p>

Full-Service Operations

Full-Service Operations Fire Departments are equipped and have completed the appropriate training identified in the OFC Training Standards (directly aligned with and inclusive of the NFPA standards) to provide a full spectrum of fire services.

These services are based on the Competencies included within the NFPA 1001 Firefighter 1 and 2 Standard and relevant NFPA 1021 Fire Officer Standards.

Full-Service fire departments will have Operational Guidelines that must be written and enforced by the local department, that describe appropriate training requirements in fire operations activities.

These fire departments are organized such that the suppression activities that occur are based on response protocols which include the appropriate staffing levels, and number and type of apparatus on scene.

All Functions (Full-Service)

Competencies required for a Full-Service Fire Department to complete:

NFPA 1001 (FF-I & FF-II);

NFPA 1021 Fire Officer (FO I);

NFPA 1041 Fire Service Instructor I;

NFPA 1072 Haz Mat Operations with Specific Mission; and

NFPA 1521 Incident Safety Officer, Pre-Incident Planning.

NFPA 1001 (2019 edition) – Chapter 4 and Chapter 5

NFPA 1021 (2020 edition) – 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7

NFPA 1041 (2019 edition) – 4.1, 4.2, 4.3, 4.4, 4.5

NFPA 1072 (2019 edition) – Chapter 5, 6.2, 6.6

NFPA 1521 (2020 edition) – 5.1, 5.2, 5.3, 5.6, 5.7

NFPA 1620 (2020 edition)

ICS 100, 200

BCEMS

Other NFPA Standards that local government and the Fire Chief (Risk Officer function) require to deal with hazards associated within their jurisdiction.

Company Fire Officer

Company Fire Officer – JPRs/Competencies

NFPA 1001 FF II; and

NFPA 1041 Fire Service Instructor I.

Additional Competencies:

The duties of the Company Fire Officer are many, and range from human resource management, community relations, administration, health, and safety, to emergency service delivery and others. NFPA 1021, the Standard for Fire Officer Professional Qualifications, identifies four levels of Fire Officer, the most common being Fire Officer I (“FO-I”) and Fire Officer II (“FO-II”). Each local government and fire department must determine the nature of the role of any specific Company Fire Officer and ensure they meet the required Competencies identified in the pertinent JPR(s) of the NFPA 1021 Standard (2020 edition).

Training Officer and Instructors

Training Officer or Instructors – JPRs/Competencies

All NFPA Standards required to train must be completed

Plus, completion of the following:

NFPA 1041 (2019 edition) FSI-I – 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5
4.3.2, 4.3.3
4.4.2, 4.4.3, 4.4.4, 4.4.5
4.5.2, 4.5.3, 4.5.4, 4.5.5

WorkSafeBC OHS Regulation Part 31.4

An individual who is responsible for instructing a specific competency(ies) to another firefighter or fire officer to ensure they achieve the required knowledge and/or skills, must already have achieved the requirements for that competency and be considered by the department as being capable of providing such instruction of those competencies to other members of the department.

Trainer and Assessor Competencies

Training and testing can be conducted “in-house” by qualified department personnel or be administered via third party providers. This section describes the requirements for “In-House” delivery of training requirements and assessments. Where a department has decided to use a third-party training provider, it should ensure that the training provided addresses the competencies set out in the Training Standards.

Regardless of which Service Level is declared, each local government and Fire Chief (Risk Management function) must ensure their training program meets the requirements of the OFC Training Standards to ensure that they can perform their fire scene operations in accordance with WorkSafeBC OHS Regulations.

Trainer competencies for “In-House” training delivery:

The OFC Training Standards recognizes the “Trainer function”, which means the fire department member who is responsible for delivering the in-house delivery of training to other fire department members, and potentially even the evaluation of such training. The use of this term is not meant to prescribe an actual title to any position as assigned by a fire department.

Trainer – JPRs/Competencies
Scope: The In-House Trainer instructs members within their home fire department to the Level and Functions to which they are personally qualified and approved by the fire department.
Requirements: <i>Must meet all competencies for each Level and Function they would instruct; plus, completion of the following competencies:</i>
NFPA 1041 Fire Service Instructor (2019 edition) – Chapter 4 (<i>accredited certification is not required</i>)

Assessor requirements for “In-House” training delivery:

The oversight of the testing processes used by a department for its in-house training program is the responsibility of the Officer who has oversight of the delivery and testing of the training being provided.

For each Service Level, an individual who is responsible for conducting specific testing of fire department personnel’s competency must already have achieved that competency and been determined by the department as capable of conducting such testing. While the requirements for an Assessor are the same as a Training Officer, the fire department must authorize them to perform one, or both, respective functions.

Assessor – JPRs/Competencies
Scope: The Training Officer/Assessor evaluates members within their home fire department to the Level and Functions to which they are personally qualified and approved by the fire department.
Requirements: <i>Must meet all competencies for each Level and Function they would assess; plus, completion of the following:</i>
NFPA 1041 Fire Service Instructor (2019 edition) – Chapter 4 (<i>accredited certification is not required</i>)

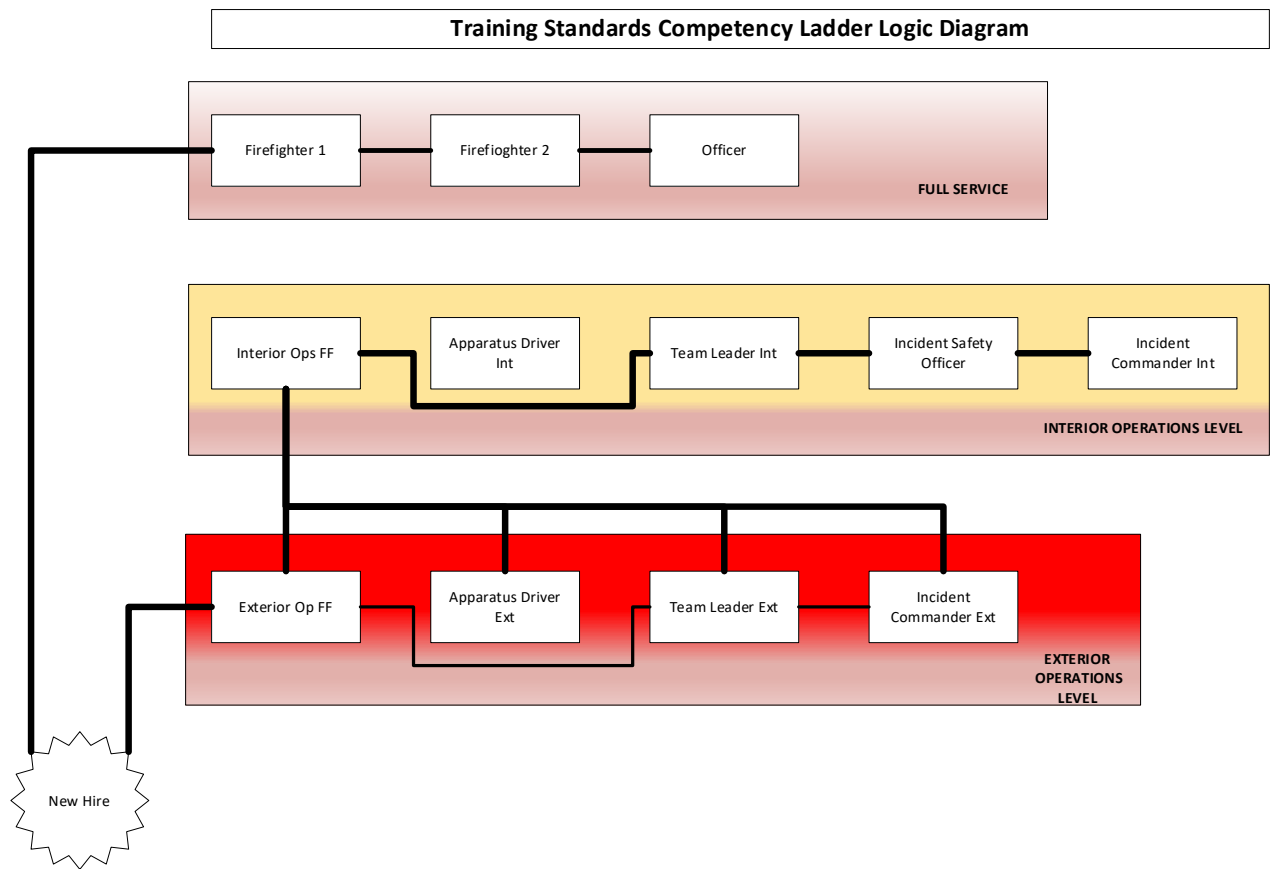
Training Records

Each fire department's Risk Management function (the 'Fire Chief') is responsible for ensuring that accurate and current records of the training and certifications of each of its firefighters and officers are created and retained in alignment with the intent of the WorkSafeBC OHS Regulation 3.23. Third-party training providers for individual fire departments are also required to track training and maintain individual training records for each firefighter and officer.

There is no current standard for training record formats at this time, but some essential components would be:

- Name of individual
- Competency or JPR that was trained for – course name
- Date of training
- Validation or indication of actual completion of the course would be essential
- If applicable an appropriate retraining target date or timing cycle

Appendix A – Flow diagram for the Competency Ladder



Appendix B – Excerpt from Policy 3.200 - Procedures

Methods to Adopt the Training Standards:

Fulfilling the Training Standards can be achieved through the following methods as determined by the AHJ:

- Develop and implement an in-house training and assessment program at the local level
- Utilize a third-party training provider
- Conduct a local review of individual's training records to identify prior learning that could be deemed to:
 - meet the full competency requirements for any Level or Function and allow the AHJ/Fire Department to recognize equivalency, or;
 - meet partial competency requirements for any Level or Function that could allow the AHJ/Fire Department to train the individual to only those competencies that were not covered by prior learning.
- Any combination of the methods above that the AHJ determines to meet the required competencies for individual personnel.

Updating existing personnel from the old Playbook to the new Training Standards:

- Personnel who are already trained to the old Playbook Levels and Functions do not require retraining to equivalent Functions in the new Training Standards, provided that the fire department's maintenance training program complies with the new Training Standards competencies where any minor training gaps will be achieved over time.
- Personnel who perform any of the newly defined functions within the new Training Standards [*e.g., Apparatus Driver/Operator (Exterior), Apparatus Driver/Operator (Interior), Incident Safety Officer (Interior), Team Leader (Interior), Incident Commander (Exterior), and Incident Commander (Interior)*] must meet the competencies for those functions through one of the adoption methods listed above.

**REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, DECEMBER 14, 2022**

SUBJECT **Community Resiliency Initiative Grant: 2023 FireSmart Community Funding & Supports**

ISSUE SUMMARY

The Capital Regional District (CRD) assists Electoral Area (EA) communities in reducing their wildfire risk through first responder coordination, public education, emergency planning, and agency cross-training. The CRD is applying to the Union of British Columbia Municipalities (UBCM) for funding to increase EA community wildfire resiliency activities (Appendix A). UBCM requires that all grant applications be accompanied by a motion of support from the local government.

BACKGROUND

UBCM provides funding for a range of community-based projects, including wildfire preparedness. A 2023 grant opportunity is available to support Local Governments as they build local capacity. The FireSmart Community Funding & Supports program supports activities that reduce community risk from wildfire. As part of the application process, UBCM requires a motion of support to receive and manage grant funding.

Protective Services staff hosted a series of engagement sessions with EA fire departments, emergency programs, local FireSmart committees, and community stakeholders to inform this grant application. Effective wildfire preparedness programs include seven FireSmart disciplines: education, vegetation management, legislation and planning, development considerations, interagency cooperation, cross-training, and emergency planning.

The CRD has applied for this grant to improve wildfire resiliency in rural EA communities through:

- a FireSmart public education campaign,
- an expanded wood chipping program that provides accessible alternatives to burning,
- a home FireSmart assessment program conducted by local qualified assessors,
- a FireSmart rebate program for residents, and
- dedicated wildfire training for First Responders.

If the proposal is approved by UBCM, most grant funding would flow to local volunteers, firefighters, residents, and businesses. The grant supports payments to community volunteers and contract positions such as the CRD FireSmart Coordinator. Funds would be distributed roughly evenly between EA and spent over the coming year. Due to the elevated risk of wildfire, the Regional District is eligible for \$200,000 in base funding and each Electoral Area is eligible for an additional \$50,000. The grant request breakdown is below:

Electoral Area	Funding Proposal
Base Funding (shared)	\$199,808.00
Southern Gulf Islands	\$49,767.00
Salt Spring Island	\$50,000.00
Juan de Fuca	\$49,215.00
Total	\$348,790.00

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Community Resiliency Initiative Grant: 2023 FireSmart Community Funding & Supports 2

ALTERNATIVES

Alternative 1

The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Board support an application to the Union of British Columbia Municipalities Community Resiliency Initiative Fund for the FireSmart Community Funding & Supports program and direct staff to provide overall grant management.

Alternative 2

That staff be directed to rescind the grant application to the Union of British Columbia Municipalities Community Resiliency Initiative FireSmart Community Funding & Supports program.

IMPLICATIONS

Financial Implications

The grant will not alter CRD fire department or emergency program service budgets but provides an opportunity for additional projects that increase community resilience to wildfire, such as homeowner education and wood chipping events.

CONCLUSION

The CRD supports community wildfire preparedness in its EAs. The UBCM FireSmart Community Funding & Supports funding stream is an important resource to build wildfire resilience in the capital region. If supported by the Board, UBCM will consider the CRD's grant application.

RECOMMENDATION

The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Board support an application to the Union of British Columbia Municipalities Community Resiliency Initiative Fund for the FireSmart Community Funding & Supports program and direct staff to provide overall grant management.

Submitted by:	Shawn Carby, CD, BHSc, MAL, Senior Manager, Protective Services
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: UBCM 2023 FireSmart Community Funding & Supports Application

Community Resiliency Investment Program

2023 FireSmart Community Funding & Supports

Application Form

New in 2023 – The 2023 FireSmart Community Funding & Supports program will have an open intake. Funding permitting, eligible applicants can submit one application between October 1, 2022 and December 31, 2023 (or until such time that funds are no longer available).

Please complete and return the application form and all required attachments. All questions are required to be answered by typing directly in this form. If you have any questions, contact cri@ubcm.ca or (250) 356-2947.

SECTION 1: Applicant Information	CRI- <i>(administrative use only)</i>
Name of Local Government or First Nation: Capital Regional District	Complete Mailing Address: 625 Fisgard St, Victoria, BC V8W1R7
Contact Person*: Jonathan Reimer	Position: Manager, EA Fire and Emergency Programs
Phone: 250-360-3137	E-mail: jreimer@crd.bc.ca

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

<p>SECTION 2: Type of Application – Please identify the type of application you are submitting and provide the required information. Refer to Section 4 in the Program & Application Guide for eligibility.</p>
<p>1. Type of Application (select one only):</p> <p><input type="checkbox"/> Single applicant (as identified in Section 1 of the application form)</p> <p><input type="checkbox"/> Regional Project for Multiple Eligible Applicants. Please list all of the partnering eligible applicants included in this application:</p> <p><input checked="" type="checkbox"/> Regional Projects for Regional District Applications Including Multiple Electoral Areas. Please list all electoral areas included in this application. Refer to Section 4 of the program guide for requirements for regional district applications: Salt Spring Island, Southern Gulf Islands, Juan de Fuca</p>
<p>2. Rationale for Regional Projects (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.</p>

<p>SECTION 3: Project Summary</p>
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<p>3. Name of the Project:</p> <p>Capital Regional District FireSmart Project</p>		
<p>4. Project Summary. Please provide a summary of your project in <u>150 words or less</u>.</p> <p>This project funds community wildfire planning and resilience for the 14 communities in the Capital Regional District Electoral Areas. Activities include a FireSmart public education campaign, expanded wood chipping program that provides accessible alternatives to burning, a home FireSmart assessment program conducted by local qualified assessors, a FireSmart rebate program for residents, and dedicated wildfire training for First Responders</p>		
<p>5. Fire Centre (use check boxes). Indicate which Fire Centre the proposed activities are located in (check all that apply).</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> <input type="checkbox"/> Cariboo Fire Centre <input checked="" type="checkbox"/> Coastal Fire Centre <input type="checkbox"/> Kamloops Fire Centre </td> <td style="width: 50%; padding: 5px;"> <input type="checkbox"/> Northwest Fire Centre <input type="checkbox"/> Prince George Fire Centre <input type="checkbox"/> Southeast Fire Centre </td> </tr> </table>	<input type="checkbox"/> Cariboo Fire Centre <input checked="" type="checkbox"/> Coastal Fire Centre <input type="checkbox"/> Kamloops Fire Centre	<input type="checkbox"/> Northwest Fire Centre <input type="checkbox"/> Prince George Fire Centre <input type="checkbox"/> Southeast Fire Centre
<input type="checkbox"/> Cariboo Fire Centre <input checked="" type="checkbox"/> Coastal Fire Centre <input type="checkbox"/> Kamloops Fire Centre	<input type="checkbox"/> Northwest Fire Centre <input type="checkbox"/> Prince George Fire Centre <input type="checkbox"/> Southeast Fire Centre	
<p>6. Project Cost & Funding Request:</p> <p>Total project cost: \$348,790.00</p> <p>Total funding request for FireSmart activities (as indicated on Worksheet(s) 1): \$348,790.00</p> <p>Total funding request for fuel management activities (as indicated on Worksheet 2):</p> <p>Total funding request for new CWRP or CWPP update (as indicated on Worksheet 3):</p> <p>Total project funding request: \$348,790.00</p> <p>Have you applied for or received funding for this project from other sources? If yes, please provide details below.</p> <p>No.</p>		
<p>7. Progress to Date. If you were approved for funding under previous rounds of the FireSmart Community Funding & Supports program, or the 2021 FireSmart Economic Recovery Fund, 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.</p> <p>2019 project (required to be completed): FireSmart Education Activities. Complete.</p> <p>2020 project: EA Community Wildfire Resiliency Plan Update. 90% complete.</p> <p>2021 projects(s) – FSCFS and/or FSERF: EA FireSmart Program Initiation Project. Complete.</p> <p>2022 project: Education, Chipping, Assessments, and Rebates. 90% complete.</p>		
<p>8. Required FireSmart Components. Starting in 2024, it will be required for all applicants to have the following FireSmart components developed/active in their community. Please check which of the following are currently in place and provide a brief summary:</p> <p><input checked="" type="checkbox"/> FireSmart Position: FireSmart Coordinator</p> <p><input checked="" type="checkbox"/> Community Wildfire Resiliency Plan: Updates under development. 90% complete.</p> <p><input checked="" type="checkbox"/> Community FireSmart & Resiliency Committee: In place at local levels - Under development at Electoral Area and Regional levels</p>		

Applicants that do not have a position, plan and committee are strongly encouraged to apply for these activities in the 2023 intake (and in order to be eligible for future funding).

