

This document contains the Executive Summary, Summary of Recommendations, and key CWPP maps (Area of Interest, Local Wildfire Risk Analysis, and Land Ownership Maps).

The purpose of this document is to provide a brief summary of the analysis, results, and recommendations associated with the 2020 Community Wildfire Protection Plan. Refer to the complete CWPP document and associated maps for more detailed information and references.

The Summary of Recommendations in this document are organized by the Level of Priority. In the complete CWPP document, the Summary of Recommendations are organized in the order in which they appear in the document. The numbering is consistent across all documents.

Village of Sayward

Community Wildfire Protection Plan

2020 Update



Submitted to:

Shaun Koopman – Emergency Program Coordinator at Strathcona Regional District
Wes Cragg – Village of Sayward, Councillor, Emergency Coordinator

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June 26, 2020



the Village of
Sayward



ACKNOWLEDGMENTS

This plan was prepared by Colin Filliter, RPF and Cynthia Lu, RPF. Colby Day, RFT completed the spatial data analysis and mapping. The authors of this report would like to thank and acknowledge the following people for their assistance and participation in updating the Village of Sayward Community Wildfire Protection Plan:

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Wes Cragg – Village Councillor, Emergency Preparedness Coordinator

Paul Hibbert – Deputy Fire Chief, Sayward Volunteer Fire Department

John Hanson – Fire Chief, Sayward Volunteer Fire Department

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Ben Boghean, Raphael Jamin – BC Wildfire Service

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REGISTERED PROFESSIONAL SIGN & SEAL

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Date Signed: June 25, 2020	Date Signed: June 25, 2020

EXECUTIVE SUMMARY

The Community Wildfire Protection Plan (CWPP) was completed under the framework established by the Community Resilience Investment program, administered by the Union of BC Municipalities. The area of interest is the wildland urban interface (WUI) surrounding the Village of Sayward, within the traditional territories of the K'omoks First Nation, We Wai Kai First Nation, and Wei Wai Kum First Nation. The Village of Sayward is about 75km north of the City of Campbell River by Highway 19.

The purpose of this CWPP is to update the recommendations made in the initial 2011 Village of Sayward CWPP. Using the best available spatial data, this CWPP identifies the wildfire risks surrounding the community, potential consequences of a wildfire to the community, and recommends possible ways to reduce the risk. Relevant recommendations from the 2011 plan are carried forward where applicable.

The fuel types in the area are a mosaic of mature conifer forests, recently harvested cut blocks, immature forests, and deciduous patches. Previous fire history in the area indicates low fire density from both human and lightning caused fires. The local wildfire threat is Low to Moderate. The local wildfire risk ranges from Low to High with higher risk areas associated with fuels in close proximity (within 500m) of the community.

The recommendations in this report are summarized below. The recommendations are based on a review of best practices from other jurisdictions, gaps identified through community engagement, the local wildfire risk analysis, actions to help prevent human-caused ignitions, and integration of FireSmart program principles. FireSmart is a national initiative to educate and empower the public on what can be done to protect their families, properties, and communities from wildfire. Fuel management treatments (surface and ladder fuel removal) are recommended for High risk areas within 100m of structures in the Village. Several FireSmart activities and practices are recommended for private landowners and the Village. Along with fuel management, community awareness and education play a critical role in reducing the wildfire risk. Community awareness focuses on FireSmart principles, understanding fire use restrictions, emergency preparedness, and regularly sharing fire safety related information with the community.

The Sayward Volunteer Fire Department provides fire protective services for the Village. On Crown lands, the BC Wildfire Service manages wildfire response. Continued recruitment and training for volunteer firefighters is critically important to maintaining response capacity for WUI fires and any other emergencies. Emergency evacuation planning is also an identified priority for the Village.

This plan makes 34 recommendations to the Village of Sayward and the Strathcona Regional District. The recommendations should be further prioritized by the Village depending on local strengths, opportunities, and the availability of human, financial, and physical resources. At minimum, the plan should be revisited every five years to assess the progress and relevance of previous recommendations and for the continual improvement of wildfire protection planning as more information becomes available.

