

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.

Ka:'yu:'k't'h'/Che:k:tles7et'h First Nations Community Wildfire Protection Plan



Submitted to:

Shaun Koopman – Emergency Program Coordinator, Strathcona Regional District
Elizabeth Jack – Emergency Coordinator, Ka:'yu:'k't'h'/Che:k:tles7et'h First Nations

Submitted by:

SuavAir Aerial Imaging
info@suavair.com
250-830-8849

June 26, 2020



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 preparing the Kyuquot Community Wildfire Protection Plan:

Shaun Koopman – Emergency Program Coordinator, Strathcona Regional District

Elizabeth Jack – Emergency Preparedness Coordinator, Ka:'yu:'k't'h'/Che:k'tles7et'h First Nations

Steinar Våge - Director of Community Services, Ka:'yu:'k't'h' / Che:k'tles7et'h' First Nations

Ben Boghean, Todd Flanagan, Raphael Jamin – North Island Fire Zone, BC Wildfire Service

Quentin Nelson – Forest Fuel Management Liaison, First Nations' Emergency Services Society of BC

This report is made possible by the Union of BC Municipalities through the Community Resiliency Investment grant.

REGISTERED PROFESSIONAL SIGN & SEAL

Colin Filliter, RPF #4820 SuavAir Aerial Imaging	Cynthia Lu, RPF #4923 SuavAir Aerial Imaging
Date Signed: June 25, 2020	Date Signed: June 25, 2020

EXECUTIVE SUMMARY

The Ka:'yu:'k't'h'/Che:k:tlles7et'h First Nations' 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 Ka:'yu:'k't'h'/Che:k:tlles7et'h First Nations' (KCFN) community at Kyuquot, on the west coast of Vancouver Island. Kyuquot is a remote community, accessible only by boat, float plane, or helicopter. Most of the area of interest is within KCFN treaty settlement lands. The purpose of this CWPP is to identify the wildfire risks surrounding the community, potential consequences of a wildfire to the community, and to recommend possible ways to reduce the risk.

The fuel type in the area is dominantly mature conifer forests. Previous fire history in the area indicates a low number of ignitions from both human and lightning causes. The local wildfire threat classification is Moderate. The local wildfire risk classification ranges from Low to High, with higher risk areas associated with fuels in close proximity (within 500m) of the community.

Although the wildfire threat is Moderate and wildfire risk is generally Moderate, the community's remote location, limited communication networks, and distance from other resources creates unique challenges. The recommendations in this report are summarized in the table 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 activities should be focused within the first 100 meters of forested areas near the community. FireSmart practices, starting with the first 10 meters around each structure, should be adopted by each household and by the KCFN for critical community infrastructure. 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, and regularly sharing fire safety related information with the community.

The BC Wildfire Service provides wildfire response services on treaty settlement lands and provincial crown land. The community is not served by a local fire department.

Recommendations in this plan aim to improve the availability of local fire suppression equipment and community training in fire/emergency response. The initial step is to inventory the existing equipment and survey the community to understand individuals' level of training and interest in further training. A community specific equipment and training needs analysis should be conducted.

This plan makes 26 recommendations to the Ka:'yu:'k't'h'/Che:k:tlles7et'h First Nations and Strathcona Regional District. The recommendations should be further prioritized by the community 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
2.	High	To complete FireSmart recommendations listed in the 2019 Community Hazard Assessment Report.	The next step is to sponsor a local FireSmart Board and work on clearing Priority Zone 1A (non-combustible) and Zone 1 (1.5-10m) around structures in the community.	KCFN
<p>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. FNESS has completed a Community Hazard Assessment and outlined next steps for FireSmart program implementation within the community.</p>				
3.	High	To conduct FireSmart activities around the identified Priority Areas listed in Table 7.	Encourage residents to start with clearing the non-combustible 0-1.5m zone around their homes, then Priority Zone 1. Public works department to work on areas surrounding community infrastructure.	KCFC
<p>Rationale: As above.</p>				
7.	High	To make this Plan and its associated maps available to the community.	Upload a digital copy of the CWPP to the KCFN and SRD Emergency Planning websites.	KCFN and SRD
<p>Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation.</p>				
8.	High	To improve community awareness of wildfire threat and risk to the community.	Regular communications to community members (flyers, notice boards, emails, social media accounts). Recommend at least one fire related communication per month (more often during fire season if required). Content of the communications include reminders on FireSmart guidelines, fire danger ratings, fire bans, fire prevention tips, air quality alerts etc. Share relevant social media posts made by	KCFN and SRD