SECTION 4: Requirements for Funding (refer to Section 5 of Program & Application Guide)

9. A. Eligibility Review/Engagement Prior to Submitting an Application.

- ☒ Applications with FireSmart activities only (i.e. only Worksheet 1) - Applicants are required to document engagement in the application. Planning and discussion must occur at a minimum of 30 days prior to submission of an application to allow for meaningful dialogue regarding the proposed FireSmart activities and opportunities for integration of planning on provincial Crown lands.

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

- ☐ **New in 2023** - Applications with fuel management activities (Worksheet 2) - Applicants are required to review Worksheet 2 with the BCWS Wildfire Prevention Officer/Prevention Specialist and/or FNESS Mitigation Specialist/Liaison and Section 6 of the worksheet must be completed by the BCWS and/or FNESS before the application is submitted.
- ☐ **New in 2023** - Applications with CWRP development or CWPP Update (Worksheet 3) - Applicants are required to review Worksheet 3 with the BCWS Wildfire Prevention Officer/Prevention Specialist and/or FNESS Mitigation Specialist/Liaison and Section 5 of the worksheet must be completed by the BCWS and/or FNESS before the application is submitted.

B. 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 (limited to Community Wildfire Resiliency Plan or Community Wildfire Protection Plan). 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.

Updated CWRP currently under development with project completion early 2023.

Submit completed 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 2 of the Program & Application Guide.

Risk Class: 2 WUI Polygon name: River Jordan

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 CWRP/CWPP or other plan, etc.).

Previous CWPPs evaluate fire risk high - very high. Outgoing CWPPs are from 2005 - 2011 and are available upon request. EA communities such as Malahat are dominated by WUI risk from non-crown lands.

Additional evidence for higher wildfire risk (e.g. CWRP/CWPP 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 \$100,000)

☒ Higher risk of wildfire (may apply for a base grant of up to \$200,000)

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.

14 diverse electoral area communities with the most active historical fire regime along BC's coastline. Highly exposed to WUI hazard. Key community planning functions are distributed between the Regional District, Province, and Islands Trust.

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

12. Community Capacity Challenges. Please describe any capacity challenges that your community faces in relation to wildfire risk reduction. This could include rural/remote location, lack of local fire department and/or lack of FireSmart position or Community Wildfire Resiliency Committee

Lack of Community Wildfire Resiliency Committee, Many remote locations (ferry-only and/or one-way in-one-way out rural access), Largest Electoral Area community in the Province (Salt Spring Island), Many communities with no formal fire service (Jordan River, Sidney Islands, etc.)

SECTION 6: Detailed Project Information

13. 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.

14. 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.

The proposed project addresses all disciplines of FireSmart and increases homeowner resilience, community cohesion, local government planning and preparation, and first responder capacity. Reduces exposure to hazards, vulnerability to impact, and community capacity for recovery from emergency incidents.

What performance measures will be used to assess the success of the proposed activities?

Performance measures as recognized FireSmart communities, trained Local FireSmart Representatives, Home assessments completed, Rebates processed, Events held, Social Media subscribers, and positive community feedback measures.

15. 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.

This application is the result of a partnership between community stakeholders. This funding enables engagement with the Federal Government (Parks Canada), Provincial Government (BC Parks, BC Wildfire Service), Local Governments (Improvement Districts on Salt Spring, Mayne, and Piers, Islands Trust), and First Nations (Pacheedaht FN and others).

16. 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 type="checkbox"/> Completed CWPP or CWRP as required in Q. 9 <input type="checkbox"/> Other rationale, as required in Q. 10 and 11
<input checked="" type="checkbox"/> Worksheet 1: Proposed Activities & Cost Estimate	<input type="checkbox"/> Approval from SPCO (if applying for Phase 2, 3 or 4) for FireSmart structure protection equipment, as required in Q.6 <input type="checkbox"/> List of proposed training with cost calculation and estimate for each FireSmart position, as required in Q.7 <input type="checkbox"/> Completed FireSmart Assessments for structures proposed for FireSmart Projects for Critical Infrastructure, as required in Q. 8 <input type="checkbox"/> Completed FireSmart Assessments for structures proposed for FireSmart Projects for Community Assets, as required in Q. 9
<input type="checkbox"/> <u>For fuel management activities only:</u> Worksheet 2: Proposed Fuel Management Activities	<input type="checkbox"/> Additional information that supports treatment as a priority, as required in Q. 6 and/or Q. 11 <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 as required in Q. 14 <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 prescription and project spatial layer

<input type="checkbox"/> <u>For cultural and 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 CWRPs and CWPP Updates only: Worksheet 3: Proposed New CWRP or Update to CWRP/CWPP</u>	<input type="checkbox"/> PDF map and Google Earth compatible KML file, at appropriate scale, outlining the area of interest and eligible WUI
<input checked="" 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	
Submit the completed Application Form and all required related attachments as e-mail attachments to cri@ubcm.ca and note " 2023 CRI " 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.	

SECTION 8: Signature – 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, EA Fire and Emergency Programs
Signature*: <i>A certified electronic or original signature is required.</i>	Date: November 21, 2022

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

**REPORT TO ELECTORAL AREAS COMMITTEE
MEETING OF WEDNESDAY, DECEMBER 14, 2022**

SUBJECT **Community Emergency Preparedness Fund Grant: Volunteer & Composite Fire Department Training & Equipment**

ISSUE SUMMARY

The Capital Regional District (CRD) is applying to the Union of British Columbia Municipalities (UBCM) for grant funding for fire department training and equipment under the Community Emergency Preparedness Fund program (Appendix A). The CRD operates six eligible Electoral Area (EA) fire departments. UBCM requires that all grant applications be accompanied by a motion of support from the local government.

BACKGROUND

UBCM provides funding for a range of community-based projects, including volunteer-based fire departments. A 2023 grant opportunity is available to support training and equipment for volunteer and composite (mixed paid and volunteer) fire departments. The CRD administers six eligible fire departments through delegated-authority commissions. Improvement district and society-operated departments are eligible to apply directly to UBCM. As part of the application process, UBCM requires a motion of support to receive and manage grant funding.

Protective Services staff coordinated this grant application with six fire departments: Port Renfrew, Shirley, Otter Point, East Sooke, Willis Point, and North Galiano. Grant funds would permit departments to upgrade equipment such as personal protective gear, wildfire suppression tools, and facilitate training courses to meet the new Provincial Minimum Training Standards.

The grant request breakdown by fire service area is below. Grant funding may be pooled between fire departments to increase efficiency and reduce overhead costs.

Fire Service Area	Funding Proposal
Port Renfrew	\$31,000.00
Otter Point	\$29,721.51
North Galiano	\$29,810.00
East Sooke	\$28,800.00
Shirley	\$29,488.00
Willis Point	\$29,778.99
Total	\$178,598.50

ALTERNATIVES

Alternative 1

The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Board support an application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for the Fire Department Training and Equipment program and

direct staff to provide overall grant management.

Alternative 2

That staff be directed to rescind the grant application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for the Fire Department Training and Equipment program.

IMPLICATIONS

Financial Implications

The grant will not alter fire department operational budgets but provides an opportunity for one-time projects that increase fire department capacity and resident safety.

CONCLUSION

The CRD supports fire prevention and response in its EAs. The UBCM Fire Department Training & Equipment funding stream is an important resource to build fire department capacity in the capital region. If supported by the Board, UBCM will consider the CRD's grant application.

RECOMMENDATION

The Electoral Areas Committee recommends to the Capital Regional District Board:
That the Board support an application to the Union of British Columbia Municipalities Community Emergency Preparedness Fund for the Fire Department Training and Equipment program and direct staff to provide overall grant management.

Submitted by:	Shawn Carby, CD, BHSc, MAL, Senior Manager, Protective Services
Concurrence:	Kevin Lorette, P. Eng., MBA, General Manager, Planning & Protective Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENTS

Appendix A: UBCM 2022 Volunteer & Composite Fire Department Training & Equipment Application

Community Emergency Preparedness Fund
Volunteer & Composite Fire Departments
Equipment & Training
2022 Application Form

Please complete and return the application form by **October 21, 2022**. All questions are required to be answered by typing directly in this form. If you have any questions, contact cepf@ubcm.ca or (250) 387-4470.

SECTION 1: Applicant Information	AP <i>(for administrative use only)</i>
Name of Primary Applicant: Capital Regional District	Date of Application: October 18 2022
Contact Person*: Jonathan Reimer	Position: Manager, EA Fire and Emergency Programs
Phone: 250-360-3137	E-mail: jreimer@crd.bc.ca

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

SECTION 2: For <u>Regional Projects Only</u>
1. Identification of Partnering Applicants. For all regional projects, please list all of the partnering applicants included in this application. Refer to Sections 2 and 3 in the <i>Program & Application Guide</i> for eligibility.
2. Rationale for Regional Projects. Please provide a rationale for submitting a regional application and describe how this approach will support cost-efficiencies in the total grant request.

SECTION 3: Project Summary
3. Project Information A. Project Title: Capital Regional District Fire Department Training & Equipment Project B. Proposed start and end dates. Start: Jan 1 2023 End: Dec 31 2023

4. Project Cost & Grant Request:

- A. Total proposed project budget: \$178,598.50
- B. Total proposed grant request: \$178,598.50
- C. Have you applied for, or received funding for, this project from other sources? If yes, please indicate the source and the amount of funding received or applied for.
No

5. Project Summary. Provide a summary of your project in 150 words or less.

The CRD operates 6 fire departments in the Juan de Fuca and Southern Gulf Islands Electoral Areas. This project would ensure minimum structure and wildfire personal protective equipment is available for all volunteers. Significant investments in training are required to meet revised OFC training standards, and this project provides a level of basic training to achieve new competencies.

SECTION 4: Detailed Project Information

6. Requirement to be Volunteer or Composite Fire Department. Please list the name and location of each eligible fire department that is included in this application, describe the composition (volunteer or composite) of each department, and state the declared level of service of each department.

East Sooke Volunteer Fire Department - Composite - Interior

North Galiano Volunteer Fire Department - Composite - Exterior

Otter Point Volunteer Fire Department - Composite - Interior

Shirley Volunteer Fire Department - Volunteer - Interior

Willis Point Volunteer Fire Department - Volunteer - Exterior

Port Renfrew Volunteer Fire Department - Volunteer - Exterior

Copies or extracts of the available evidence of declared level of service is required to be submitted with the application.

The BC Structure Firefighter Minimum Training Standards include the requirement for fire departments to declare their level of service. This applies to all local government, Treaty First Nation and society-run fire departments. The training standards are not automatically applicable on federal reserve lands and, for the purpose of CEPF funding, non-Treaty First Nations are not required to declare their level of service if they are not prepared to do so. This will not impact the review or scoring of applications.

7. Operating Budget(s).

- a. Please indicate the annual operating budgets of each fire department included in this application.

Listed budgets include both annual operating and capital costs (trucks, halls, etc.) as they are entangled within internal budgeting processes.

East Sooke Volunteer Fire Department - \$429,941

North Galiano Volunteer Fire Department - \$181,744

Otter Point Volunteer Fire Department - \$520,055

Shirley Volunteer Fire Department - \$162,041

Willis Point Volunteer Fire Department - \$136,055

Port Renfrew Volunteer Fire Department - \$92,301

- b. Describe the extent to which that budget enables each fire department to purchase essential equipment and/or obtain training.

There is minimal opportunity to purchase essential equipment and obtain minimum levels of training. As above, most departmental budgets do not permit significant paid positions or volunteer compensation. The overwhelming majority of budgets go towards training, equipment, overhead, and capital (apparatus and hall) costs.

8. Proposed Activities. What specific activities will be undertaken as part of the proposed project? Refer to Sections 4 and 6 of the *Program & Application Guide* for eligibility.

- a. Purchase of equipment.

Equipment for the 6 departments are based on individual need, and includes basic personal protective equipment and wildfire suppression handtools and associated equipment.

- b. Training. *Note: training is for fire department members only and not community members. All proposed training activities must include the name of course and the instructor and/or agency who will provide the training.*

Training is for members of the 6 included departments only. All training is aimed at meeting the new BC Structure Firefighter Minimum Training Standards, particularly competencies for Apparatus Operator, Team Leader, and Incident Commander. Due to the short time window since the release of the Training Standards, the CRD has not completed an equivalency assessment for all departments and is unable to confirm the individual courses required. CRD is working with the OFC to confirm equivalencies. CRD Procurement policy requires the use of a competitive process to award the training contracts which will follow notification of success from UBCM. We will identify the instructor and/or agency at that time.

9. Resiliency. Describe how the proposed project will build the resiliency of volunteer and composite fire departments in preparing for and responding to emergencies.

East Sooke - With 1/3 of our service area being a forested park, upwind from the residential area, keeping our firefighters properly equipped to respond to wildfire incidents will ensure a better response action (lighter and less constraining gear translates into more usable response hours per firefighter) and better firefighters protection (current overalls provide less protection than proper NOMEX PPE).

North Galiano - This project will provide the opportunity to increase flow rates on a 65mm (2.5") attack line during initial exterior attack on structural fires to "hit it hard from the yard", and increase the possibility of extinguishing or setting the fire back quickly.

Including lightweight portable monitors allows the flexibility to mount this mode of attack despite a limited response and older membership. PPE purchases will provide improved protection for members currently wearing ill-fitting or worn gear. Live fire & pumps & training will prepare members from a department with low structure fire call volume with the practical skills and experience to respond to emergencies.

Otter Point - The additional equipment will enable the department to not only have more resources to deal with larger incidents more efficiently, but also to restock apparatus in a timelier manner thus being ready for the next call sooner.

Shirley - The new turnout gear will allow our firefighters the protection needed to respond to active fires, road rescue incidents, medical aid calls, etc. They will be able to train in their new gear so that they are familiar with it in times of emergency. Without the approved Turnout gear they are unable to respond appropriately to emergencies.

Willis Point - Willis Point is a rural residential area where nearly all houses have an interface fire zone. Wildland firefighting PPE will strengthen our ability to protect our community. Structure protection bunker gear will keep our firefighters in up to date protective gear

10. Mental Well-Being. Describe the extent to which proposed training will specifically address the mental wellbeing of eligible fire department staff and volunteers.

As a volunteer department it is important for members to know they are valued enough to have the proper safety equipment to do their job. As we enter many highly stressful situations with members that may have minimal training it is very important for their mental health and well being to know that they have equipment that is up to the standard to properly protect them. Having old, hand me down gear or expired gear doesn't give the crew the confidence they need to psychologically do their job.

Improved response, PPE & training will improve the confidence and mental wellbeing of fire department staff and volunteers.

11. Transferability. Describe the extent to which the proposed project may offer transferable resources and supplies to other communities (e.g. trained staff and/or equipment that will be made available to other communities, training resources other communities will be invited to utilize, etc.).

East Sooke - The gear will ensure that East Sooke firefighters are prepared for wildfire incidents in our neighboring communities with which we have existing mutual aid agreements, and for deployment elsewhere in the province during fire season (in limited numbers).

North Galiano - NGVFD are mutual and automatic aid partners with the South Galiano Volunteer Fire Department. Mutual aid may be possible during large events on other Southern Gulf Islands.

Otter Point - The additional equipment will also be available to our four neighbouring volunteer/composite mutual aid fire department partners, which we have automatic mutual aid for structure fires with three of them.

Shirley - The more resources we have to attend to emergencies the more we can help the other communities. We have mutual aid agreements with neighbouring communities

which means we may need to send some of our resources to help them while still needing to cover our own community. Having all our members with the equipment they need means we have the additional resources to aid in those other communities.

Willis Point Fire Department has mutual aid agreements with neighbouring Saanich Fire Department, and Highlands fire department. Volunteer firefighters and equipment would be directly available through our mutual aid agreements in the region.

12. Partnerships. Identify any other organizations or stakeholders you will collaborate with on the proposed project and specifically outline how you intend to work together.

Significant coordination will occur between the 11 Fire Services where CRD is Authority Having Jurisdiction. However, no external partnerships are directly anticipated in this project.

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

Thank you.

SECTION 5: Required Application Materials

Only complete applications will be considered for funding. The following separate attachments are required to be submitted as part of the application.

All applicants are required to submit:

- ☒ Completed application form;
- ☒ Evidence of declared service level (e.g. bylaw, resolution); and
- ☒ Detailed project budget

Local government, First Nation, or improvement district applicants must submit:

- ☒ Council or Board resolution, Band Council Resolution or Treaty First Nation resolution, or improvement district Trustee resolution indicating support for the current proposed activities and willingness to provide overall grant management.