HIGH PRIORITY RECOMMENDATIONS

No.	Priority	Objective	Recommendation / Next Steps	Responsibility
1.	High	To improve emergency preparedness by developing a Village of Sayward Emergency Preparedness and Evacuation Plan.	Assess and map emergency evacuation routes and muster locations for the Village for wildfire and other emergencies. Make Emergency Evacuation Maps available on the Village and SRD website.	Village and SRD – currently in progress with Behr Integrated Solutions.
Rationale: Based on gaps identified during CWPP engagement. However, this work is ongoing (by a contractor) and is expected to be completed in 2020.				
3.	High	To reduce the fuel hazard within high risk areas identified within 500m of the Village.	Engage a qualified forest professional in creating site level prescriptions, and supervising/coordinating operational implementation of treatments for each recommended treatment area. For additional treatment areas, refer to Priority 1 areas from the 2011 CWPP. Consultation with applicable First Nations, private landowners, industry tenure holders, municipalities and the SRD will be required as part of the operational planning process.	Village with SRD support
Rationale: Recommended treatment areas based on local wildfire risk analysis. High risk areas within 500m of community structures or critical infrastructure are priority for treatment.				
4.	High	To remove buildup of fuel hazards, especially along evacuation routes, from winter storm damage or other events.	Assess policy tools (bylaws, Fire Chief's authority, <i>Wildfire Act</i>) that can be used to expedite clean up of dead, downed, or windthrown materials that create a fire hazard on private land within the Village boundary.	Village with SRD support
Rationale: Recommended to address fire hazards on private land identified during CWPP engagement.				
6.	High	To reduce fuel hazard within identified FireSmart priority areas (based on critical infrastructure and risk).	Contact a Local FireSmart Representative to conduct Community Hazard Assessments for identified priority areas – MacMillan Drive	Village with SRD support

			and Kelsey Recreation Centre areas.	
Rationale: As above. These areas selected based on proximity to higher risk fuels as per the local wildfire risk analysis.				
9.	High	To reduce fuel hazard on private land and provide property owners alternatives to open burning.	Offer alternative yard waste disposal options including periodic collection and chipping services through community chipping days.	Village with SRD support
Rationale: Fuel management requires the removal of fuels which can be costly and a barrier to action. Providing free or subsidized debris disposal is a best practice for encouraging private landowner participation in fuel management activities.				
10.	High	To improve community awareness of the FireSmart program.	Encourage residents to complete the free, online, FireSmart 101 course.	Village and SRD
Rationale: Public education as part of FireSmart program implementation, refer to #5 above.				
11.	High	To communicate the content of the CWPP and inform the public of the recommendations.	Make the CWPP report and associated maps available to the public through Village and SRD websites.	Village and SRD
Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation.				
12.	High	To improve community awareness and access to FireSmart program information.	Link FireSmart BC program information to Village and Fire Department websites. Make hard copies of resources available at the Municipal Office.	Village and SRD
Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation.				
13.	High	To improve community awareness of wildfire regulations, wildfire threat and risk through education.	Develop a Village specific Fire Safety and Wildfire Preparedness information pamphlet (paper and digital resource). Send this as an annual mailout to all Village residences. This pamphlet should include information on Village Bylaws, <i>Wildfire Regulation</i> legal requirements, FireSmart principles, emergency evacuation routes, wildfire safety, wildfire reporting, and	Village

			BCWS resources on fire bans, air quality.	
Rationale: Community education and awareness are necessary for wildfire protection planning and FireSmart program implementation. A mailout is an existing mechanism already used by the Village to communicate with residents.				
14.	High	To improve community awareness of wildfire regulations, wildfire threat and risk through education.	Include FireSmart and wildfire awareness information in the monthly Village newsletter, particularly in the months leading up to and including fire season (April to October).	Village
Rationale: Community education and awareness are necessary for wildfire protection planning and FireSmart program implementation. Use the existing Village newsletter to communicate fire related information.				
15.	High	To improve community awareness of wildfire threat and risk; and of what actions can be taken to mitigate risk.	Organize an annual Community Fire Safety or Community Wildfire Preparedness day. Activities may include checking fire extinguishers and smoke alarms in homes; conducting FireSmart clearing of Priority 1 (up to 10m) zones around critical community infrastructure, FireSmart presentations, fire department demonstrations, etc. The Safety day could be timed with Fire Prevention Week which takes place annually during the 2 nd week of October each year. October 4 to 10, 2020 is the next Fire Prevention Week.	Village, Fire Department
Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation. Addresses education and emergency planning FireSmart disciplines (refer to #5).				
16.	High	To improve community understanding of wildfire threat and risk; to improve awareness of what actions can be taken to mitigate risk.	Use SRD, Village, and fire department social media accounts to regularly share wildfire preparedness, wildfire safety, and FireSmart practices information. Posts can redirect followers to the established resources of FireSmart BC, BC Wildfire Service, and Prepared BC.	Village and SRD

Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation. Addresses education and emergency planning FireSmart disciplines.