			SRD, BCWS, EMBC, FireSmart BC	
Rationale: Recommended best practice for community education and awareness regarding wildfire protection planning and FireSmart program implementation.				
9.	High	To improve community awareness of emergency preparedness, wildfire risk, and risk mitigation opportunities.	Organize an annual Community Fire Safety day. Activities may include checking fire extinguishers and smoke alarms in homes, conducting FireSmart clearing of Priority 1 (up to 10m) zones around homes, fire extinguisher practice, water suppression system (fire hydrants) practice, evacuation drills 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.	KCFN
Rationale: Recommended best practice for community education and awareness about wildfire protection planning and FireSmart program implementation. Addresses education and emergency planning FireSmart disciplines.				
10.	High	To improve inter-agency communication regarding wildfire risk, emergency preparedness, response, and recovery.	SRD should arrange a regional meeting with community officials at the start of fire season to review communication, support, incident command structure, and emergency procedures. This meeting should involve community representatives, SRD, and Coastal Fire Centre – North Island Fire Zone staff.	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.				
12.	High	To improve community and public awareness of fire danger through signage.	Work with BCWS North Island Fire Zone to submit a proposal to install Wildfire Information signage at the Fair Harbour Marina.	KCFN and SRD
Rationale: Recommended best practice for community education and awareness about wildfire protection planning and FireSmart program implementation. Public awareness is a FireSmart discipline.				
13.	High	To improve community capacity in responding to structural and WUI fires.	Complete an inventory of fire suppression equipment available in the community.	c

Rationale: Based on CWPP engagement, a comprehensive inventory of available fire suppression equipment is not readily available. An inventory is recommended to identify gaps in equipment availability.				
14.	High	To improve community capacity in responding to structural and WUI fires.	Conduct a community specific fire suppression equipment needs analysis. Based on the analysis, work to procure additional equipment that may be required including water pumps, hoses, water storage, hand tools, etc.	KCFN, FNESS to support
Rationale: Based on CWPP engagement, a comprehensive inventory of available fire suppression equipment is not readily available. A community specific needs assessment, along with an inventory are recommended to address gaps in equipment availability. Self-sufficiency in equipment availability is critical due to the isolated and remote location of the community.				
16.	High	To ensure emergency evacuation of community members is possible on short notice.	Conduct an inventory of physical resources (vehicles/boats, licensed drivers, fuel) available to conduct emergency evacuation of all community members. Procure any additional resources that may be required.	KCFN
Rationale: Recommended best practice for emergency access and evacuation planning.				
17.	High	To engage the community in wildfire response planning and document what local skills and resources are available.	Survey the community to determine what formal training in emergency response, wildfire response (i.e.: S100), and other technical expertise (i.e.: chainsaw operation, danger tree assessment) is available.	KCFN
Rationale: Recommended best practice to assess skills and resources available within the community, especially important due to the isolated/remote location of the community.				
18.	High	To improve community capacity in emergency management and planning.	Conduct a community specific training needs analysis and training plan to improve capacity in wildfire response, emergency support services, incident command systems, and emergency operations center.	KCFN
Rationale: Recommended best practice to help ensure available human resources in the community to provide support services during an emergency, especially important due to the isolated/remote location of the community.				
20.	High	To improve community capacity in responding to structural and WUI fires.	Host community training days to practice use of fire	KCFN