Legally incorporated society-run fire department applicants must submit:

- ☐ Board of Directors motion indicating support for the current proposed activities and willingness to provide overall grant management.
- ☐ Current Certificate of Good Standing.

Regional project applicants are required to submit:

- ☐ Resolution or motion from each partnering applicant clearly stating their approval for the primary applicant to apply for, receive, and manage the grant funding on their behalf.

SECTION 6: Signature

I certify that: (1) to the best of my knowledge, all information is accurate and (2) the area covered by the proposed project is within our jurisdiction (or appropriate approvals are in place).

Name: Jonathan Reimer

Title: Manager, Fire and Emergency Programs

Signature:



An electronic or original signature is required.

Date: October 18 2022

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

Submit applications to:

Local Government Program Services, Union of BC Municipalities

E-mail: cepf@ubcm.ca



Making a difference...together

REPORT TO MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE MEETING OF TUESDAY, NOVEMBER 29, 2022

SUBJECT Magic Lake Estates SCADA Communication Upgrades

ISSUE SUMMARY

To seek approval to include a Supervisory Control and Data Acquisition (SCADA) Communication Upgrade project to the Magic Lake Estates Water 2023 Capital Plan.

BACKGROUND

The existing Magic Lake Estates Water and Sewer infrastructure is controlled by a SCADA communication system that has been patched together over the years by a variety of systems and equipment. The SCADA system is extremely important as it enables an operator to control equipment and respond to alarms either remotely or in person depending on the severity of the alarm.

The existing communication equipment was installed starting in the 1970's, based on a number of criteria including: available technology, topography, lines of sight from antennas, expansion/upgrades to the water and wastewater systems and available funding. A communication study was conducted in the early 2000's to replace older technology. The study concluded that it was not possible to replace all sites to radio as cellular modems were not yet available. Therefore, the existing communication system has been maintained. The communication system hardware and annual third-party fees are noted in Table 1 below.

Table 1: Existing Communication Infrastructure for Magic Lake Estates Sites

Component	Locations	Function & Limitations	Third Party Fees
Trio Radio Antennas	Magic Lake WTP (w) Frigate Reservoir (w) Captain Reservoir (w) Magic Lake PS (w)	<ul style="list-style-type: none"> ▪ Radio ▪ Logs and displays information ▪ Can change setpoints remotely 	No annual fees
Telus Leased Lines	Buck Lake PS (w) Bosun PS (w) Schooner WWTP (s) Cannon PS (s) Galleon PS (s)	<ul style="list-style-type: none"> ▪ 4-20 mA signal ▪ Limited alarm display only ▪ Owned by Telus (so they charge fees and no internal troubleshooting available) 	\$15,000 per year (w) \$17,000 per year (s)
Two-wire Copper	Schooner PS (s) Cutlass PS (s) Capstan PS (s) Masthead PS (s) Buccaneer PS (s)	<ul style="list-style-type: none"> ▪ 4-20 mA signal ▪ Limited alarm display only ▪ No control or data acquisition 	No annual fees

(w) = water site

(s) = sewer site

As part of the design of the Magic Lake Estates Wastewater Treatment Plant and Pump Station (PS) Upgrades, the consultant completed an updated radio path survey and technology review to determine communication requirements for the new infrastructure.

Based on their investigation, it was determined that Telus wants to discontinue the leased lines and the two-wire copper components are limited in their functionality. In addition, they confirmed that newer radio and cellular modem options are available that would make the entire system more secure and reliable. Additional benefits of standardizing and modernizing the communication system include consistency, improved remote troubleshooting, better data collection, lower operational fees, and advanced system and alarm monitoring. The proposed communication system and annual third-party fees are noted in Table 2 below. The proposed communication equipment upgrades will result in about \$14,000 per year less operational fees for the Water Service.

Table 2: Proposed Communication Infrastructure Upgrades for Water and Sewer Sites

Component	Locations	Function	Third Party Fees
GE MDS Orbit Radio	<u>Magic Lake WTP (w)</u> <u>Captain Reservoir (w)</u> <u>Buck Lake PS (w)</u> Frigate Reservoir (w) Magic Lake PS (w) Galleon PS (s) Schooner PS (s) Capstan PS (s) Masthead PS (s) Buccaneer PS (s)	<ul style="list-style-type: none"> Modern Radio system Logs and displays information Can control setpoints and reset alarms remotely Some types of troubleshooting can be done remotely 	No annual fees
GE MDS Orbit Cellular	<u>Magic Lake WTP (w)</u> Bosun PS (w) Schooner WWTP (s) Cutlass PS (s) Cannon PS (s)	<ul style="list-style-type: none"> Cellular modem system Logs and displays information Can control setpoints and reset alarms remotely Some types of troubleshooting can be done remotely Low monthly fees for data usage 	~ \$720 per year (w) ~ \$1080 per year (s)

Note: the site locations underlined above require communication upgrades for the communication system at the wastewater sites to function.

The consultant advised that, in order to complete the wastewater facility upgrades, communication upgrades must also be completed at three water facility sites, (Magic Lake Water Treatment Plant for radio and cellular, Captain Reservoir, and Buck Lake Pump Station) for the upgraded radio system to function properly because of the location and elevation of these sites. These locations will use master radios and 'store and forward' technology so that all information can be received back to the Water Treatment Plant where the SCADA server is located.

Although the remaining three water sites, (Bosun PS, Frigate Reservoir, and Magic Lake PS), do not require upgrades for the wastewater communication system to function, there are benefits to changing these sites as well. The benefits include lowering the annual operating fee and eliminating radio interference between the Trio and Orbit systems. Although it may be possible to keep the two radio systems, it will cost more to mitigate potential interference and it is not guaranteed that some interference could occur which can create poor signals, limit data collection, and cause false alarms.

The cost estimate to implement the recommended changes to the water sites are listed in Table 3 below.

Table 3: Cost Estimate for Magic Lake Estates Communication Upgrades

Task	Three Water Sites required for Sewer Upgrades	Three Water Sites for benefit of Water only	Water Sites - Total
Design	\$ 8,000	\$ 4,000	\$12,000
Hardware	\$45,000	\$15,000	\$60,000
Installation	\$ 3,000	\$ 3,000	\$ 6,000
Commissioning	\$ 6,000	\$ 6,000	\$12,000
Total	\$62,000	\$28,000	\$90,000

Note: costs for the sewer sites communication upgrades are not included above (i.e., kiosk, radios and antennas). Those items are included in the wastewater project capital plan.

As noted above, the reduction in annual operating fees from completing the communication upgrades to the Water Sites is about \$14,000. Therefore, based on a capital cost of \$90,000 the payback period would be approximately seven years.

ALTERNATIVES

Alternative 1

The Magic Lake Estates Water and Sewer Committee recommends the Electoral Areas Committee recommends to the Capital Regional District Board:

That the provisionally approved Magic Lake Estates Water Service 2023-2027 Capital Plan and Budget be amended to include a new Capital Project for 2023 to complete communication improvements at all Magic Lake Estates Water sites with a budget of \$90,000 to be funded from the Water Service Capital Reserve Fund.

Alternative 2

The Magic Lake Estates Water and Sewer Committee recommends the Electoral Areas Committee recommends to the Capital Regional District Board:

That the provisionally approved Magic Lake Estates Water Service 2023-2027 Capital Plan and Budget be amended to include a new Capital Project for 2023 to complete communication improvements at three Magic Lake Estates Water sites with a budget of \$62,000 to be funded from the Water Service Capital Reserve Fund.

Alternative 3

That this report be referred back to staff for additional information.

IMPLICATIONS

Alternative 1

Upgrading communication systems at all water and wastewater facilities would make the entire system more secure and reliable. In addition, it will standardize the whole system to make it more consistent, improve remote troubleshooting, enable better data collection, and provide advanced monitoring and alarm response.

It will be more cost effective for the system to be designed and upgraded by the same consultant and contractor. Currently the Magic Lake Estates Water Service has \$620,328 in its 2023 Capital Reserve Fund. Therefore, there are sufficient funds to include a 2023 capital project with a budget of \$90,000. The net annual reduction of third-party fees is about \$14,000.

Alternative 2

Upgrading the communications systems at only three water sites just to enable the SCADA system to work for wastewater upgrades could work, but with noted challenges. Bosun PS would retain a Telus leased line along with the high operating costs. Frigate Reservoir and Magic Lake PS would retain a different radio than the rest of the system, which could cause interference with the Orbit radio. Additional design and isolation efforts could be implemented to mitigate potential interference, but it is not guaranteed to work. There are sufficient funds in the Water Service Capital Reserve Fund to include a 2023 capital project with a budget of \$62,000. The net annual reduction of third-party fees is about \$7,000.

CONCLUSION

The existing Magic Lake Estates Water and Sewer infrastructure is controlled by a SCADA communication system that has been patched together by a variety of systems and equipment. As part of the Magic Lake Estates Wastewater Treatment and Pump Station project, CRD's consultant has completed a SCADA communication review and is recommending upgrades to the entire system to make it more secure and reliable. Upgrading the Telus leased lines to radio or cellular modem sites at the Water locations could also reduce the annual third-party fees by about \$14,000.

RECOMMENDATION

The Magic Lake Estates Water and Sewer Committee recommends the Electoral Areas Committee recommends to the Capital Regional District Board:

That the provisionally approved Magic Lake Estates Water Service 2023-2027 Capital Plan and Budget be amended to include a new Capital Project for 2023 to complete communication improvements at all Magic Lake Estates Water sites with a budget of \$90,000 to be funded from the Water Service Capital Reserve Fund.

Submitted by:	Martina Bona, P.Eng., Project Engineer, Wastewater Engineering and Planning
Concurrence:	Malcolm Cowley, P.Eng., Manger, Wastewater Engineering and Planning
Concurrence:	Joseph Marr, P.Eng., Acting Senior Manager, Infrastructure Engineering
Concurrence:	Ian Jesney, P. Eng., Acting General Manager, Integrated Water Services
Concurrence:	Ted Robbins, BSc., CTech., Chief Administrative Officer

ATTACHMENT

Appendix A: SCADA Radio Path Analysis – Field Testing Report by Victoria Mobile Radio

Capital Regional District
Magic Lake Estates
SCADA Radio Path Analysis
Field Testing

Report By:

Victoria Mobile Radio Ltd.

October, 2022

1.0 Introduction

Victoria Mobile Radio (VMR) was hired to do a Desktop Study for a proposed radio system for the Magic Lake Estates SCADA system on Pender Island. Afterwards VMR was asked to do the Field Testing to verify the Desktop Study paths.

2.0 General

Older SCADA systems often used leased lines for communications. The Industry has been switching to SCADA radio for many years now. Mainly due to problems to get proper support for the leased lines. The telephone Carriers want hundreds of calls on a phone line, not one modem talking to one RTU. This support becomes a low priority item for them. Reliability is not the only reason. Newer SCADA radio technology has faster data speeds, powerful networking abilities, and state of the art security.

3.0 Background Information

3.0.1 The Magic Lakes Estates system is predominantly wired. Either a telephone leased line or 2-wire copper between sites. There are also a few Trio SCADA radios in place for three links back to the Water Treatment Plant (WTP).

3.0.2 As part of the WTP upgrade a new SCADA radio system is proposed. The Capital Regional District (CRD) uses the GE MDS TransNet unlicensed radio for many of their other SCADA needs. The original request was to plan for this radio to be used for the new system. This is an older GE MDS radio model, serial only, that has been around for 15+ years. It is still a very popular product due to its reliability and very good performance. However, based on GE MDS notification of the TransNet hardware being end-of-life as of December 2020, VMR used the GE MDS MCR-900 radio for all field testing. Not to put customers in a bad spot GE MDS is going to produce an Orbit radio that is backward compatible to the TransNet radio to make sure existing TransNet systems have the ability to stay in operation. This is not a migration path from TransNets to Orbit, as the radio cards are too different in technologies.

3.0.3 Appendices included in this Report

3.0.3.1 Appendix A – Overview Map

3.0.3.2 Appendix B – Field Testing Spreadsheets
(Note: See multiple tabs at bottom)

3.0.3.3 Appendix C - TransNet Specification Sheet

3.0.3.4 Appendix D - ECR/MCR-900 Specification Sheet

3.0.3.5 Appendix E - LN4 Specification Sheet

3.0.3.6 Appendix F - Budgetary Pricing

4.0 System Path Considerations

- 4.0.1 Even though all Magic Lake Estate's sites are relatively close together the topography is such that it is still challenging for radio. A number of SAF sites will be needed. It was confirmed by the Field Testing that tree obstructions proved to be significant.
- 4.0.2 The Field Testing followed what the Desktop suggested. Generally speaking, sites were tested from a radio located on the top of the Lively Peak Shaw tower first, and then from a radio at the Frigate Reservoir, then Capstan Pump Station, and finally with a radio at Galleon Pump Station.
- 4.0.3 With the Desktop work suggesting that the Cannon Pump Station will not have radio coverage for the proposed radio network on the Island there was three alternate tests done. First, to see if the SPWS TransNet Repeater on Bruce Mountain, Saltspring Island, would have coverage. Second, to see if the CRDW Repeater on Mt. McDonald would have coverage, and the third was to measure cellular coverage.
- 4.0.4 UHF licenced radio is also an option that would roughly produce about 12dB more signal due to higher RF power and better propagation due to the lower 400MHz frequency, as compared to 900MHz. There was no UHF radio Field Testing done.

5.0 System Equipment Considerations

- 5.0.1 The GE MDS MCR-900 unlicensed radio was used to qualify radio performance for the Study. The GE MDS Orbit LN9 radio was used to measure signal from Mt. McDonald. The GE MDS Orbit Cell Modem was used to measure cell signal. For any unlicensed measurements a number of parameters were gathered with the MCR-900 radio: RSSI, LQI, and IPERF Data Throughput.

6.0 Radio Path Evaluation

The following tasks were completed to assess radio path performance:
(See Appendix B)

6.0.1 Field Testing to Lively Peak.

- 6.0.1.1 Path to Capstan Pump Station
- 6.0.1.2 Path to Masthead Pump Station

- 6.0.1.3 Path to Galleon Pump Station
- 6.0.1.4 Path to Buccaneer Pump Station
- 6.0.1.5 Path to WTP
- 6.0.1.6 Path to Bosun Pump Station
- 6.0.1.7 Path to Frigate Reservoir
- 6.0.1.8 Path to Magic Lake Pump Station

6.0.2 Field Testing to Frigate Reservoir

- 6.0.2.1 Path to Cutlass Pump Station
- 6.0.2.2 Path to Masthead Pump Station

6.0.3 Field Testing to Galleon Pump Station

- 6.0.3.1 Path to Masthead Pump Station
- 6.0.3.2 Path to Buck Lake Pump Station

6.0.4 Field Testing to Capstan Pump Station

- 6.0.4.1 Path to Schooner WWTP
- 6.0.4.2 Path to Schooner Pump Station
- 6.0.4.3 Path to Buck Lake Pump Station
- 6.0.4.4 Path to Frigate Reservoir

6.0.5 Field Testing at the Cannon Pump Station

- 6.0.5.1 Path Test to Mt. Bruce Using Unlicensed TransNet Radio
- 6.0.5.2 Path Test to Mt. McDonald Using Licensed LN9 Radio
- 6.0.5.2 Cellular Test Using Orbit Cellular Modem

7.0 Unlicensed/Licensed System Design

In consideration of the radio path assessment completed in Section 6.0, the following radio system design considerations are submitted:

7.0.1 MDS TransNet unlicensed Radio Specifications:
(See Appendix C)

- 7.0.1.1 RF Transmit Power: 1 Watt
- 7.0.1.2 Receive Sensitivity: -108 dBm
- 7.0.1.3 Maximum Baud Rate: 115 kbps
- 7.0.1.4 Very powerful SAF functionality (Serial data only radio)

7.0.2 MDS Orbit MCR/ECR-900 unlicensed Radio Specifications

7.0.2.1 RF Power: 1 Watt

7.0.2.2 Receive Sensitivity: -105dBm to -95dBm (Depending on Configuration)

7.0.2.3 Maximum Baud Rate: 1.25Mbps, depending on RF conditions

7.0.2.4 Powerful SAF functionality, but limited with TCP/IP functionality

7.0.2.4 IP radio, but fully capable of serial payload data

7.0.3 MDS Orbit LN4 Licensed Radio Specifications:

7.0.3.1 RF Transmit Power: 10 watts

7.0.3.2 Receive Sensitivity: -115 dBm to -103dBm (Depending on Configuration)

7.0.3.3 Maximum Baud Rate: 64 kbps

7.0.3.4 TCP/IP with built-in Firewall and Router

7.0.3.5 Limited SAF functionality

7.0.4 An Industry accepted radio system design standard for 900MHz SCADA radio is a Fade Margin of 22 dB to obtain a radio path reliability of 99.4%. Depending on level of data “availability” that is needed this number can be reduced or increased. A 99.4% reliability link will suffer outages over a one-year period of 52 hours and 24 minutes. Licensed and unlicensed radios each have their own advantages/disadvantages. Each may be more appropriate depending on system requirements.

8.0 Conclusion

8.0.1 A 400 MHz Licenced radio system could be implemented that would produce improved radio coverage. However, we are recommending using unlicensed 900MHz radios for the following reasons:

8.0.1.1 There would still need to be at least 2 cell modems with a UHF System.

8.0.1.2 Adding three more cell modems to make the 900MHz system work is not a significant cost. Certainly not enough cost to justify using the Bear Mountain frequency pair, as that may limit the use of this licenced frequency pair for larger SCADA uses in the future.