18.	High	To engage industrial stakeholders on the contents of this plan for improved communication and awareness.	Share this plan with industrial stakeholders. Collaboration amongst regional operators is recommended to reduce fuel hazards on Crown lands and along rights-of-way. Inquire about slash management (i.e. forestry tenure holders) and fuel hazard management (i.e. BC Hydro or Ministry of Transportation and Infrastructure rights-of-way) initiatives. Fuel hazard abatement is critical along powerline corridors, road rights-of-way when brushing, clearing fallen trees, or other vegetation management work occurs.	Village and SRD
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Rationale: Inter-agency cooperation within the WUI is necessary to maintain evacuation routes and protect a community and its critical infrastructure. Recommended best practice for information sharing, awareness, collaboration and cooperation. Adapted from 2011 recommendations related to inter-agency cooperation.

21.	High	To improve water availability for fire suppression on rural/isolated properties outside of the hydrant coverage area.	Purchase a water tanker truck. Construction of a storage area to house the truck should also be planned for during the acquisition.	Village, Fire Department, and SRD
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Rationale: Water availability in the fire protective services area, outside of the hydrant coverage area was identified as an issue during CWPP engagement.

23.	High	To maintain and upgrade the condition of the main access and emergency evacuation route along Sayward Road.	Develop annual action plans for regular maintenance of the Sayward Road right-of-way including brushing, danger tree and surface fuel management. Ensure plans are in place for timely removal of storm damaged trees and debris prior to each fire season. Long-term planning to replace the single-lane bridge is recommended.	Village and SRD
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Rationale: Build up of fuel hazards from previous storm damage were concerns identified by both SVFD and BCWS.

28.	High	To ensure fire department members are trained to respond to wildland fire emergencies.	Ensure all SVFD firefighters are trained to Structural Protection Wildland Firefighter Level 1 (SPP-WFF1) and SPP-115 (structure protection workshop).	Village, Fire Department
Rationale: As new members join SVFD, to keep SPP-WFF-1 training top of mind.				
31.	High	To improve inter-agency and cross-jurisdiction communication about wildfire risk, emergency preparedness, response, and recovery.	The SRD should arrange an annual meeting, prior to fire season, to include BCWS – North Island Fire Zone, EMBC, and local fire department representatives and Village Administration to review incident command structure, communication strategies and emergency support services in the event of a WUI fire.	SRD
Rationale: Key contacts and individuals may change from year to year. Annual meetings recommended as a best practice to build relationships and improve communication in the event of a WUI event. Interagency cooperation and cross-training are FireSmart disciplines.				
32.	High	To improve equipment availability for structure protection during a WUI fire event.	Engage the City of Campbell River / Campbell River Fire Department in mutual aid/service agreements for assistance and deployment of the City's structural protection unit in the event of the WUI fire impacting the Village.	Village
Rationale: Recommended as a best practice emergency planning activity, to identify priorities or conditions for deployment of equipment prior to the event of a WUI fire.				

MEDIUM PRIORITY RECOMMENDATIONS

No.	Priority	Objective	Recommendation / Next Steps	Responsibility
5.	Med	To increase community engagement in the FireSmart program through education.	Contact a Local FireSmart Representative to conduct a Local FireSmart Champion workshop to find a local champion to organize community FireSmart initiatives.	Village with SRD support
Rationale: The FireSmart program is a nationwide initiative. Several post-wildfire examples across the country show how FireSmart activities reduce the structure losses associated with WUI fires. FireSmart activities are a focus area for all CWPP's developed under the UBCM CRI funding program. FireSmart is implemented through best practices in 7				