			extinguishers, available fire tools, and the hydrant system.	
Rationale: Due to the isolated/remote location of the community, to improve community readiness to respond to fires with available local equipment. No formal procedures or training protocols are known to be in place.				
24.	High	To reduce the risk of structure fires negatively impacting human safety and reduce the risk of structure fires causing WUI incidents.	Annual checks for smoke alarms and fire extinguishers. Purchase and install alarms and extinguishers for any structures without.	KCFN
Rationale: Recommended best practice to implement a formal protocol to ensure equipment in homes is up to date. Especially important due to the isolated/remote location of the community.				
26.	High	To improve community capacity in responding to structural and WUI fires.	Practice the Fire Response procedures as outlined in the Emergency Plan.	KCFN
Rationale: A recommended best practice is to develop a regular practice schedule for fire response procedures can improve community readiness to respond to a structure/WUI fire event.				

MEDIUM PRIORITY RECOMMENDATIONS

No.	Priority	Objective	Recommendation / Next Steps	Responsibility
1.	Med	To reduce the likelihood of human-caused WUI fire events by regulating the use of fires and fireworks on KCFN lands.	Develop a local policy to regulate the use of fire and fireworks during periods of high/extreme fire danger on treaty lands.	KCFN
Rationale: Recommended best practice to reduce the risk of human-caused WUI fire events during high fire danger.				
4.	Med	To improve community awareness of wildfire threat, risk to the community, and risk mitigation opportunities.	Contact a Local FireSmart Representative to deliver FireSmart awareness and Community Champion workshop.	KCFN
Rationale: As above.				
5.	Med	To reduce the risk of ignitions within the structural ignition zone.	Review the FireSmart Canada Home Development Guide and BC FireSmart Begins at Home Manual, ensure new construction or structural upgrades to existing buildings use the FireSmart preferred materials.	KCFN
Rationale: As above. Development standards are a FireSmart discipline.				
6.	Med	To reduce the fuel hazard in the recommended treatment areas.	Work with a qualified registered professional to complete and implement site level prescriptions for the recommended treatment areas.	KCFN with FNESS support
Rationale: Recommended treatment areas based on local wildfire risk analysis. Moderate risk areas within 100m of the community prioritized for treatment.				
19.	Med	To establish and maintain a working relationship with BCWS North Island Fire Zone.	Contact BCWS to explore opportunities for community training days, joining the Fire Warden program.	KCFN
Rationale: Potential employment opportunity and opportunity for cross-training.				
21.	Med	To establish a volunteer fire department for the community with trained emergency responders.	Recruit interested community members to join. Work with FNESS to identify training and equipment needs.	KCFN / FNESS to support
Rationale: Due to the isolated/remote location of the community, to improve community readiness to respond to fires with available local equipment. No formal procedures or training protocols are known to be in place. Community interest in this was indicated during CWPP engagement.				

22.	Med	To improve community awareness and capacity to respond to WUI fire incidents.	Make S100 (Basic Fire Suppression and Safety) & S185 (Fire Entrapment Avoidance and Safety) courses available annually or biennially within the community.	KCFN / FNESS to support
Rationale: From CWPP engagement, no formal procedures or training protocols are known to be in place. Due to the isolated/remote location of the community, formal training will improve community readiness to respond to fires with available local equipment.				
23.	Med	To improve capacity in fire protection leadership governance.	Work with FNESS to ensure administrative staff have Foundational Training, beginning with Tier 1 and progressing to Tier 3 over the next 5 years.	KCFN / FNESS to support
Rationale: Recommended best practice to help ensure available human resources in the community to provide support services during an emergency, especially important due to the isolated/remote location of the community.				

LOW PRIORITY RECOMMENDATIONS

No.	Priority	Objective	Recommendation / Next Steps	Responsibility
11.	Low	To improve communication of emergency preparedness activities to the community.	Develop an Emergency Preparedness Communication Plan that considers how to communicate with the community about emergency preparedness and evacuation for wildfires along with other natural events such as tsunamis, earthquakes, and landslides.	KCFN, with support from Emergency Plan contractor
Rationale: Local emergency evacuation plan is now completed. Best practice is to have a plan to communicate its contents to the community.				
16.	Low	To clear and maintain a helicopter staging area for emergency evacuations and/or wildfire response operations.	Maintain the existing helicopter landing/staging. Keep this area free of obstructions, loose debris and overhanging vegetation or obstacles. Maintain access control (i.e.: fencing) around the area. Clearly mark this location so it is visible from land and air. A second helicopter landing area should be designated near the KESS/evacuation muster station.	KCFN
Rationale: Recommended best practice for emergency access and evacuation planning.				