8.0.1.3 There are significant bandwidth limitations with Licenced radio, as compared to Unlicensed.

8.0.1.4 There is ISSED(IC) licencing costs with Licenced radio.

8.0.2 A 900 MHz Unlicensed Radio System upgrade could be implemented as follows:

8.0.2.1 Install a Master Radio (AP) at the Lively Peak (Captain's Reservoir) with the following sites communicating directly to this site.

- 8.0.2.1.1 WTP
- 8.0.2.1.2 Capstan Pump Station
- 8.0.2.1.3 Galleon Pump Station
- 8.0.2.1.4 Buccaneer Pump Station
- 8.0.2.1.5 Frigate Reservoir
- 8.0.2.1.6 Magic Lake Pump Station
- 8.0.2.1.7 Bosun Pump Station

8.0.2.2 Install a SAF Radio at Galleon Pump Station that will communicate with the following sites:.

- 8.0.2.2.1 Masthead Pump Station
- 8.0.2.2.2 Buck Lake Pump Station
- 8.0.2.2.3 Lively Peak AP

8.0.2.3 Install a SAF Radio at the Capstan Pump Station that will communicate to the following sites:

- 8.0.2.3.1 Schooner WWTP
- 8.0.2.3.2 Capstan Pump Station

8.0.2.4 Install a SAF Radio at the Schooner WWTP site that will communicate to the following site:

- 8.0.2.4.1 Schooner Pump Station
- 8.0.2.4.2 Capstan Pump Station

8.0.2.5 Install Orbit Cellular Modems at the following sites that testing has shown to have weak radio paths. It should be emphasized that cellular only has a reliability of 95%. Far short of licenced or unlicenced radio that 99.4% is strived for. For example, this is the difference between 52 hours in a year of downtime (99.4%) and 438 hours of downtime (95%). One will go un-noticed by the SCADA system, the other will not.

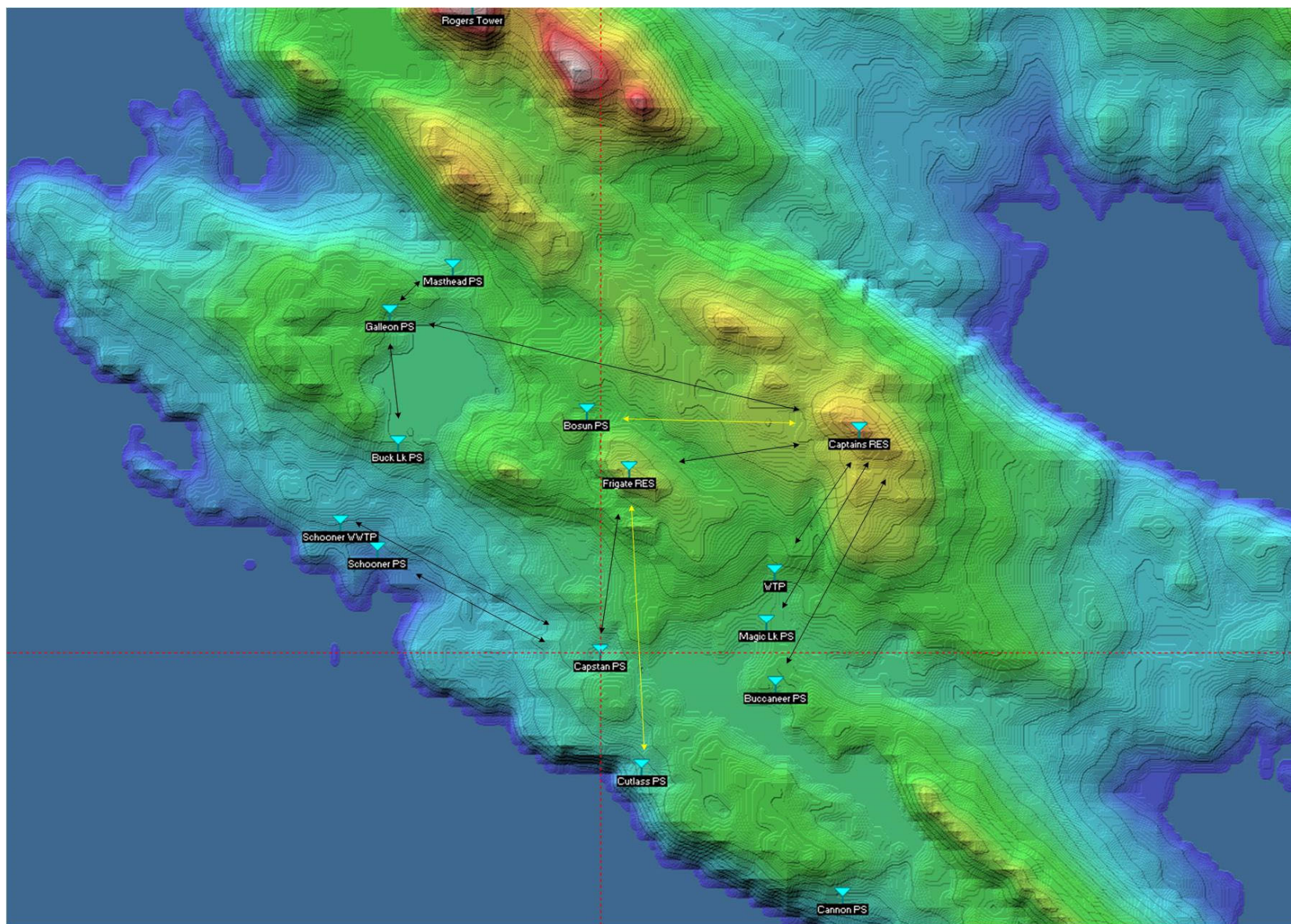
- 8.0.2.5.1 Bosun Pump Station
- 8.0.2.5.2 Schooner WWTP
- 8.0.2.5.3 Cutlass Pump Station
- 8.0.2.5.4 Cannon Pump Station

9.0 Recommendations

In consideration of the conclusions identified in Section 8.0, it is recommended:

- 9.0.1 Plan the most reliable system possible based on the data in this report.
(See Appendix A)
- 9.0.2 Install cellular radio at sites that do not have reliable radio path (99.4% Reliability) based on the data in this report.
(See Appendix A)
- 9.0.3 Any site where cellular is implemented, and radio coverage is available but does not meet reliability parameters, should have radio configured as backup.
- 9.0.4 Implement cellular radio for desired remote access for control and diagnostics. For example, the radio path from Schooner WWTP to Capstan Pump Station is Marginal. So, it would make sense to install a cell modem at Schooner WWTP which would give remote access and fast backhaul functionality. Schooner WWTP would still have a radio for communications to Capstan Pump Station and Schooner Pump Station. Schooner Pump station needs to use Schooner WWTP as a SAF or cell site to get communications out. Perhaps set-up the WTP as the cell Hub if that is where the Host software will be located? Or bring the system back to Macauley and install the cell Hub at that location?
- 9.0.5 Implement redundant equipment at key sites if uptime is critical. Remove as many single points of failure as possible. For example, install Master radios at the WTP and Captain's Reservoir.
- 9.0.6 Use directional antennas everywhere possible, as per Industry Canada's directive.
- 9.0.7 Implement Security measures available with the Orbit radios.
- 9.0.8 Complete a radio network system design, including Bench Testing, based on feedback to the results of this Report.

Appendices



Appendix A – Overview Map

CRD Magic Lake Estates Path Analysis

Field Testing - 900MHz (unlicensed)

October 6, 2022

[illegible]

CRD Magic Lake Estates Path Analysis

Field Tesitng - 900MHz (unlicenced)

October 6, 2022

[illegible]

CRD Magic Lake Estates Path Analysis
Field Testing - 900MHz (unlicenced)
October 5, 2022

	Location	Latitude	Longitude	Bearing to	Path Length	Elevation	AGL	RSSI	LQI	IPERF	Fade	Fade	Reliability	Comments
		(North dms)	(West dms)	Lively Peak	(km)	(m)	(FT)	(-dBm)	(Signal	Data	Margin	Margin	500/250	
							(Bucket Truck)	Measured	Quality)	Speed	500 Modem	250 Modem	(%)	
	Paths to Lively Peak (Shaw Tower)									(kbps)	(dB)	(dB)		
1	Capstan Pump Station	48.76467°	-123.2932°	51.7	1.11	61.2	10/20/30/40/50	88/85/78/78/77	8/8/9/8/8	83@30'	22	26	99.4/99.7	Good @ 30'
2	Masthead Pump Station	48.77592°	-123.2998°	138.6	1.54	71.5	10/20/30/40/50	122/99/99/98/?	?/16/16/16/?	19@30'	1	5	55/75	No Good
3	Galleon Pump Station	48.77458°	-123.3026°	105.0	1.61	77.2	10/20/30/40/50	89/90/76/77/?	7/8/8/8/?	198@30'	22	26	99.4/99.7	Good @ 30'
4	Buccaneer Pump Station	48.76372°	-123.8254°	20.6	0.85	78.2	10/20/30/40/50	72/72/73/?/?	5/5/6/?/?	251@30'	27	31	99.8/99.23	Good @ 10'
5	Water Treatment Plant	48.76700°	-123.2855°	35.2	0.53	83.4	10/20/30/40/50	85/85/76/74/?	8/8/8/8/?	132@30'	25	29	99.6/99.91	Good @ 30'
6	Bosun Pump Station	48.77169°	-123.2938°	69.0	0.92	102.2	10/20/30/40/50	?/87/?/?/?	?/6/?/?/?	44@20'	12	16	94/97	Poor
7	Frigate Reservoir	48.77003°	-123.29200°	83.4	0.78	130.4	10/20/30/40/50	67/67/65/?/?	5/5/5/?/?	329@30'	34	38	99.95/99.99	Good @ 10'
8	Magic Lake Pump Station	48.76553°	-123.2859°	29.2	0.68	76.9	10/20/30/40/50	82/82/72/?/?	8/13/12/?/?	279@30'	27	31	99.8/99.23	Good @ 30'
9	Lively Peak	48.77083°	-123.2814°	-	-	167.9	-	-	-	-	-	-	-	-
	Notes:						LQI / Modem							
							Pristine							
							Usable							
							Sensitivity (dBm) based on 1x10 ⁻⁶ @ XXX kbps							
	Acceptable Fade Margin Based on Reliabilty of 99.4% or 22dB.													
	All Unlicenced Radio Tests Used the 500kbps Modem Setting						Good: ≥22 dB of Fade Margin							
							Marginal: <22dB, ≥18 dBd of Fade Margin							
							Poor: <18 dB, ≥10 dB of Fade Margin							
							No Good: < 10 dB of Fade Margin							

TransNET

Long Range, High Speed
Serial Communications



APPENDIX A

Data Acquisition | Compact and Unlicensed

Today's SCADA and Telemetry systems transport large amounts of data at ever-increasing speeds. Additionally, the need for greater packaging flexibility has redefined the "ideal" wireless platform. The MDS TransNET™ utilizes FHSS (Frequency Hopping Spread Spectrum) to provide reliable long range data transportation at up to 115.2 kbps. The TransNET provides transparent data communications for nearly all SCADA, Telemetry, and EFM protocols including Modbus.

Any MDS TransNET may be configured as a repeater to extend the operating range of the network. Multiple repeaters may exist at any level of the network preventing a single radio failure from disabling the entire network.

Key Benefits

- Digital signal processing (DSP) technology with self-equalization, automatic CRC/ARQ and powerful forward error correction
- Quick return on investment with plug-and-play installation
- Unlicensed radio design
- Communicate with any asynchronous protocol without extra software or additional programming
- Excellent performance in the face of interference or difficult signal paths
- Network-wide diagnostics software simplifies tasks and reduces costs

Application Specific Wireless Solution



Oil & Gas

- Remote monitoring of pipeline flow and status signals
- Monitor and transmit wellhead pressure and tank levels collected by RTUs



Energy

- Remote control of IED and PLC at distribution substations
- Condition monitoring for pole-top circuit breakers and capacitor banks



Water & Wastewater

- Monitor lift stations across multiple sites from control room



Heavy Industrial

- Activation of perimeter gates based on detection of vehicle
- Monitor and control remote pumps and compressors

Industrially Hardened

- Operational temperature range from -40°C to 70°C
- CSA Class I, Div. 2 groups A, B, C, D for hazardous locations

Application Flexibility

- Low power consumption sleep mode for solar powered applications
- Long range wireless communication, up to 30 miles
- High speed throughput to 115.2 Kbps

Reliable & Scalable

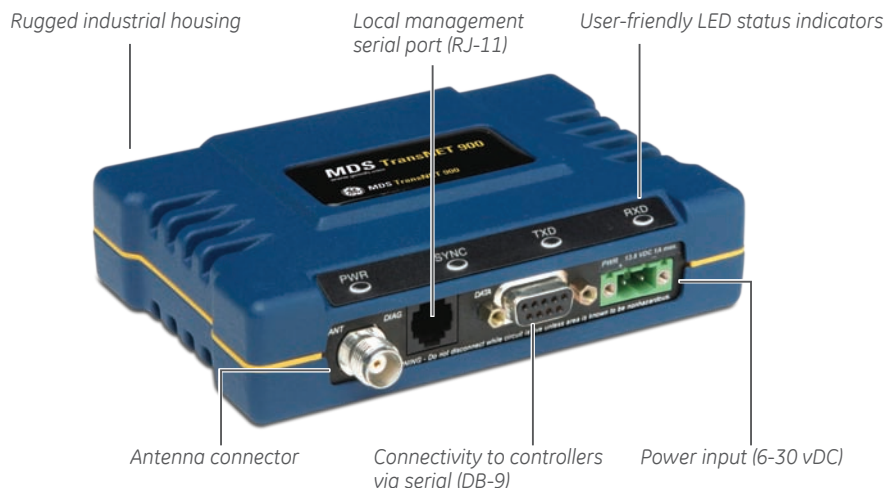
- Point-to-Multipoint, 2-way communication
- High receive sensitivity for noisy environments and long distances
- Compatible with multiple industry protocols including Modbus and DNP3
- Unparalleled robustness with forward error correction and CRC/ARQ multiple re-sends
- Store and forward to extend network range cost-effectively

Secure

- Proprietary hopping algorithm among 128 channels



Remote & Access Point



Specifications

GENERAL

Frequency Band 902-928 MHz ISM band
 Dimensions 8.9 D x 12.7 W x 2.5 H cm.
 (3.5 D x 5 W x 1 H in.)
 Input Power 6 to 30 Vdc
 Current Drain for AP and Remote

Mode	30 Vdc	13.8 Vdc	6 Vdc
Transmit	236 mA	510 mA	1.18 A
Receive	51 mA	100 mA	155 mA

Sleep Mode 4 mA typical
 Temperature -40° C to +70° C
 Range Up to 30 miles
 Humidity < 95% RH (Non-Condensing)

TRANSMITTER

Power Output 1 Watt (30 dBm) at 6 Vdc to 30 Vdc, user selectable down to 100 mw (+20 dBm)
 Modulation CPFSK

RECEIVER

Sensitivity -105 dBm (1 x 10⁻⁶ BER) typical
 Error Detection CRC16; Resend on Error
 Interference Avoidance 64,000 hop patterns selected automatically via network address
 FEC, CRC/ARQ and/or Multiple Packet Transmits
 Excellent Strong Signal (interference) Characteristics
 Band Segmentation for Friendly Coexistence with other services such as LMS

DATA

Interface RS-232/RS-485 (User Selectable)
 Usable Throughput 115.2 kbps
 Port Speeds 1.2 to 115.2 kbps

CONNECTORS

Power, User, NMS 2 Pin Phoenix, DB-9, RJ11
 RF TNC

OPERATING MODES

Point-to-Multipoint
 Master
 Remote
 Repeater Extension (store and forward) – Unlimited repeaters, self healing networks

NETWORK MANAGEMENT

Diagnostics
 Centralized network control eliminates site visits
 Create store and forward configurations
 Compatible with other MDS Products
 MDS InSite

AGENCY APPROVALS

FCC Part 15 Approved
 UL/CSA Class 1 Div. 2 approved (UL 508, UL 1604)
 IC Approved

Ordering

TransNET Remote and Access Point

EL805-MD	* X * A * C * * * N	
Frequency	9	MDS 900-928 MHz long range (up to 30 miles), FCC and IC approved
	2	MDS 2.4 GHz long range (up to 15 miles), not FCC/IC/ETSI approved
Interface	0	RS-232
	1	RS-485
Diagnostics	N	None
	W	Network-wide

Order Code Example

EL805-MD9X1AFCS0WN

- Chassis-enclosed radio
- 902-928 MHz band
- RS-232 interface
- Include network diagnostics

Accessories for the TransNET

Fixed Remote Kit with Yagi	KFR-N09-D1
Power Supply (AC Input)	01-3682A02

View Accessories catalog at www.gemds.com

Visit www.GEMDS.com/TransNET to:

- Buy TransNET through the online store
- Download guideform specifications
- Download user documentation
- Read application notes and white papers

MDS Orbit Unlicensed Solutions



900MHz and 2.4/5 GHz Routers for Cost-Effective Industrial Deployments

Orbit's industry-leading networking and security capability as well as its support for a variety of wireless technologies and topologies position it as a single box, OPEX-saving platform for industrial networks.

GE's unlicensed wireless solutions provide exceptional performance with 900MHz or Wi-Fi to extend secure connectivity across industrial networks.