disciplines: education, emergency planning, vegetation management, legislation, development, interagency cooperation and cross-training.				
8.	Med	To improve community FireSmart awareness through education.	Contact a Local FireSmart Representative to deliver Public education materials at annual community events (i.e. Canada Day, Health Fair, Show and Shine)	Village with SRD support
Rationale: Public education as part of FireSmart program implementation, refer to #5 above.				
17.	Med	To help ensure implementation and continual engagement with this CWPP over time.	Annual check-ins between the Village and SRD should occur to follow-up on recommendations and actions planned and completed. Annual check-ins should also develop an action plan of priority items to be worked on for the year.	Village and SRD
Rationale: Recommended best practice to ensure follow-up on action items.				
19.	Med	To reduce the likelihood of human-caused WUI fire events by promoting alternative means of yard/property waste disposal beyond open fires.	Provide residents with information on alternatives to burning yard waste. Link this information on the Village and SRD websites. Alternatives to burning include yard waste disposal centres (Sayward Transfer Station), composting, or xeriscaping.	Village and SRD
Rationale: Recommended practice, observed from other similar jurisdictions. Contributes to public education and development planning; potential to reduce the likelihood of human-caused WUI fire events.				
20.	Med	To improve community awareness of fire bans and other burning restrictions when in effect.	Install additional signage at the Sayward Visitors Centre at Sayward Junction to communicate fire bans and burning restrictions to the Fire Danger Rating sign when applicable.	SRD and Village to work with BCWS North Island Fire Zone
Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation. Sayward Junction is a high traffic, highly visible location for signage.				
22.	Med	To improve water availability for fire suppression on rural/isolated properties outside of	Assess the feasibility and potential locations for dry hydrant installation, and/or other water storage options for fire	Village and SRD

		the hydrant coverage area.	fighting during drought conditions.	
Rationale: Water availability in the fire protective services area, outside of the hydrant coverage area was identified as an issue during CWPP engagement.				
23.	Med	To improve emergency access to the area by designating and maintaining a helicopter landing/staging area for use by BCWS or other agencies during an emergency.	Designate an accessible area to be used as a helicopter landing area. This area should be noted in the Village Emergency Preparedness Plan. Regularly maintain the area to be free of loose objects, obstructions, overhanging vegetation of other obstacles.	Village
Rationale: Best practice recommendation for emergency access and emergency evacuation, based on gaps identified during CWPP engagement.				
26.	Med	To improve emergency evacuation communications to the community.	Encourage residents to sign up to the SRD's free Connect Rocket emergency notification service which sends out text messages to cellular subscribers and voice calls to landlines.	Village and SRD
Rationale: Existing program/infrastructure to continue to encourage residents to use.				
29.	Med	To maintain SVFD's readiness for responding to WUI fires.	Include wildfire-specific training sessions that include fire line construction, pump operations, sprinkler protection, portable water tank deployment, and wildland hose operations. Interface training should include completion of a wildfire simulation exercise and safety training specific to wildland fire and risks inherent with natural areas. Work with the BCWS North Island Fire Zone, and SRD to conduct annual joint training or mock exercises.	Village with SRD and BCWS support
Rationale: Based on CWPP engagement with the Village, SVFD, and BCWS, no such coordination is known to be in place. Interagency cooperation and cross-training are FireSmart disciplines. The BCWS North Island Fire Zone has indicated cross-training is an area of interest for future development.				

LOW PRIORITY RECOMMENDATIONS

No.	Priority	Objective	Recommendation / Next Steps	Responsibility
2.	Low	To reduce wildland urban interface hazards by incorporating wildfire hazard and preparedness considerations into the Village of Sayward Official Community Plan.	Apply a wildfire and wildland urban interface fire hazard lens to applications for rezoning, subdivision or construction. Amend OCP to include wildfire risk language. This may include a specific requirement that wildfire risk management plan be included in the assessment of environmental impacts and proposed mitigating measures, OCP Part 5 Section 2(f)(6). The Village should obtain the proper legal advice prior to adopting any amendments to the OCP or other bylaws.	Village
Rationale: Based on gaps identified from a review of the Village's OCP, and best practices observed in other jurisdictions.				
7.	Low	To improve community FireSmart awareness through education.	Deliver FireSmart education program within the K-5 public school system. Utilize FireSmart Education Kits and the FireSmart BC Education package.	Village
Rationale: Public education as part of FireSmart program implementation, refer to #5 above.				
24.	Low	To establish and maintain a secondary emergency evacuation route.	Continue work with industrial stakeholders, private land owners, Western Forest Products Inc., and Mosaic Forest Management to establish M Branch as a regularly maintained and viable evacuation route for community members and private vehicles.	Village with SRD support
Rationale: Best practice recommendation for secondary emergency access and emergency evacuation, based on previously identified limitations with Sayward Road (single lane bridge).				
27.	Low	To continue recruitment and retention efforts for volunteer fire department members.	Regularly schedule open houses or recruitment days. Connect with the community regularly through social media and consider its use as an advertising tool.	Village, Fire Department

Rationale: Based on CWPP engagement, recruitment of members is a challenge in small communities. Recommended practice from other jurisdictions is to use social media as a tool to connect with the community.