25.	Low	To reduce the likelihood of structural ignitions during a WUI fire event.	Purchase exterior sprinkler kits for homes; provide training to the community for how to set up the kits Consider the water availability for sprinkler systems, additional water storage reservoirs are likely required to ensure water pressure and availability.	KCFN
Rationale: Recommended best practice for emergency access and evacuation planning.				

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

**Kyuquot CWPP
Area of Interest Map**



Scale: 1:20000
Strathcona Regional District
Electoral Area A
Kyuquot First Nation

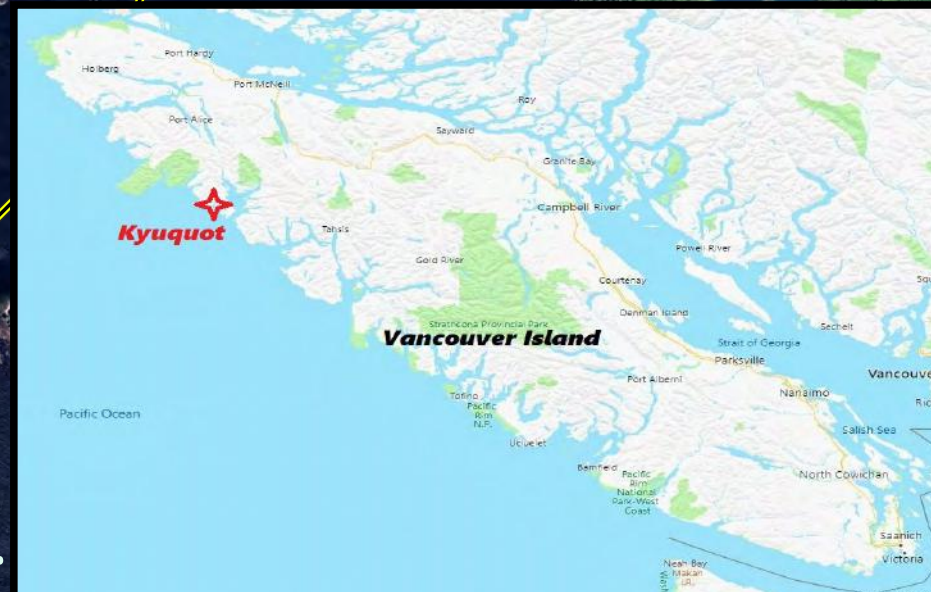
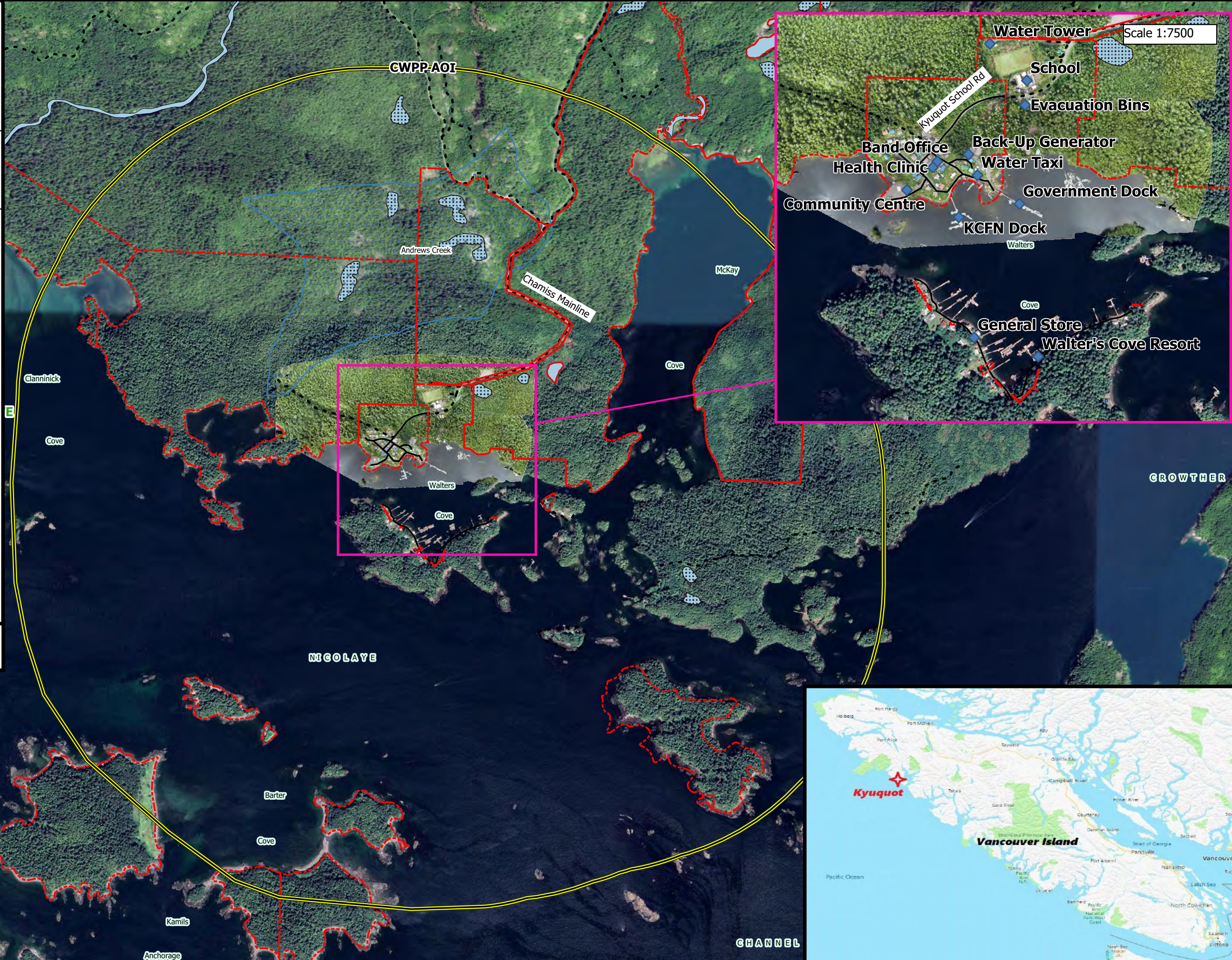
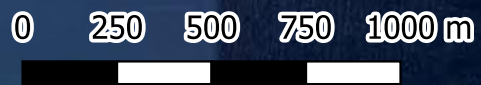