Key Benefits

- Extend industrial networks into rural and Field Area Networks using Orbit's 900MHz Unlicensed, Wi-Fi, and cellular connectivity
- High performance interference avoidance and very low latency 900MHz technologies along with advanced Quality of Service enable determinism for critical and industrial applications
- Orbit's integrated routing, switching, Quality of Service (QoS) and comprehensive security provide for flexible integration into modern networks
- A holistic cyber security framework protects the users, the network and assets and allows operators to meet stringent government and corporate cyber security requirements
- Rugged durable design, wide temperature range and low power consumption provide deployment life extension in the harshest of environments while protecting CAPEX investment

Applications



Oil & Gas

- Well head and production pad automation
- Pipeline monitoring and control
- WiFi for field operations



Water & Wastewater

- Level, pressure and flow monitoring
- Pipeline monitoring and control



Utility

- DA & AMI convergence
- Renewables protection and control with IEC® 61850
- Substation device monitoring and video surveillance



Heavy Industrial

- Heavy machinery monitoring
- Excavation machine control
- Facility-wide network extension to offsite areas

What's New

- New SFP fiber interface
- New alarm input with optional alarm sensor kit
- Configurable automatic over-the-air radio firmware upgrades
- VRF and Open VPN
- EMP hardened per MIL-STD-461G, RS105

Comprehensive Security

- Advanced firewall protects users and network assets against intrusion
- IPSec VPN enables secure enterprise-class encrypted communication
- Secure boot protects integrity of firmware
- Extensive X.509 digital certificate management simplifies provisioning
- Integration with enterprise systems via RADIUS, AAA, SCEP, SNMPv3 and Syslog
- FIPS 140-2 (Level 2) certified*

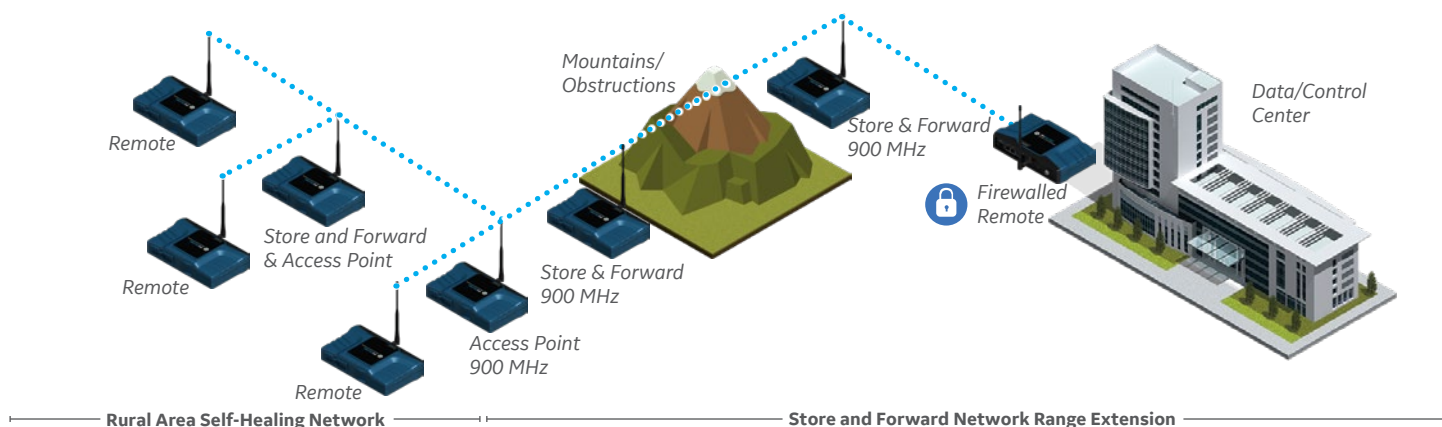
Deterministic Performance

- High performing 900MHz unlicensed FHSS and dual-band Wi-Fi routers
- Low latency for critical and demanding protection applications
- Advanced Quality of Service ensures deterministic application performance
- Designed to endure harsh environments:
 - Enhanced ESD protection
 - Extended temperature (-40 to +70 C)
 - Class 1/Div 2 & IEEE® 1613 compliance



The MDS Orbit Platform Models & Radio Support

MDS Orbit as Enabler for Classic Multipoint Communication with Coverage Extension Into Rural Areas



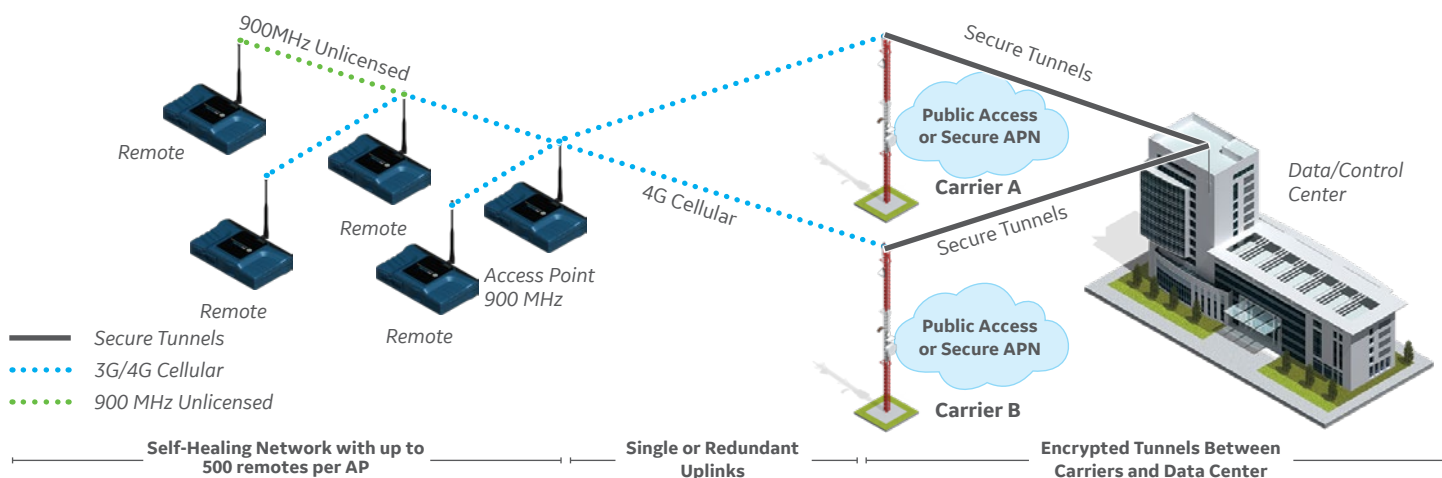
Features

- MDS Orbit's flexible 900MHz unlicensed deployment architectures as well as support of > 30 miles per segment with effective FHSS interference avoidance make it an ideal enabler for the expansion of network coverage into remote and rural areas
- A large scalability of remotes per Access Point expands network coverage into massive footprints
- High performance Store and Forward technology allows repeaters to be daisy chained for up to 8 hops in series to extend network range through mountainous or rugged terrain
- Stateful firewalling as well as RF and IPsec encryption ensure protection of data, users and network assets from intrusion

Application Examples

- Oil & gas production fields, oil pipeline monitoring & control, Distribution Automation Field Area Networks, water & waste water, municipalities

MDS Orbit as 900MHz Unlicensed Gateway with Multiple Encrypted Uplinks Through Public Carriers



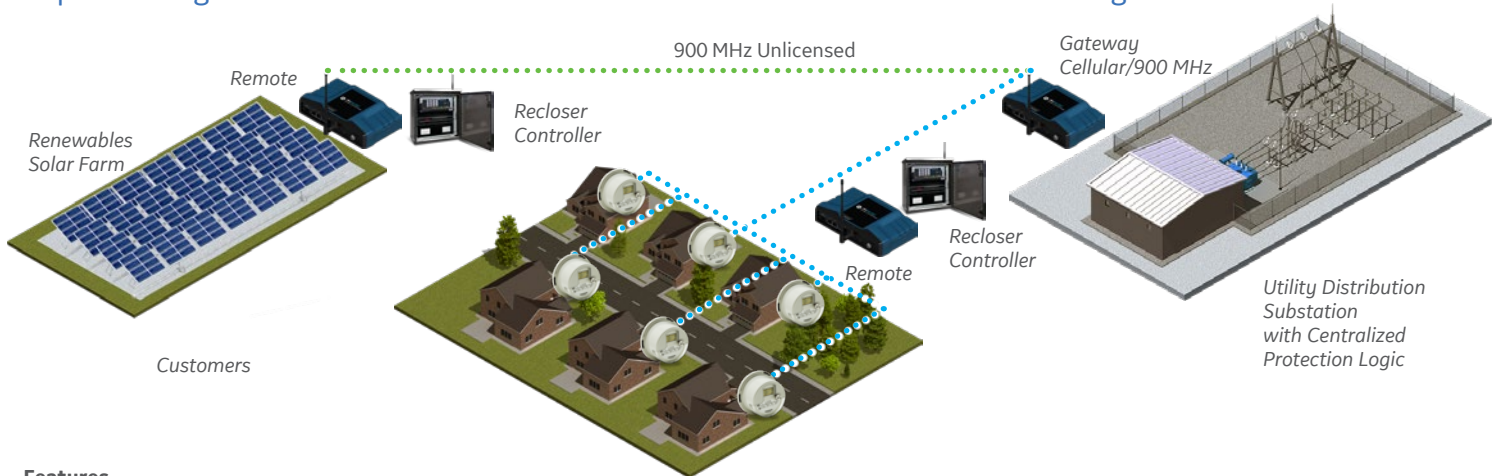
Features

- MDS Orbit MCR-900 supports a second wireless card which could be 4G LTE with 3G fallback.
- The large scalability of MDS Orbit unlicensed 900MHz remotes allows for cost effective expansion of network coverage to allows to cost-effectively expand network coverage to hundreds of sites with a single cellular uplink thus saving on OPEX by eliminating recurring per-site cellular subscription fees
- Stateful firewalling as well IPsec encryption can be applied on 900MHz or Cellular links to augment network security for critical applications and protect against intrusions

Application Examples

- Advanced Metering Infrastructure (AMI) gateways, Distribution Automation Field Area Networks, water & waste water, municipalities, oil & gas production fields

Implementing Renewables Protection & Control with the IEC 61850 Protocol using MDS Orbit



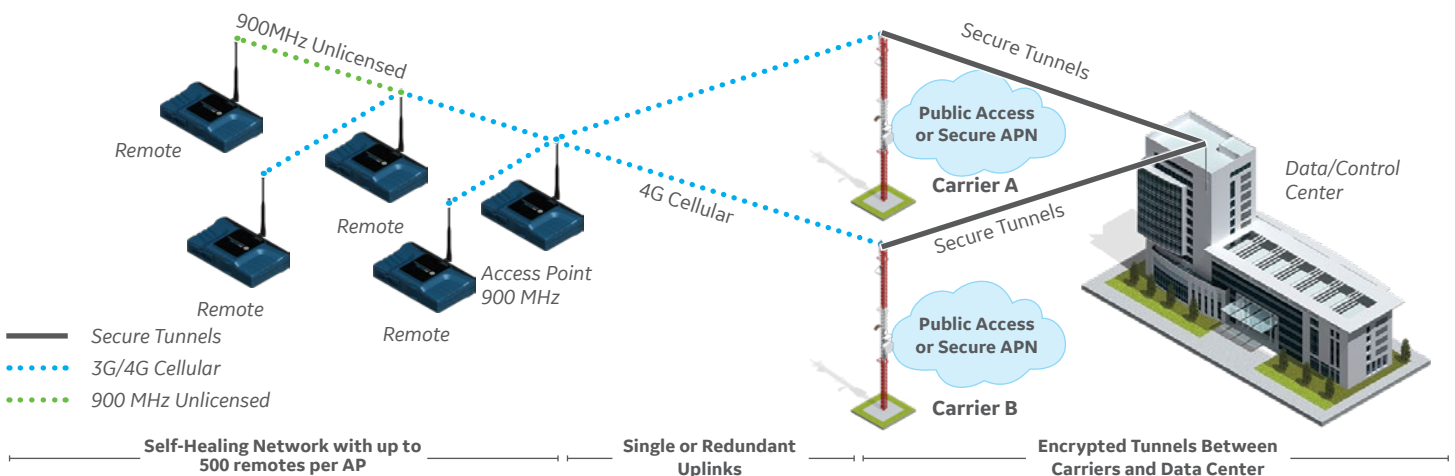
Features

- MDS Orbit's high performance 900MHz unlicensed technology can transport IEC 61850 GOOSE Ethernet frames natively. It allows for data rates of up to 1.25Mbps with a latency tunable to as low as 5msec. This along with advanced Quality of Service facilitate advanced Distribution Automation applications such as Renewables/Distributed generation Protection & Control which demand low latency and network determinism
- A large scalability of remote enables cost-effective coverage of large customer and asset footprints
- Stateful firewalling as well as RF and IPsec encryption enable network operators to meet NERC® CIP / EPCIP and other stringent cyber security requirements by encrypting communication links and protecting network assets and users against intrusion

Application Examples

- Distributed Generation/Renewables Protection & Control, Distribution Automation, critical infrastructure control, other protection applications

MDS Orbit as a Network Convergence Enabler for Multiple Simultaneous Applications



Features

- MDS Orbit supports advanced QoS functionality which allow it to prioritize egress traffic based on Layer 2- Layer 4 classifications. In this fashion, critical applications are assigned to the priority queue and are switched first to meet application requirements.
- Orbit is capable of up to 5 site-to-site IPsec VPN tunnels per device which give it flexibility to secure critical application paths as needed. Furthermore,
- Orbit supports a stateful firewall to protect the network and assets against intrusion.
- Orbit's support of multiple wireless and networking technologies make it an ideal network convergence platform.

Application Examples

- Converged Distribution Automation (Protection, Control, SCADA, Metering, AMI etc.), Oil & Gas production fields (SCADA, control, Workforce, Video Monitoring)

MDS Orbit Unlicensed Specifications

900 MHZ UNLICENSED

- Operating Modes: Access Point, Remote, Store & Forward
- Technology: Point-to-Point, Point-to-multipoint,
- Data Rates/Sensitivity:
 - 125 Kbps/-105 dBm
 - 250 Kbps/-103 dBm
 - 500 Kbps/-99 dBm
 - 1.0 Mbps/-95 dBm
 - 1.25 Mbps/-95 dBm
- Latency: tunable to <5 msec one-way
- Output Impedance: 50 Ohms
- Frequency: 902-928 MHz
- Frequency Masks: 16 masks, up to 5 channels per mask
- Spreading method: FHSS, DTS
- Occupied Bandwidth 152 to 1320 kHz, up to 80 channels
- Modulation 2, 4-level GFSK, Dwell Time 10-300 msec
- Carrier Power 100 mW – 1W, Range > 30 miles
- Media Access: Patent pending proprietary design, advanced interference avoidance, error detection, retransmission, auto repeat guaranteed collision free data, and dynamic fragmentation
- Input Voltage 10 to 60 VDC
- Typical Power Consumption:

	AP	REMOTE
Idle	4.0W	3.2W
50% Duty Cycle	5.3W	5.0W

WI-FI OPTIONS

IEEE 802.11 b/g/n 2.4 GHz option:

- 1x1 SISO (single antenna/radio chain)
- Scalability up to 2 SSIDs, up to 7 clients/stations
- Max transmit power (adjustable): up to 20dBm
- Operating modes: Access Point (AP), Station, Station bridging
- Security: WPA/WPA2 PSK, Enterprise
- Applications:
 - Local configuration and management using Wi-Fi devices
 - Station/client connecting to a 2.4GHz AP in outdoor LOS environment
 - Small-scale 2.4GHz AP operating in outdoor LOS environment

IEEE 802.11 a/b/g/n Dual-Band 2.4/5 GHz option:

- 2x2 MIMO (dual antenna/radio chain)
- Scalability up to 2 SSIDs, up to 32+ clients/stations
- Max transmit power (adjustable): up to 26dBm (23dBm per antenna/chain) for 2.4GHz and 23dBm (20dBm per antenna/chain) for 5GHz
- 5GHz (U-NII-1 and U-NII-3 bands supported)
- Operating modes: Access Point, Station, Station bridging, Access-Point-Station (simultaneous AP and Station operation)
- Security: WPA/WPA2 PSK, Enterprise
- Applications:
 - Local configuration and management using Wi-Fi devices
 - Station/client connecting to a 2.4GHz/5GHz AP in indoor/outdoor LOS/NLOS environment
 - Large-scale AP operating in indoor/outdoor LOS/NLOS environment

CELLULAR OPTIONS

- Includes dual SIM, GSM eSIM, GPS, and 3G fallback
- 4G: 4G LTE-A NAM/EMEA/LATAM - Anterix™ 900 MHz, AT&T, Verizon, US Cellular*, Bell, Telus, Rogers*, Vodafone, FCC, PTCRB, CE, GCF
- 4G: 4G LTE-A Pro - US - FirstNet Ready™, CBRS - AT&T, Verizon, FCC, IC, PTCRB
- 4G: 4G LTE-A Pro Brazil/Australia - Telstra, GCF, Anatel, RCM/ACMA
- 4G: 4G LTE with 2G/3G fallback - EMEA/LATAM - CE, GCF, Anatel
- See MDS Orbit Cellular brochure for more details

CYBER SECURITY

- Tunneling: IPSec VPN compatible with Enterprise VPN concentrators
- Firewall: Stateful Packet Inspection Layer 2-4, Access Control Lists, NAT
- 900 unlicensed Encryption: AES-CCM 128/256 bit with auto key rotation
- Authentication: RADIUS, PSK, EAP/TLS, PKI
- Certificates: X.509, SCEP, PEM, DER
- Boot Security: Digitally signed firmware
- FIPS 140-2 (Level 2) certified*

NETWORKING TECHNOLOGIES

- Full IEEE 802.3 Layer 2 switching with Spanning Tree, VLANs, IGMP
- Layer 3 static routing
- Routing and Bridging from/to any interface (as applicable)
- Advanced L2-L4 Quality of Service
- Protocols: NAT, DHCP, ICMP, UDP, TCP, ARP, NTP, FTP, SFTP, TFTP, DNS
- Serial: TCP server, Modbus/TCP, Modbus RTU, TCP client, UDP Unicast and Multicast, BSAP, and DNP3
- VRF and Open VPN

MANAGEMENT

- HTTP, HTTPS, SSH, NETCONF, local console
- SNMPv1/v2/v3, MIB-II, Enterprise MIB
- Syslog and Syslog-over-TLS, MDS PulseNET compatible

ENVIRONMENTAL & AGENCY APPROVALS

- EMP: MIL-STD-461G, RS105 Electro Magnetic Pulse
- Operating Temperature: -40° to 70° C (-40° to 158° F) 900 MHz modem
- Humidity: 95% at 60° C (140° F) non-condensing
- Case: Die Cast Aluminum
- Dimensions: (1.75 H x 8.0 W x 4.8 D in.) | Weight: 2 lbs
- Mounting Options: Integrated DIN Rail mount, Standard bracket
- FCC Part 15, IC, ETSI / CE (3G and WiFi models)
- CSA Class 1, Div. 2, CSA C22.2 No. 142-M1987 & 213-M1987
- IEEE 1613**, IEC 61850-3
- UL as it is in process and will be complete by time of publication also required for GE2GE opportunities

* Check with local sales representative for availability.