30.	Low	To improve training amongst community members in emergency support services.	Recruit and train interested community members to serve in roles of emergency support services and incident command systems.	Village and SRD
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Rationale: Recommended activity based on CWPP engagement with the Village, limited resources and staff turnover at Village Administration.

33.	Low	To improve equipment availability for structure protection during a WUI fire event.	The Village should purchase sprinkler kits for protection of critical Village infrastructure. Demonstration days can be used to raise community awareness and encourage private home/landowners to purchase their own kits for their homes.	Village, Fire Department
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Rationale: Based on current inventory, the equipment availability for structural protection in the region could be improved. Sprinkler kits are a relatively low-cost option and highly effective option for the Village and residents.

34.	Low	To improve equipment availability for structure protection during a WUI fire event.	Encourage private property owners to purchase their own sprinkler kits, particularly those properties outside of the hydrant coverage area.	Village
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Rationale: Based on current inventory, the equipment availability for structural protection in the region could be improved. Sprinkler kits are a relatively low-cost option and highly effective option for the Village and residents.

SUMMARY OF POTENTIAL RESOURCES AND FUNDING SUPPORTS

Resources	Land Jurisdiction	Types of Projects
Local government taxation	Municipal Private	<ul style="list-style-type: none"> • Various projects as directed by local governments including FireSmart assessments and activities, debris disposal, equipment purchases, training, etc.
Forest Enhancement Society BC (FESBC)	Provincial Crown	<ul style="list-style-type: none"> • Fuel management treatment prescriptions and implementation
UBCM Community Resiliency Investment Program (CRI)	Municipal First Nations Private	<ul style="list-style-type: none"> • FireSmart hazard assessments, demonstration projects, off-site debris disposal (i.e.: chip trucks) • Community Education • Development planning • Emergency planning and cross training
UBCM Community Emergency Preparedness Fund (CEPF)	n/a	<ul style="list-style-type: none"> • Emergency support services training • Fire department training or equipment • Emergency evacuation planning • Emergency operations training
First Nations Emergency Support Services – Indigenous Services Canada (FNESS/ISC)	First Nations Reserve lands	<ul style="list-style-type: none"> • Fuel management prescriptions and treatments On-Reserve
BC Wildfire Service	Provincial Crown	<ul style="list-style-type: none"> • Fuel management treatments (in coordination with local fire zone officer) <ul style="list-style-type: none"> • Public education and outreach

Sayward Community Wildfire Protection Plan Area of Interest



Scale: 1:30000
 Strathcona Regional District
 Electoral Area A
 Village of Sayward