** Requires an external DC to DC converter having floating DC inputs (neither side grounded)

GE

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GEGridSolutions.com/Communications

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English
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MDS Orbit Licensed Solutions

High Speed, Long Range, Exceptional Performance for Licensed Wireless Networks

The constant evolution of industrial SCADA applications coupled with the ever increasing scale of asset deployment cause significant challenges on underlying licensed narrowband networks. Such networks need to offer an always-on connectivity to maximize application availability. They must provide a comprehensive framework of security in order to guard against the intensified waves of cyber attacks. Finally, the wireless networks must enable advanced performance in order to scale and support modern TCP/IP applications.

The GE MDS Orbit is an industrial-strength wireless router platform that helps overcome the challenges of deploying modern industrial automation applications. In addition to enabling high performance communication over the 900MHz, 700MHz, 400 MHz, 200MHz* and 100 MHz* licensed narrowband spectrum, the Orbit platform offers a diverse range of integrated secondary radio options including cellular, Unlicensed 900MHz ISM as well as Wi-Fi.

Key Benefits

- Repurpose narrowband spectrum for more bandwidth-intensive IP applications using QAM modulation
- Provide backward compatibility with GE MDS SD Series or legacy GE MDS x710 radios to seamlessly expand or migrate networks
- Minimize network downtime with dual radio uplinks and other redundancy features
- Protect network and assets against intrusion with powerful cyber security capabilities
- Simplify operations, reduce learning curves and reduce cost by unifying the deployment of multiple wireless technologies on a single platform

Applications



Oil & Gas

- Well Head and Production Pad Controllers & Metering Automation
- Remote Field Office Connectivity



Water & Wastewater

- Monitoring and Control
- Maintenance Workforce Mobility



Emergency & Utility Vehicles

- Law enforcement connectivity
- Utility Workforce Mobility



Electric Utilities

- Field Area Network
- AMI Backhaul
- Workforce Mobility



Smart Cities & Municipalities

- Traffic Signals Control
- Video Security
- Weather Monitoring Stations



Heavy Industrial

- Train Control and Machinery Monitoring
- Excavation Machine Control



Exceptional Network Performance

- Up to 64QAM of modulation enables newer applications in narrowband networks
- Bi-directional per-packet, per-remote Adaptive Modulation maximizes network throughput in uplink and downlink directions
- IP Header and Payload compression improve efficiency by up to 30%

Advanced Security and Networking

- Enterprise-class cyber security including VPNs, key rotation, firewalling and centralized authentication for advanced protection
- FIPS 140-2 (Level 2) certification*
- Rich Quality of Service allows for various modes of traffic prioritization in addition to per-application bandwidth allocation

Platform Flexibility

- Backward-compatibility with GE MDS SD Series and x710 networks for a seamless migration path
- Variety of form factors with single or dual radio configurations

Industry Leading Reliability

- A patented Media Access Control guarantees message delivery and eliminates collision at the Access Point
- Various uplink redundancy options, including cellular backup to improve network availability
- 3rd party Certified for IEEE1613, IEC61850-3, ATEX and Class 1 Div 2 for deployment in harsh environments

Exceptional Network Performance

Improved productivity, optimization, preventive maintenance, quality control, regulatory compliance, safety and security are just a few of the requirements that drive the need to for high performance networks to support multiple applications and deliver actionable data collected from remote, geographically dispersed assets.

The GE MDS Orbit Licensed radio solutions bring new levels of networking performance to users operating narrowband licensed networks in 6.25, 12.5, 25, and 50* kHz channels.

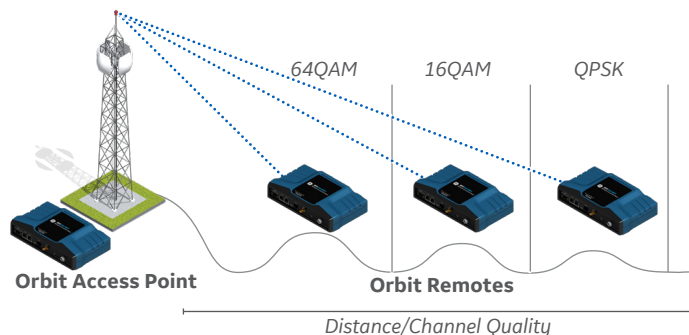
Enhanced QAM Modulations

The GE MDS Orbit platform implements QAM modulation to achieve raw data rates up to 6 times faster than traditional FSK modulations variants typically utilized in legacy narrowband networks. With QAM modulation significant improvements in gross data rates can be achieved and can be improved even further with Orbits real-time compression on application data and underlying transport protocols such as IP.

CHANNEL SIZE	LEGACY SPEED	QPSK	16QAM	32QAM	64QAM	ORBIT ADVANCED MAC MODE THROUGHPUT ¹
6.25 kHz	4.8 kbps	9.6 kbps	19.2 kbps	24 kbps	28.8 kbps	174 kbps
12.5 kHz	9.6 kbps	20 kbps	40 kbps	50 kbps	60 kbp	400 kbps
25.0 kHz	19.2 kbps	40 kbps	80 kbps	100 kbps	120 kbps	758 kbps
50.0 kHz	38.4 kbps	80 kbps	160 kbps	200 kbps	240 kbps	1.37 Mbps

¹ Maximum TCP Throughput measured with Orbit configured for Advanced MAC Mode with Adaptive FEC, Adaptive Coded Modulation, Ethernet Header Compression, RHOC TCP, UDP, IP Compression, LZ0 Data Compression, Packet Concatenation, lperf TCP Server.

Bi-Directional Adaptive Modulation



Bi-Directional Adaptive modulation maximizes throughput in both upstream and downstream directions for each remote independently. It enables Access Points and Remotes to transmit data at the highest possible modulation in real time, on a per-packet basis. The outcome is a network that does not sacrifice its overall performance for the least common denominator link.

IP Header and Payload Compression

Orbit's IP Header and Payload compression improves network throughput efficiency by up to 30%. It is especially beneficial when using TCP based applications that tend to have a lot of handshaking, thus overhead.

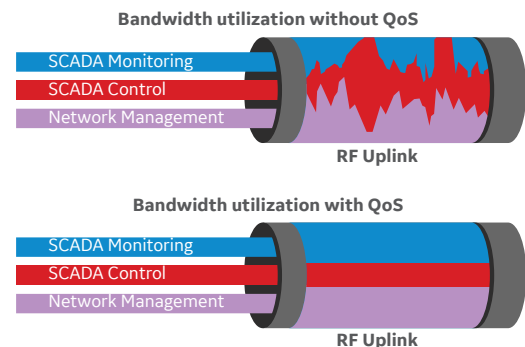
Advanced Security & Networking

Enterprise Class Security

The MDS Orbit platform is built on a comprehensive cyber security framework to enable the deployment of highly secure industrial applications. It offers standards-based IPSec VPN and DMVPN capabilities to ensure end-to-end IP encryption between remotes and headend regardless of the underlying backhaul. As an added layer of security, Orbit supports the encryption of licensed radio links at the RF layer with secure key rotation algorithms. Centralized RADIUS authentication and 802.1x enable only authorized users and machines to access the network at the intended entry points and times. Orbit's stateful firewall and MAC-filtering block unwanted traffic from flowing through the network. Orbit also employs secure device practices such as Secure Firmware and Secure Boot to protects against the tampering with its hardware and software.

Dynamic Routing and Quality of Service

Orbit's support for dynamic and static routing as well as managed switch capabilities facilitate the deployment in a multitude of network architectures. Orbit's advanced QoS functionality enable the transport of multiple application streams in the same network without compromising the performance of critical traffic. With fair and priority queuing, and traffic shaping, Orbit offers choices to engineer traffic priorities and carve dedicated bandwidth on a per-application basis in order to maximize application performance and adhere to Service Level Agreements (SLAs).



Platform Flexibility

Variety of Form Factors

To help extend communications to a variety of enclosure systems, Orbit is offered in compact (ECR) and standard (MCR) form factors. They can be factory-configured with different interface and radio combinations.

Diverse Radio Technologies

In addition to being offered in licensed spectrum, the Orbit platform supports communication in unlicensed 900Mhz, cellular technology as well as WiFi. Orbit can be factory-configured with single or dual-radios. This allows customers to deploy various radio technologies on the same platform, firmware and user experience thus standardizing operations, reducing cost and learning curves.

Backward Compatibility with MDS SD and x710

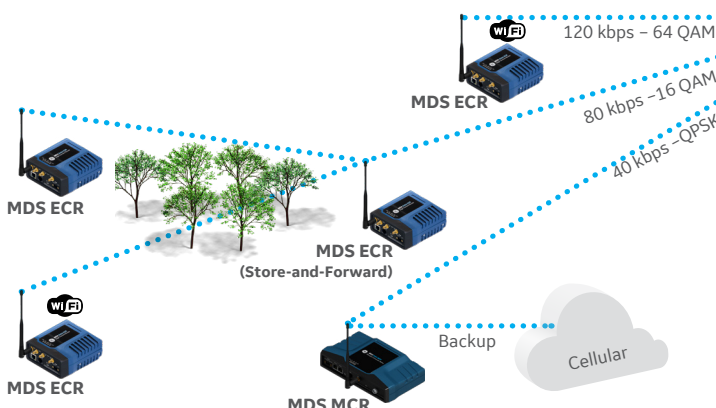
The MDS Orbit licensed narrowband radio can operate in a CPFSK Digital A backward compatible modulation to interface with existing MDS SD Series or x710 Access Points. Supporting Transparent (serial streaming) as well as Packet-with-Mac (IP) modes, this capability enables customers to seamlessly expand or migrate brownfield networks with minimum disruption.

Integration with MDS Master Station

Orbit's Licensed Narrowband radio technology integrates seamlessly with the MDS Master Station. The Master Station is a fully redundant solution for licensed communications, offering dual power supplies, dual radios, an integrated duplexer and with no cooling fans or moving parts.

Application Example

Remotes



Access Interfaces

- Connect multiple RTU and Controller types to a single remote radio
- Access interfaces include Ethernet, Serial, and an optional WiFi

Performance

- Use QoS to prioritize critical SCADA over lower priority traffic
- Adaptive modulation automatically adjusts optimum speed in both directions
- A patented MAC enables network scalability with minimized impact on performance

Security

- Firewalling and MAC filtering block unwanted traffic at the network perimeter
- RF and IPsec VPN encryptions provide options for end to end communication security
- 802.1x at remote locations allow network access to only authorized users and machines

Industry Leading Reliability

A Patented Media Access Control

Media Access Control (MAC) is a mechanism that orchestrates and manages how devices access a network to transmit data. Orbit's patented MAC maintains optimal throughput as more devices and applications are added to the network. It further guarantees the delivery of data packets to intended destinations and eliminates data collision at the Access Point.

Network High Availability

To achieve maximum application uptime, Orbit supports a variety of High Availability mechanisms to enable multiple uplink paths. The Orbit platform supports dual radio configurations, such as Licensed Narrowband and Cellular, interface bonding, Spanning Tree, Layer 3 failover, VRRP as well as latency and packet-loss based failover. GRE tunneling coupled with IPsec VPNs and DMVPN further enable the establishment of secure Virtual Private Networks (VPN) across any wireless technology.

Ease of Use and Management



Intuitive User Interface

An easy-to-use Graphical User Interface (GUI) allows for the quick provisioning and maintenance from a web browser. Orbit supports HTTP, HTTPS, and SSH. Orbit's wizards speed up the configuration of complex network functionality by breaking down processes into simple, concise and automated steps.

Network Management

The Orbit platform supports standards based management using SNMPv1/2c/3, MIN-II and Enterprise MIB. NETCONF is also supported. The GE MDS PulseNET NMS fully integrates with Orbit to offer advanced network as well as device management capabilities. PulseNet enables auto-provisioning to simplify network deployment and reduce operation expenses.

Orbit ECR and MCR Licensed Spectrum Models Comparison

FORM FACTOR	PRIMARY LICENSED RADIO OPTIONS	SECONDARY RADIO OPTIONS	COMMUNICATION PORTS	MOUNTING
MCR 	150-174 MHz*, 216-235 MHz* 330-406 MHz, 406-470 MHz, 450-520 MHz*, 757-758 & 787-788 MHz, 896-960 MHz	WiFi, 2G/3G/4G LTE 2G/3G GSM World Unlicensed 900 MHz (some combinations not supported)	Option A: 2 Ethernet, 1 Serial, 1 USB Option B: 1 Ethernet, 2 Serial, 1 USB Option C: 4 Ethernet, 2 Serial, 1 USB	Surface Mount DIN Mount Option
ECR 	150-174 MHz*, 216-235 MHz*, 330-406 MHz, 406-470 MHz, 450-520 MHz*, 757-758 & 787-788 MHz, 896-960 MHz	WiFi	1 Ethernet, 1 Serial, 1 USB	Surface Mount DIN Mount Option

Specifications

ORBIT LICENSED NARROWBAND TECHNOLOGY	
Module	Single
Configuration	
Frequency	Configurable
Duplex Modes	Half duplex
Modulation	CPFSK, QPSK, 16QAM, 64QAM
Adaptive Modulation	Per-packet, per-remote, bi-directional
Dynamic FEC:	Convolutional, Reed Solomon
Compression	IP Header and Payload with up to 30% efficiency improvement
Media Access Control	High performance MAC

ORBIT LICENSED NARROWBAND FREQUENCY BANDS

- 150-174 MHz*
- 216-235 MHz*
- 330 - 406 MHz
- 406.1 MHz – 470 MHz
- 450 MHz – 520 MHz*
- 757-758 and 787-788 MHz
- 896 – 960 MHz

GROSS DATA RATES (ALL FREQUENCIES)

Channel	32QAM	64QAM	Orbit Advanced MAC Mode ²
6.25 kHz	24 kbps	28.8 kbps	174 kbps
12.5 kHz	50 kbps	60 kbps	400 kbps
25 kHz	100 kbps	120 kbps	758 kbps
50 kHz	200 kbps	240 kbps	1.37 Mbps

² Maximum TCP throughput measured with Orbit configured for Advanced MAC Mode with Adaptive FEC, Adaptive Coded Modulation, Ethernet Header Compression, RHOC TCP, UDP, IP Compression, LZ0 Data Compression, Packet Concatenation, lperf TCP Server.

TRANSMITTER CHARACTERISTICS

Frequency Stability	+/- 0.5 ppm
Peak Carrier Power	+40 dBm 330-470 MHz +39.5 dBm 896-9160 MHz
Average Power (Programmable)	QPSK: +36 dBm 16QAM: +33 dBm 64QAM: +33 dBm
Power Range	+20dBm to +40dBm
Carrier Power	(+/- 1.5 dB typical)
Accuracy	
Adjacent Channel	< -60 dB
Power	
Output Impedance	50 Ohms

RECEIVER CHARACTERISTICS

Type	Direct Conversion		
Adjacent Channel Rejection	60 dB nominal		
Sensitivity (Actual)	@ 1x10-6 BER, No FEC		
Channel	QPSK	16QAM	64QAM
12.5 kHz	-112 dBm	-102 dBm	-95 dBm
25 kHz	-109 dBm	-99 dBm	-92 dBm
Sensitivity (Actual)	@ 1x10-6 BER, No FEC		
Channel	QPSK	16QAM	64QAM
12.5 kHz	-115 dBm	-109 dBm	-102 dBm
25 kHz	-112 dBm	-106 dBm	-99 dBm

AGENCY APPROVALS / STANDARDS

- FCC Part 15 and IC
- ETSI / CE
- PTCRB, GCF
- IEEE 1613**, IEC61850-3
- CSA Class 1, Div. 2, UL 508, UL 1604
- ATEX approval for EU on MCR
- EN 60079-0:2012, EN60079-15:2010
- Shock: MIL-STD-810F Method 516.5
- Vibration: MIL-STD-810F Method 514.5
- Shock and Vibration: EIA RS374A
- Storage Temp: Mil-Std 810F Section 501.4 with 1 week soak test
- IP 40/41 per IEC 60529 for Vertical Falling Water and Pollution 3 for Dust

* Planned future release. Roadmap items subject to change.

** Requires an external DC to DC converter having floating DC inputs (neither side grounded)

NETWORKING

- IPv4 Routing OSPF, EBGp, RIPv2 with performance-based route failover
- IPv6 Routing*
- Full managed switch capability, IEEE 802.3, 802.1Q/VLANs, 64 VLANs, STP
- Concurrent Bridging & Routing
- GRE Tunneling with Layer 2 (Ethernet) and Layer 3 support
- Route/path failover between any two wireless/Ethernet interfaces based on link loss, latency degradation or packet loss thresholds
- Quality of Service 16 egress queues, Priority Queuing, Fair Queuing, Traffic Shaping, Classification based on DSCP, 802.1p and Layer 2-4 classifiers
- IP Protocols TCP, UDP, ARP, DHCP, ICMP, NTP, FTP, SFTP, TFTP, DNS, configurable HTTP and HTTPS, SSH
- Serial TCP server, Modbus/TCP, Modbus RTU, TCP client, UDP Unicast and Multicast, BSAP, and DNP3

SECURITY

- IPsec VPN Server (responder) and Client (initiator) with DMVPN
- Authentication Public Key, EAPTLS, Pre-Shared, lke 1-2
- Encryption : 3DES, AES 128/192/256, CBC, CTR, CCM, GCM, SHA 256/384/512 HMAC
- Firewalling: Stateful Layer 3-4 Firewall with MAC Filtering, NAT, Source NAT (Masquerading), Static NAT, Port Forwarding
- Device Security : Secure Boot, Secure Firmware, Digitally Signed Hardware and Software, Magnetometer Tamper Detection
- Certificate Management: X.509, SCEP, PEM, DER, RSA
- User Authentication: Local RBAC, AAA/RADIUS, 802.1x
- FIPS 140-2 (Level 2) certification in progress

MANAGEMENT

- GE MDS PulseNET NMS Support with device management and auto-provisioning
- GUI configuration Wizards to simplify operation
- Secure device management via an intuitive web-based GUI and/or CLI
- Event logging, Syslog-over-TSL, SSH, Console
- lperf throughput diagnostic, NETCONF
- SNMP v1/2c/3, MIB-II, Enterprise MIB

MECHANICAL

Case	Rugged die-cast aluminum
Dimensions MCR	1.75 H x 8.0 W x 4.8 D in. 4.45 H x 20.32 W x 12.19 D cm
Weight MCR	2 lbs., .91 kg
Dimensions ECR	2.1 H x 4.3 W x 4.6 D in. 5.33 H x 10.92 W x 11.68 D cm
Weight ECR	1.45 lbs., .65 kg

ENVIRONMENTAL

- Operating Temp -40° to +70° C (-40° 158°F)
- Storage Temp -40° to +85° C (-40° 185°F)
- Humidity 95% at 60° C (140° F) non-condensing

WARRANTY

- 5-year standard manufacturer warranty on all Orbit MCR/ECR models

SECONDARY RADIO OPTIONS

Unlicensed 900Mhz ISM

- Frequency Bands: 902-928 MHz FHSS
- Bandwidth 152 to 1320 kHz, up to 80 channels
- Modulation: 2, 4-level GFSK, Adaptive
- Raw Data Rates: 125kbps, 250kbps, 500 kbps, 1000 kbps, 1250 kbps
- Latency of < 5 msec
- TX Power: 1 watt, configurable

Cellular

- 2G/3G GSM World (AT&T, GSM, world coverage)
- 2G/3G/4G LTE North America with GPS: Verizon, AT&T, T-Mobile, Bell Canada, Rogers, Telus. Modem allows switching between carriers by upgrading to corresponding carrier profile firmware.
- 2G/3G/4G LTE EMEA & APAC with GPS
- 2G/3G/4G LTE Australia Telstra with GPS
- LTE Private Band 26

Wi-Fi

- 802.11 b/g/n operating at 2.4 GHz
- Up to 52 Mbps of throughput
- Operating Modes: AP, Client/Station

ORBIT MODEL INTERFACES

MCR Option A	(2) 10/100 Ethernet, RJ45 (1) RS232/485 Serial, RJ45 (1) mini USB 2.0
MCR Option B	(1) 10/100 Ethernet, RJ45 (2) RS232/485 Serial, RJ45 (1) mini USB 2.0
MCR Option C	(4) 10/100 Ethernet, RJ45 (2) RS232/485 Serial, RJ45 (1) mini USB 2.0
ECR	(1) 10/100 Ethernet, RJ45 (1) RS232/485 Serial, RJ45 (1) mini USB 2.0
Antenna Connectors	Licensed NB:TNC 900Mhz Unlic: TNC Wi-Fi: RP-SMA Cellular: SMA GPS: SMA female

ELECTRICAL & POWER CONSUMPTION

- Input Voltage 10 to 60 VDC
- Power Consumption Calculations with nominal 25C at 13.8V

With 3G GSM World	Power	13.8V
Connected (Idle)	2.5W	182mA
Typical download	3.2W	235mA
With 4G LTE	Power	13.8V
Connected (Idle)	4.0W	292mA
Typical download	4.3W	310mA
With 4G LTE + Wi-Fi	Power	13.8V
Connected (Idle)	4.8W	350mA
Typical download	5.5W	400mA
With 900Mhz ISM	Power	13.8V
Typical	3.2 W	232mA
Maximum	5.3 W	385mA
With Licensed NB	AP	Remote
Idle	910 mA	350 mA
50% Duty Cycle	950 mA	780 mA

* check with sales for availability

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Minutes for a meeting of the Mayne Island Parks and Recreation Commission at the Library, 411 Naylor Road, Mayne Island on September 8, 2022 at 3 pm.

PRESENT: Debra Bell, (Chair/Treasurer) Michael Kilpatrick (Vice-Chair)
Peter Askin Veronica Euper
Adrian Wright Kestutis Banelis
Jane Schneider Lauren Edwards (Recorder)

ABSENT: Paul Brent, A/Director, CRD, Southern Gulf Islands

The meeting was called to order at 3:01 pm

1. Territorial Acknowledgement

It was acknowledged that MIPRC were pleased to take this opportunity to express gratitude for the custodial relationship of the land of the Coast Salish people on which the meeting was held.

2. Approval of Agenda

Add to section 6 Correspondence/Meetings: Invitation received to indigenous intercultural training for commissioners.

MOVED by Commissioner Bell and **SECONDED** by Commissioner Kilpatrick,
that the agenda be approved as amended.

CARRIED

3. Adoption of Minutes of August 11, 2022

MOVED by Commissioner Wright and **SECONDED** by Commissioner Euper,
that the Mayne Island Parks and Recreation Commission Meeting Minutes of August 11, 2022 be
approved as presented.

CARRIED

MOVED by Commissioner Euper and **SECONDED** by Commissioner Banelis,
that the Mayne Island Parks and Recreation Commission Closed Meeting Minutes of August 11, 2022
be approved as presented.

CARRIED

4. Chair's Remarks

Chair Bell stated that Queen Elizabeth II passed on this date. Flags at Miners Bay are at half-mast and flags at Kippen Road, Dinner Bay and Cotton Park will be lowered to half-mast.

Mayne Island Parks and Recreation Commission
Minutes for September 8, 2022

5. Reports

5.1. Treasurer's Report

- 5.1.1. Treasurer's Report for the period August 1 - 31, 2022 (attached)
Change from: Capital Funds Project for Cotton Park Fencing
Change to: Capital Funds Project for Cotton Park Fencing and Pathway.

MOVED by Commissioner Bell and **SECONDED** by Commissioner Schneider,
that the Mayne Island Parks and Recreation Commission Treasurer's report for the period
of August 1st to 31st, 2022 be approved as amended.

- 5.1.2. Budgets for 2023-2027 (attached)

MOVED by Commissioner Bell and **SECONDED** by Commissioner Askin,
that the 2022 operating surplus, if any, be transferred into the Capital Reserve Fund for
parks service.

CARRIED

MOVED by Commissioner Bell and **SECONDED** by Commissioner Euper,
that the 2022 community recreation surplus, if any, be carried forward and transferred
into the surplus account of the Community Recreation Service.

CARRIED.

MOVED by Commissioner Bell and **SECONDED** by Commissioner Euper,
that Mayne Island Parks and Recreation Commission approve the Operating Funds
Budget for 2023 to 2027.

CARRIED

MOVED by Commissioner Bell and **SECONDED** by Commissioner Banelis,
that Mayne Island Parks and Recreation Commission approve the Recreation Funds
Budget for 2023 to 2027.

CARRIED

MOVED by Commissioner Bell and **SECONDED** by Commissioner Schneider,
that Mayne Island Parks and Recreation Commission approve the Donation Funds Budget
for 2023 to 2027.

CARRIED

MOVED by Commissioner Bell and **SECONDED** by Commissioner Euper,
that Mayne Island Parks and Recreation Commission approve the Five-Year Capital
Expenditure Plan for 2023 to 2027.

CARRIED

5.2. Administration

- 5.2.1. Follow up Action Report - Received

a) Fall Fair information table was reported on and discussion included:

Mayne Island Parks and Recreation Commission
Minutes for September 8, 2022

- A request from a community member for a pathway on the far side of David Cove where a “No Trespassing” sign has been put up on the private property where people typically walk. Commissioner Askin will contact the property owner to investigate options.
- A complaint was received regarding a fleet of propane trucks using the ramp at Village Bay and its condition.
- A complaint was received that the Pocket Park at Sandy Hook had many felled trees and was a fire hazard.
- A suggestion was made to allow camping for kayakers at the St. John Point meadow.
- It was suggested that the info table could be made more interactive next year.

b) Sanitation

- The septic plan from VIHA is still to be ordered.
- A priority is finding an alternative product for treating the Adachi Pavilion pergola wood for beetles before the garbage bin is rebuilt.

c) Bandstand

Painting will be done in September.

d) Brushing Bailing Well

This item will be removed from the list as there has been no response.

e) Monthly Playground assessments

- A replacement piece for the car structure is being sourced.
- Commissioner Banelis will have assessments documented for the next meeting.

f) Kadonaga Bay

Commissioner Askin has prioritized the removal of the beach debris.

g) Commercial Boat Ramp Usage

- The province has asked for an environmental assessment and a commitment that if they do not renew the tenure, CRD are obligated to remove the ramp.
- MIPRC had passed a motion not to allow commercial construction vehicles and an application is in place for recreational use.
- The current agreement expired in 2017 and an issue is whether MIPRC has any control or authority until the renewal is approved.
- Commissioner Bell will follow up with CRD on this matter.

5.2.2. Health and Safety concerns - None

5.2.3. Danger Tree guidelines/shared calendar

- The guidelines were emailed to all commissioners.
- Commissioner Kilpatrick confirmed that the danger tree reports were received for entry into the shared calendar.

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5.2.4. Events - Report received

- Discussed the need to receive applications for publicly announced events.

MOVED by Commissioner Kilpatrick and **SECONDED** by Commissioner Bell that Mayne Island Parks and Recreation Commission waive the fee at the Adachi Pavilion for the Celebration of Life for Mary Crumblehulme on September 17, 2022 held by Brian Crumblehulme.

CARRIED

5.2.5. Sponsored activities

Discussed using removable construction fencing for the first base line during baseball games. Permanent fencing was also discussed. Fencing would not affect the disc golf course. This should be raised for further discussion for next year.

5.2.6. Commissioner Commonality meeting

- Commissioners discussed visiting other Southern Gulf Islands Park Commission meetings as a presenting delegation with input on agenda items of mutual interest.
- It was suggested that the online Doodle software could assist in scheduling Commonality meetings.
- This topic to be discussed further.

5.2.7. Fallow/feral deer update – No report.

5.2.8. Volunteer BBQ

Feedback was for an organized group game.

5.3. Committees

5.3.1. Technology – Report received.

5.3.2. Fitness Track - Report received.

- Commissioner Kilpatrick will follow up for responses and material supplier.
- Completion of Phase One is desired for the fall.

5.3.3. Sanitation

a) Chamber of Commerce – no update available.

b) Recycling bins - update

- The contracted cleaner promoted the use of recycling bins and offered to manage any additional garbage that was deposited. She will also laminate signs for the bins.
- A trial use was approved until the end of November and it was commented that the summer season has heavier use.

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- c) Recent repairs and updating fixtures
 - Streamline Plumbing installed new flush valves at Dinner Bay Park and fixed the leaking toilets at Miners Bay Park, however, the cleaner reports the women's closest to the sink is often plugged.
 - Fixture updates and the elimination of paper towels were discussed. The committee will discuss this issue and provide a recommendation at the next meeting.

5.3.4. Memorial plaques – eligibility and fees

- The new board was installed.
- The inclusion of memorial plaques for pets in a separate section of the board was discussed.
- Discussed having time limits for all plaques, i.e. five years for pets and 10 years for people.

MOVED by Commissioner Askin and **SECONDED** by Commissioner Bell, that Mayne Island Parks and Recreation Commission allow plaques for people and pets on the memorial wall at Miners Bay Park.

CARRIED

The committee will discuss and report at the next meeting the issue of fees; space allocation between people and pets; memorial only or an honour/recognition wall; and the suggestion of a recognition plaque for all commissioners, past, present and future.

5.4. Parks

5.4.1. Miners Bay

- The bandstand is to be painted
- The funding available to purchase new holiday lights for the tree was discussed. Commissioners Wright and Kilpatrick will discuss this issue and arrange for the installation.
- Blackberry bushes were trimmed back and commissioners discussed removing them with no final decision.

5.4.2. Dinner Bay

- There has been a lot of use this year.
- Roller skating continues in Adachi Pavilion.
- Disc Golf impacts have worsened this year and woodchips have been put down to deal with compaction and undermining of surface roots. .
- The manufacturer of the playground car has not responded regarding a replacement piece.
- The teeter-totter needs a new rubber boot to cover the base spring.
- An alternative coating is being sought to keep beetles out of wood structures.
- If the control mechanism on the freezer cannot be replaced, a new freezer will be required for next year.
- The stove gasket located in the door requires repair.

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- Commissioner Banelis will discuss with the Lions the donated natural gas BBQ before taking it to the dump. It may be expensive and difficult to convert to propane.
- 5.4.3. Japanese Memorial Garden – Report received.
Approximately 30 people, including the Japanese Consul General and presidents and CEOs of Japanese community groups in Canada attended the tour.
- 5.4.4. Fred & Bette Cotton – Report received
- 5.4.5. Village Bay – No report.
- 5.4.6. Trail Network Development/Henderson – Report received.
- It was reported that a commercial supplier on Saltspring Island is expected to provide an estimate for an aluminum staircase at Kippen Road this month.
 - A trail guardian for Flag Hill Trail may be available and this will be confirmed at the next meeting.
 - Commissioner Askin will attend the Pathway and Trails Association's AGM.

6. Correspondence/Meetings

- 6.1. Telephone call from resident concerning Olla display and Art Show at Japanese Garden.
- The displays will be removed in the coming weeks and Lance Shook's sculpture was removed.
- 6.2. Email correspondence from CRD regarding SGI Transportation Service Referendum.
- It was recommended that people should read the material and vote.
- 6.3. Email correspondence from Terry Fox Run organizers regarding MIPRC providing ice-cream on September 18. This was the tradition pre-Covid.
- MIPRC will provide the ice-cream.
- 6.4. Cover letters and cheques mailed to recreational funding recipients on or before August 29, 2022.
- 6.5. Email of appreciation from recreational funding recipient.

7. New Business

- 7.1. Discussion regarding naming of parks and trails and Notice of Motion for October meeting.
- It was reported that the Sandy Hook pocket park is little used with high maintenance and costs for dangerous tree removal and that there is little ecological value in that park.
 - Discussed the process for the naming of parks and trails.

Mayne Island Parks and Recreation Commission
Minutes for September 8, 2022

MOVED by Commissioner Askin and **SECONDED** by Commissioner Schneider,
that Mayne Island Parks and Recreation Commission form a committee to consider the naming of
parks and trails, including the park on Sandy Hook Road.

CARRIED

The committee members will include all commissioners.

8. Motion to Close the Meeting in accordance with Community Charter Part 4, Division 3, Section 90(1)(b) and that recorder and staff attend the meeting.

8.1. Recreational Funding

MOVED by Commissioner Euper and **SECONDED** by Commissioner Bell,
that the meeting be closed in accordance with Community Charter Part 4, Division 3, Section 90(1)(b)
and that recorder and staff attend the meeting.

CARRIED

9. Rise and Report

9.1. Recreational Funding

MOVED by Commissioner Euper and **SECONDED** by Commissioner Askin,
that recreational services funding for 2022 be awarded to the Mayne Island Youth Group.

CARRIED

10. Meeting Adjournment

MOVED by Commissioner Kilpatrick and **SECONDED** by Commissioner Banelis,
that the meeting be adjourned.

CARRIED

The meeting adjourned at 5:23 pm

Original signed by

October 13, 2022

Debra Bell, Chair

DATE

Original signed by

Lauren Edwards, Recorder

ADOPTED



Minutes for a meeting of the Mayne Island Parks and Recreation Commission at the Library, 411 Naylor Road, Mayne Island on October 13, 2022, 3:00 pm.

PRESENT: Debra Bell, (Chair/Treasurer) Michael Kilpatrick (Vice-Chair)
Peter Askin Veronica Euper
Adrian Wright Kestutis Banelis
Jane Schneider Lauren Edwards (Recorder)

ABSENT: Paul Brent, A/Director, CRD, Southern Gulf Islands

GUESTS: Justine Starke, CRD SGI Manager, Service Delivery
Shauna Huculak, CRD Manager, Archaeology, First Nations Relations
Kat Ferneyhough, CRD Liaison for Mayne Island

Call to Order

The meeting was called to order at 3:02 p.m.

1. Territorial Acknowledgement

The Mayne Island Parks and Recreation Commission respectfully acknowledged that Mayne Island is located within the treaty and traditional territory of the Coast Salish people and gave thanks to them and the cultural teachings of this land.