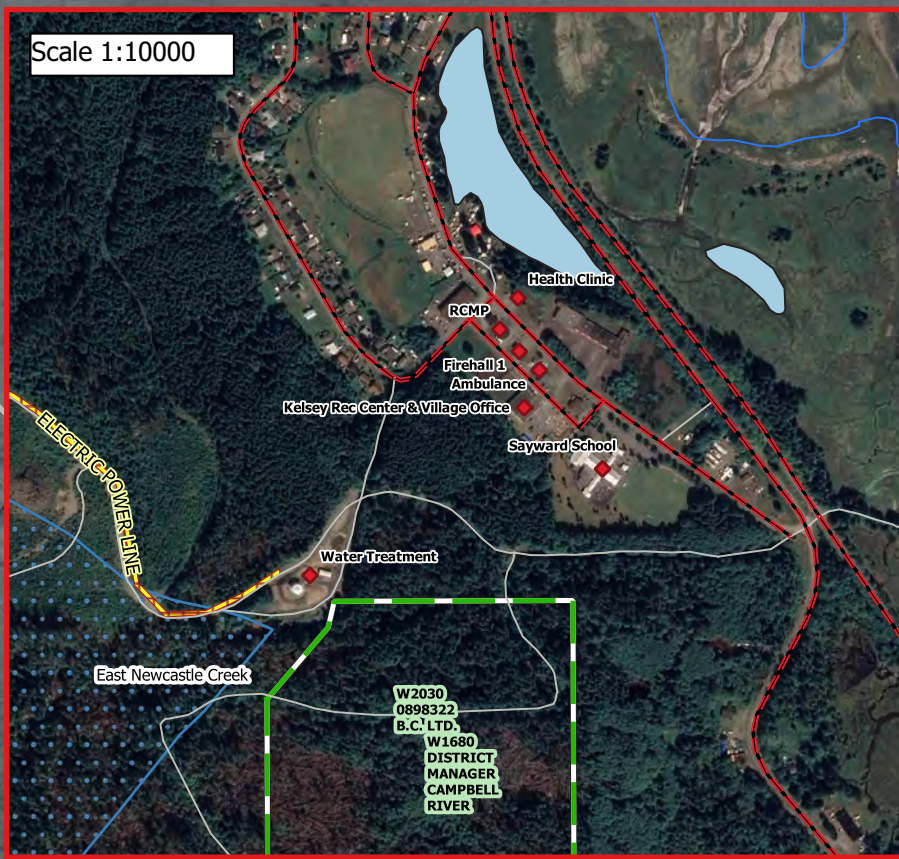
Legend

Digital Road Atlas

- Gravel
- Unknown, Deact
- Paved
- Highway
- ▨ Crown Tenure - Utilities
- ▭ CWPP AOI
- ▭ Tree Farm Licence
- ▭ Crown Woodlots
- ▭ Electoral Area
- ▭ Municipality
- ▭ SRD Fire Services
- ▭ Indian Reserves
- ▭ Fire Polygon - 2019
- ▨ Community Watersheds
- ▭ Lakes
- ▭ Major Rivers
- ▨ Wetlands
- ▭ Lakes

Google Satellite

Scale 1:10000



Ownership	Area (Ha)
Private	1,228
Municipal (Village)	16
Provincial Crown Land	1,534
Federal	9
Federal - Indian Reserve	147
Water	1,018
Total:	3,951

SALMON RIVER 1 (K'OMOKS)

Village of Sayward

TFL39
Western Forest Products Inc.

2019 Fire

Sayward Road

Salmon River Main

CWPP-AOI



0 250 500 750 1000 m

Date: : 05/10/2020
 Author: Colby Day, RFT
 Coordinate System: BC Albers NAD83



Scale 1:30000
Strathcona Regional District
Electoral Area A
Village of Sayward



Sayward Updated Fire Risk Summary	
Updated Fire Risk	Area (ha)
No Risk	0
Low Risk	187
Moderate Risk	3,204
High Risk	560
Extreme Risk	0
Total:	3,951

Legend

Digital Road Atlas

--- Gravel

— Unknown, Deact

— Paved

Proposed Treatment Updated

CWPP AOI

100m Buffer

Crown Tenure - Utilities

Municipality

Indian Reserves

Fire Risk Updated

0.1 (No Risk)

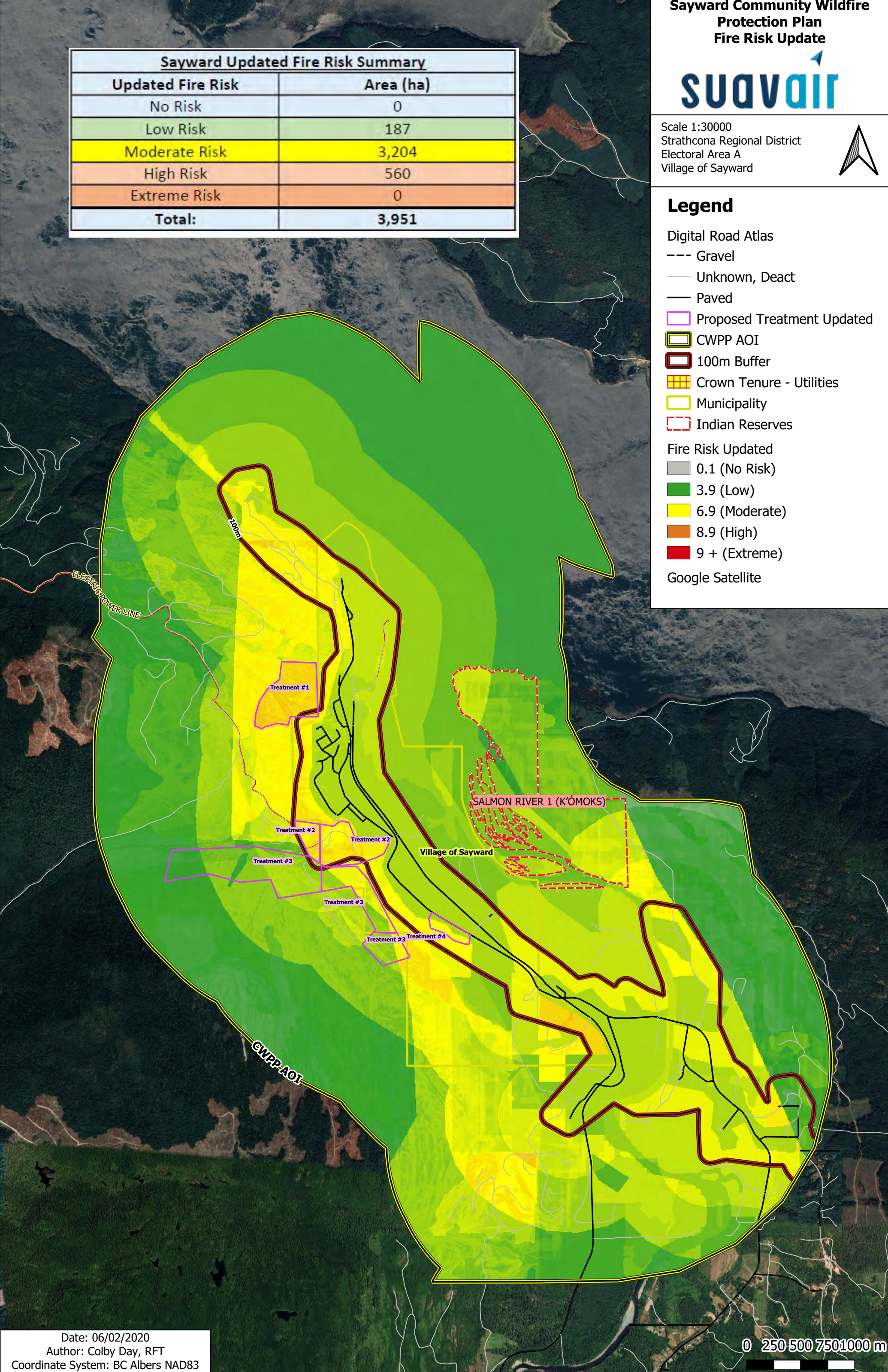
3.9 (Low)

6.9 (Moderate)

8.9 (High)

9 + (Extreme)