2. Approval of Agenda

MOVED by Commissioner Bell and **SECONDED** by Commissioner Wright,
that the agenda be approved as presented.

CARRIED

3. Adoption of Minutes of September 8, 2022

MOVED by Commissioner Bell and **SECONDED** by Commissioner Askin,
that the Mayne Island Parks and Recreation Commission Meeting Minutes of September 8, 2022 be approved as presented.

CARRIED

MOVED by Commissioner Bell and **SECONDED** by Commissioner Schneider,
that the Mayne Island Parks and Recreation Commission Closed Meeting Minutes of
September 8, 2022 be approved as presented.

CARRIED

4. Chair's Remarks

Chair Bell expressed thanks for the several messages of appreciation from groups who received recreational funding grants. The new brochure is very well done and copies are available at TruValue.

5. Presentation

Justine Starke, CRD SGI Manager, Service Delivery and Shauna Huculak, CRD Manager, Archaeology, First Nations Relations

A printed copy of the PowerPoint presentation by S. Huculak, CRD Archaeology Manager, was provided to commissioners. She reported the following:

- Her purpose was to try to understand needs and find balance for both the First Nations people and the local community.
- There is no going back once archaeological sites have been disturbed.
- CRD's archeological policy applies to projects from their beginning to end and that the policy is being refined to balance needs and expectations and develop respectful relationships that build trust.
- The *Heritage Conservation Act* is the driving legislation and the policy ensures compliance.
- The *Heritage Conservation Act* will be transformed to align with the UN Declaration on the Rights of Indigenous Peoples and described her role as a conduit between the Province, First Nations people and the local community.
- There is a process of archaeological support for operational activities and she provided examples of other Southern Gulf Islands projects.
- Volunteers should receive yearly refresher training for chance find archaeological procedures.
- Chance finds on lands outside CRD are also protected and the community should be educated.
- Unreported chance finds may be subject to charges and fines.
- Plans for potential meetings with the WSÁNEĆ Leadership Council are being considered.
- She commented on how she can assist with the Dinner Bay fitness circuit and the Village Bay boat ramp.

The guests left the meeting after the presentation.

6. Reports

6.1. Treasurer's Report

6.1.1. Treasurer's Report for the period September 1 - 30, 2022

MOVED by Commissioner Bell and **SECONDED** by Commissioner Euper, that the Mayne Island Parks and Recreation Commission Treasurer's report for the period of September 1st to 30th, 2022 be approved as presented.

CARRIED

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MOVED by Commissioner Askin and **SECONDED** by Commissioner Wright, that the Doreen McCleod boardwalk in Henderson Park be approved in the amount of approximately \$900.00.

CARRIED

6.2. Administration

6.2.1. Follow up Action Report (not covered elsewhere)

- The Sharepoint system will be developed in approximately six weeks.
- Commissioner Bell will follow up with the issue of gifts-in-kind for both MIPRC and the Harbour Commission.
- Commissioners to share ideas via email for discussion at next meeting regarding Commonality Meeting possibilities for 2023.
- The septic system plan was received for Dinner Bay.
- CRD may roll out the E-transfer system in early 2023 for donation payments.
- It was reported that the use of the library as a cooling centre is with CRD for consideration. A heat pump installation would be required.
- The Sharepoint system may have project management capability that can be used for trail assessment management.
- The property near Reef Bay was discussed including whether MIPRC has interest in pursuing an easement. Commissioner Askin will inquire as to why new signs have been posted.
- Whether MIPRC has authority to manage boat ramps while awaiting license renewal was discussed.

6.2.2. Health and Safety concerns

It was discussed and agreed to monitor a possible blind spot hazard at hole #5 on the disc golf course.

6.2.3. Events

It was reported that, in response to an email about a large community meeting in Dinner Bay Park on December 3rd at 6:00 pm, an application was provided which has not yet been returned.

6.2.4. Sponsored activities

- A list of activities Parks may wish to sponsor throughout the calendar year was discussed and Commissioner Schneider will prepare a list.
- It was reported that Parks was asked to participate with the co-management of the Canada Day celebrations.

6.2.5. Fallow/feral deer update

It was reported that a letter is being drafted for approval.

6.2.6. Indigenous Intercultural Skills Training presentation

Some commissioners attended this presentation.

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6.2.7. CRD Community Wildfire Resiliency Plan update

- Some commissioners attended this presentation which relates to the funding of a FireSmart Program within Southern Gulf Islands.
- It was reported that the presenter will raise park specific issues for consideration within the program plan.

6.2.8. Commissioner expiring terms and vacancy ad

- Commissioners with terms expiring in December should confirm renewals at the next meeting.
- An advertisement will be placed in the November *MayneLiner* for vacancies.

6.2.9. Policy for naming parks and trails/Motion

In considering CRD's current and developing policy for naming parks, it was discussed and agreed that Commissioners Kilpatrick and Bell will develop a local MIPRC policy for consideration.

6.3. Committees

6.3.1. Memorial plaques

Committee recommendation was provided, including that:

- the memorial wall is for memorial plaques only;
- the memorial wall will not be for honors or recognition;
- there will be no recognition plaques for MIPRC commissioners past, present or future;
- memorial plaques are for people and pets that have a connection to Mayne Island;
- plaques are equally allocated for people and pets and vertically divided on the wall;
- plaques are 4"x 6" at a price of \$350 each (cost is \$93.00 each);
- any increase in cost to MIPRC will increase the fee charged for the memorial plaque;
- fees received will cover maintenance of the wall and support MIPRC;
- a 10-year term will be provided upon payment of the fee;
- an information sheet will be created;
- after the 10-year term, and, if MIPRC continues with the memorial plaque program, participants with an existing memorial plaque will have the opportunity to continue to participate in the memorial plaque program on the terms and conditions in place at that time;
- MIPRC can discontinue the program; and
- MIPRC reserves the right to approve memorial plaque wording.

MOVED by Commissioner Euper and **SECONDED** by Commissioner Askin, that Mayne Island Parks and Recreation Commission accept the recommendations of the Memorial Plaque Committee for memorial plaques on the board at Miners Bay Park.

CARRIED

The following was discussed, including that:

- cities have five year limits for memorial plaques;
- plaques fall off and get lost over time;

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- the program should not be made onerous for future commissioners;
- plaques need to be buffed every three years; and
- a small year date should be added to identify the age of the plaque.

6.3.2. Fitness Track

- The fitness track and equipment may fit the criteria for the New Horizon for Seniors Grant. The funding is granted in March 2023 and the application deadline is November 1, 2022.
- Commissioner Kilpatrick will circulate the equipment information. He reported that the motion equipment will be nearby the playground and washroom area and the static equipment will be along the Ed Williams Trail.
- An incident of a person with a walker tumbling off the edge of the Ed Williams trail was discussed. Commissioners agreed to a site visit on Saturday October 15th.

MOVED by Commissioner Bell and **SECONDED** by Commissioner Schneider, that Commissioners Kilpatrick and Bell can approve expenditures for the purchase and development of the walking/running track.

CARRIED

6.3.3. Land Acquisition – update and recommendations
Deferred for the November meeting.

6.3.4. Sanitation

a) Chamber of Commerce update

The letter regarding washroom support is ready for approval and will be sent for the Chamber's next meeting.

b) Fixture update

- It was reported that a meeting with the electrician occurred regarding washroom hand dryer installation.
- It was discussed and agreed that the units be selected based on the wiring options.

c) Water meters

- It was reported that the water meter at the library needs to be relocated however the cost was not discussed.
- The locations were agreed to for Dinner Bay and the Japanese Memorial Garden.

6.4. Parks

6.4.1. Miners Bay

a) Bandstand painting/repair

The painting is almost complete and the concrete perimeter work was tentatively scheduled for the following week.

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b) Holiday lights

It was discussed and agreed that given the minimal electricity use and cost savings, the lights for the library would remain as is for the time being.

MOVED by Commissioner Kilpatrick and **SECONDED** by Commissioner Wright, that Mayne Island Parks and Recreation Commission approve the purchase of lights for the Miners Bay Park tree up to a maximum of \$5,000.00.

CARRIED

The tree lights will not be changed until next spring.

6.4.2. Dinner Bay

Playground assessments were received.

The following was reported:

- The Adachi Pavilion was fumigated for buprestid beetles and will be fumigated again in the spring. Decision can then be made whether to coat or leave the wood natural.
- Parts for the playground equipment are being sought.
- Woodchips are available for spreading.
- A second water tank should be considered for future discussion.
- The pergola roof covering requires discussion by Commissioners Banelis and Kilpatrick (Adachi Pavilion Committee) and should be added to the agenda.
- The bylaws do not allow the use of bows and arrows in parks.
- A recycling bin has not yet been placed in the park.

MOVED by Commissioner Banelis and **SECONDED** by Commissioner Askin, that Mayne Island Parks and Recreation Commission approve spending of up to \$1,000.00 for a barbecue for the Adachi Pavilion which would also include the \$300.00 donation from the Kadonaga family.

CARRIED

6.4.3. Japanese Memorial Garden

It was reported that:

- metal pricing for the fence roof is being sought;
- the zigzag bridge wood has been cut and volunteers are being organized for the rebuild;
- the planting of 3,450 flower bulbs has been started for the garden's 20th anniversary;
- some trees require cutting due to wrong location and one is damaged; and
- the arborist fee includes wood chipping and the removal of wood rounds.

MOVED by Commissioner Kilpatrick and **SECONDED** by Commissioner Bell, that Mayne Island Parks and Recreation Commission approve the quote of \$1538.25 for the removal of six trees at the Japanese Memorial Garden by DR Daylight.

CARRIED

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- 6.4.4. Cotton Park
Report received for information.
- 6.4.5. Village Bay
A volunteer is available to cover during the current Trail Guardian's absence.
- 6.4.6. Trail Network Development/Henderson Park
Report received for information.
Commissioners were thanked for their RSVPs for the work party on October 14th.

7. Correspondence/Meetings

- 7.1. Email correspondence regarding McLeod Road shoreline access and construction on Lot 5.
 - Commissioner Bell reported that she and Justine Starke, CRD, visited the site and she has the site plan along with owner information.
 - Clarification from CRD regarding MIPRC's license of occupation will be sought.
 - Commissioner Bell will keep commissioners informed.
- 7.2. Email correspondence regarding amendments to tree removal plan for Village Bay to Miners Bay Regional Trail.
 - Discussed the extra 22 trees which need to be removed.
- 7.3. Invitation to CRD Community Wildfire Resiliency Plan updates via Zoom September 28, 2022.
- 7.4. Meeting with Michael Dunn, Mayne Island Conservancy Society regarding Emma and Felix Jack Park.
 - Commissioner Bell reported that she met with Michael Dunn and discussed with him the expired stewardship agreement and proposed native plants for the park.
- 7.5. Telephone conference with Pender Island Parks commissioner and trail development.
- 7.6. Telephone conference with Library Director, Southern Gulf Island Libraries regarding heat pump.
- 7.7. Email correspondence from Brian Dearden regarding Miners Bay Dock improvements.
 - Commissioner Bell reported on discussions with Brian Dearden.

MOVED by Commissioner Bell and **SECONDED** by Commissioner Kilpatrick,
that Mayne Island Parks and Recreation Commission support the proposed concept of the Miners
Bay Wharf Head improvements.

CARRIED

- 7.8. Email correspondence regarding improvements to Village Bay boat ramp.
 - It was reported that the proposal for repair to the ramp has been received from the Association of Mayne Island Boaters.

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- MIPRC's authority to deal with ramp issues has to be determined prior to agreeing to repairs.

7.9. Email correspondence from CRD regarding phase 1 of development of external Sharepoint system for MIPRC.

8. New Business – See item 7. Correspondence/Meetings

8.1. Proposal regarding Village Bay boat ramp improvements.

8.2. Emma and Felix Jack Park and relationship with the Mayne Island Conservancy Society.

8.3. Proposal regarding Miners Bay Dock improvements.

9. Motion to Close the Meeting in accordance with Community Charter Part 4, Division 3, Section 90(1)(a) and that recorder and staff attend the meeting
None

10. Rise and Report

11. Meeting Adjournment

MOVED by Commissioner Wright and **SECONDED** by Commissioner Banelis,
that the meeting be adjourned.

CARRIED

The meeting adjourned at 5:53 pm

Original signed by,

Debra Bell, Chair

November 10, 2022

DATE

Original signed by,

Lauren Edwards, Recorder

ADOPTED



Making a difference...together

MINUTES OF A MEETING OF THE Southern Gulf Islands Harbours Commission, held Friday, May 27, 2022 at 9:30 a.m., Goldstream Meeting Room, 479 Island Highway, Victoria, BC

PRESENT: Commissioners: B. Mabberley (Vice Chair) (EP), Galiano Island; P. Brent (EP), Saturna Island; J. Hall (EP), Piers Island/Swartz Bay; D. Howe (EP)(10 am), Southern Gulf Island Electoral Area Director

Staff: S. Henderson, Senior Manager, Real Estate & SGI Administration; D. Puskas, Manager, Capital Projects; D. Dionne, Administrative Coordinator (Recorder); A. Chan, Senior Administrative Assistant, Real Estate & SGI Administration

Also Present: P. Binner, Wharfinger Coordinator

REGRETS: B. Dearden (Chair), Mayne Island; J. Deschenes, North Pender Island; R. Fenton, South Pender Island;

EP = Electronic Participation

The meeting was called to order at 9:45 am.

At the time the meeting was called to order, a quorum had not been reached. The Commission members present agreed to proceed as an information meeting and that they would return to Commission business if quorum was reached. The Commission moved directly to Item 3 on the agenda. Quorum was reached at 10 am and the Vice Chair proceeded with the business of the day.

1. APPROVAL OF AGENDA

MOVED by Commissioner Brent, **SECONDED** by Commissioner Hall,
That the agenda be approved.

CARRIED

2. ADOPTION OF MINUTES

MOVED by Commissioner Brent, **SECONDED** by Commissioner Hall,
That the minutes of the March 25, 2022 meeting be adopted.

CARRIED

3. CHAIR'S REMARKS

The Vice Chair made the following remarks:

- On April 13, 2022 the CRD Board approved a newly developed *Best Practices Guide for Meetings*. One new best practice is to no longer conduct a vote on recommendations to "receive for information". You will notice items on the agenda to be received for information that the recommendation has changed to read "*There is no recommendation. This report is for information only.*" Staff will respond to questions related to the item but no vote will be called. Following the 2022 General Local Election, the Best Practices Guide for Meetings will be incorporated into the new Board orientation on meeting procedures. Please connect with Staff to receive a copy.

4. PRESENTATIONS/DELEGATIONS

There were presentations or delegations.

5. COMMISSION BUSINESS

5.1. Southern Gulf Islands Harbours Service Project and Operations Update – May 2022

Staff provided a summary of the project updates and noted the following additional information:

- **Spanish Hills:** site inspection with Pacific Industrial Marine (PIM) two days ago, scope has been adjusted and is within budget to get what is required out there.
- **Port Washington:** Work has been awarded to Salish Sea, site inspection scheduled for June 14.
- **Piers Island Additional Float:** out for tender. Some contractors have indicated that they already have floats made, so they will be able to make the summer fisheries window.
- **Swartz Bay:** construction inspection with PIM confirmed the length of the float is exactly the same length as a failing float at Hope Bay. PIM is willing to replace the float, within budget.
- **Hope Bay:** PIM was the successful proponent. Site inspection completed on Wednesday. The inspection revealed that the stringers on that float are failed. PIM has proposed that the float they are removing from Swartz Bay can be refurbished and then brought to Hope Bay to replace the failed float there, within budget.

D. Howe joined the meeting

- **Miners Bay:** a meeting with BC Ferries that was scheduled for earlier this week was postponed to next week and staff will prepare a written update on progress after that meeting.

Actions:

- Staff to coordinate a review of the 2016 Moffett & Nichol report regarding Miners Bay dock safety - the ambulance driver is reluctant to drive the ambulance out onto the dock until they have seen a safety report.
- Staff to coordinate replacement of rotten boards at Miners Bay.
- Staff to reassess the loads at Miners Bay and Port Washington in future assessment.
- Staff to review decking at Swartz Bay that needs replacing as part of maintenance program.

A summary of the operational updates:

- **Lyall Harbour:** new floatation installed and completed, transition plate has been ordered and should be here this week and ready for modifications. Zinc anodes have been replaced.

The Project and Operations update report was received for information.

5.2. Horton Road Alternative Uses – Discussion

Staff advised that discussions are ongoing, including not decommissioning the dock and reviewing whether there is another non-profit user that may be able to use it. Staff are expecting to have more information prior to the next meeting.

6. NEW BUSINESS

There was no new business.

7. MOTION TO CLOSE THE MEETING

The Commission moved into closed session at 10:17 am.

MOVED by Commissioner Brent, **SECONDED** by Commissioner Hall,
That the meeting be closed in accordance with the Community Charter, Part 4, Division 3:

1. Labour or Employee Relations under Section 90 (1)(c); and
2. Land Acquisition/Disposition/Expropriation or Improvements under Section 90 (1)(e)

CARRIED

8. RISE AND REPORT

The Commission rose from its closed session at 10:50 am without report.

9. ADJOURNMENT

The Commission agreed to cancel its July 22, 2022 meeting and convene at its next regularly scheduled meeting on September, 23, 2022.

The Commission thanked D. Puskas for his work with the Commission over the years and wished him luck in his new role.

MOVED by Commissioner Brent, **SECONDED** by Commissioner Hall,
That the May 27, 2022 meeting be adjourned at 10:50 am.

CARRIED

CHAIR

SECRETARY