Google Satellite



**Sayward CWPP
Ownership Treatment Map**



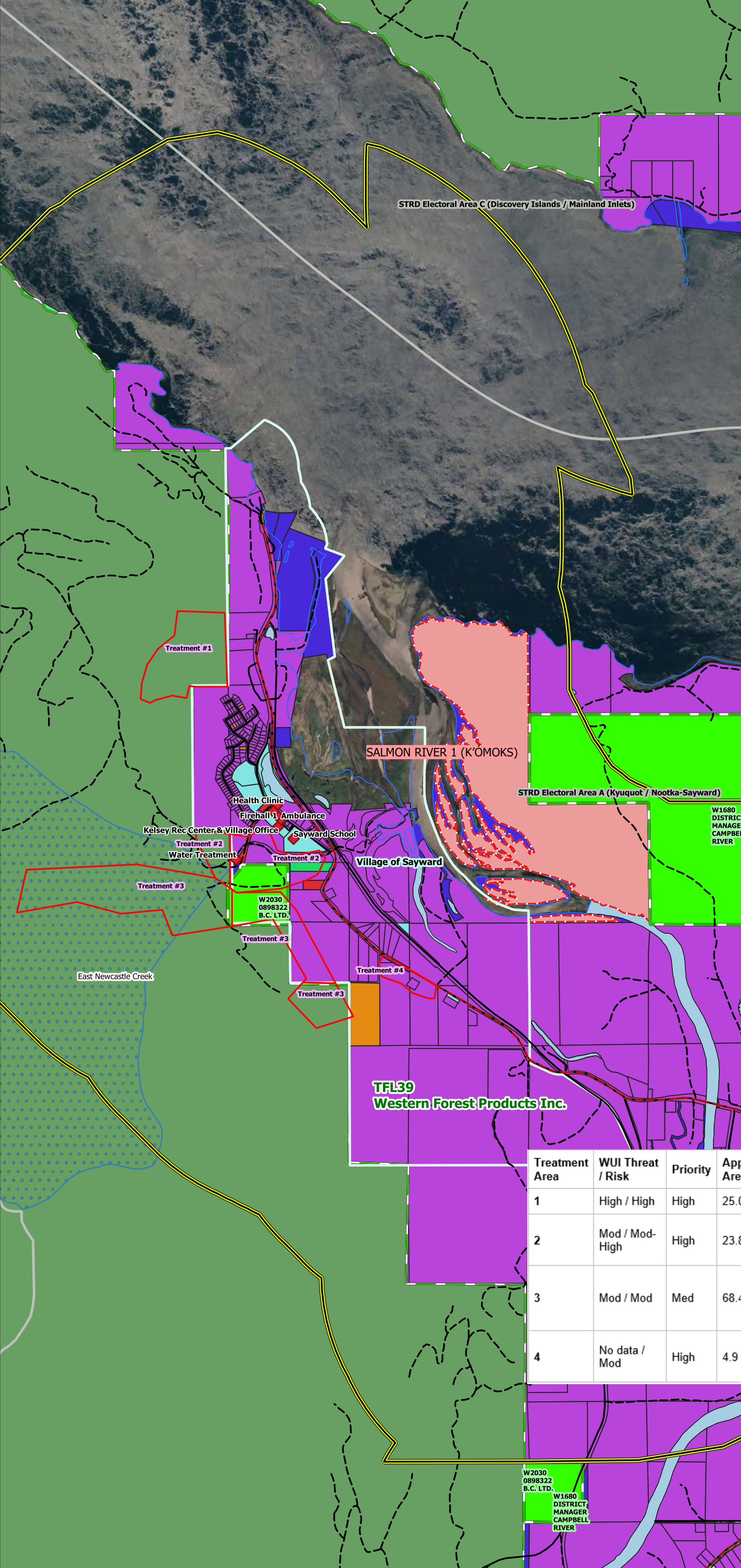
Scale: 1:25000
Strathcona Regional District
Electoral Area A
Village of Sayward



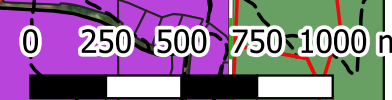
Legend

- ◆ Critical Infrastructure
- ▭ Proposed Treatment Updated
- Digital Road Atlas
 - Gravel
 - Unknown, Deact
 - Paved
 - == Highway
- ▨ Crown Tenure - Utilities
- ▭ CWPP AOI
- ▭ Tree Farm Licence
- ▭ Crown Woodlots
- ▭ Electoral Area
- ▭ Municipality
- ▭ Indian Reserves
- ▭ Community Watersheds
- ▭ Lakes
- ▭ Major Rivers
- ▭ Wetlands
- Parcel Fabric
 - ▭ Crown Agency
 - ▭ Crown Provincial
 - ▭ Federal
 - ▭ First Nation
 - ▭ Mixed Ownership
 - ▭ Municipal
 - ▭ None
 - ▭ Private
 - ▭ Unknown

Google Satellite



Treatment Area	WUI Threat / Risk	Priority	Approx. Area (ha)	Land Ownership	Comments / Rationale
1	High / High	High	25.0	Crown – TFL 39	High risk within WUI500
2	Mod / Mod-High	High	23.8	Municipal (5.8ha) and Private (18ha)	Mod risk within WUI100 and near water treatment plant
3	Mod / Mod	Med	68.4	Crown – TFL39 (43.7ha), W2030 (8.7ha), private (16ha)	Previous storm damage – dead/dry fuels within WUI500
4	No data / Mod	High	4.9	Private	Previous storm damage, dead/down fuels along Sayward Road within WUI100



Date: : 06/05/2020
Author: Colby Day, RFT
Coordinate System: BC Albers NAD83