Legend

- ◆ Critical Infrastructure
- First Nation Treaty Land
- Kququot CWPP AOI
- Digital Road Atlas
- Gravel
- Unknown, Deact
- Paved
- Crown Woodlots
- Community Watersheds
- Parks and Protected Areas
- Lakes
- Major Rivers
- Wetlands
- Lakes

Kyuquot Drone_2019-09-16_SuavAir
Google Satellite

Date: 05/11/2020
Author: Colby Day, RFT
Coordinate System: BC Albers NAD83



**Kyuquot CWPP
Fire Risk - Updated Map**



Scale: 1:20000
Strathcona Regional District
Electoral Area A
Kyuquot First Nation



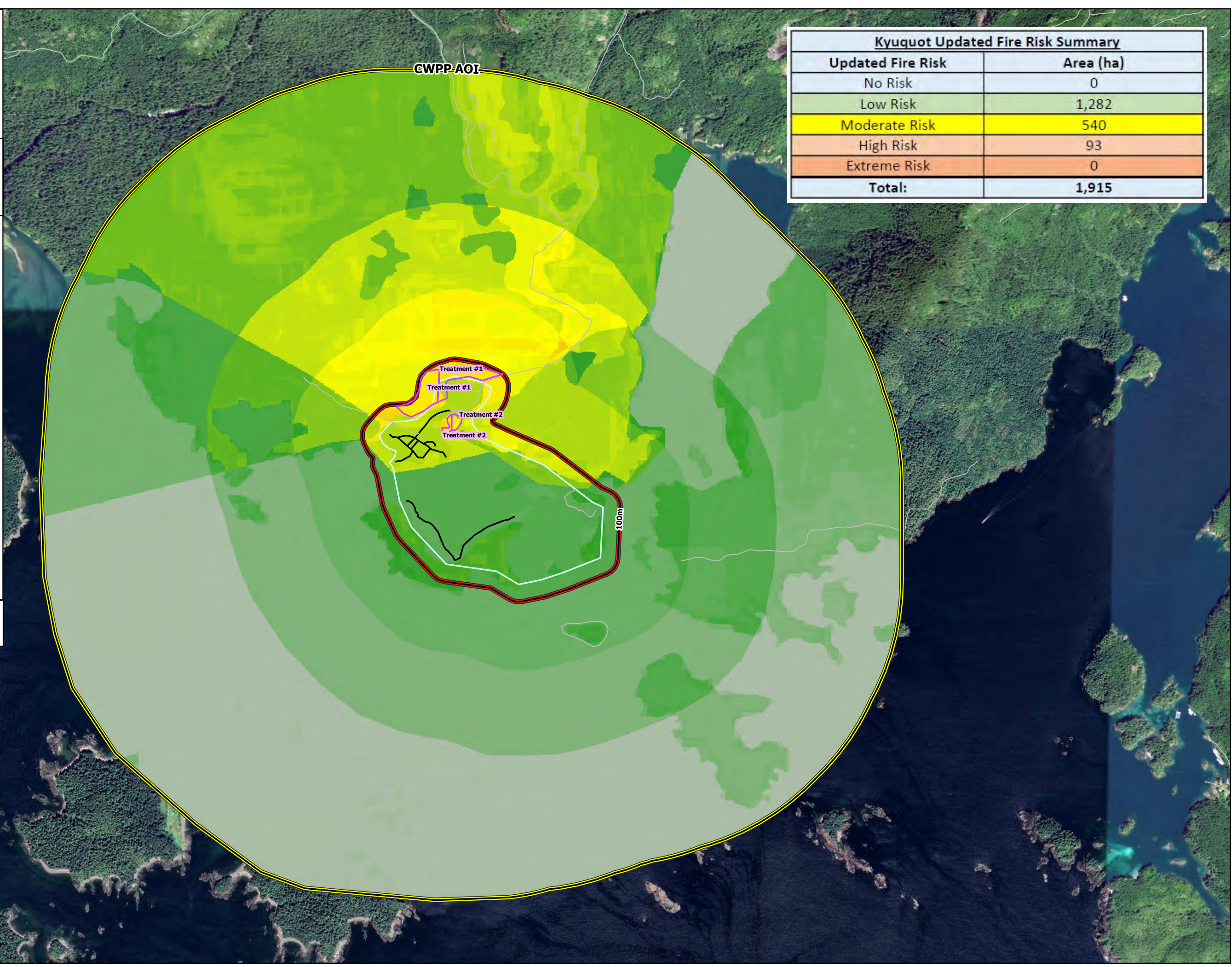
Legend

- Digital Road Atlas
- Gravel
- Unknown, Deact
- Paved
- ▭ Proposed Treatment Updated
- ▭ CWPP AOI
- ▭ 100m Buffer
- ▭ Urban Interface
- Fire Risk Updated
- ▭ 0.1 (No Risk)
- ▭ 3.9 (Low)
- ▭ 6.9 (Moderate)
- ▭ 8.9 (High)
- ▭ 9 + (Extreme)

Google Satellite

Date: 05/27/2020
Author: Colby Day, RFT
Coordinate System: BC Albers NAD83

0 250 500 750 1000 m



CWPP-AOI

Treatment #1

Treatment #1

Treatment #2

Treatment #2

100m

Kyuquot Updated Fire Risk Summary

Updated Fire Risk	Area (ha)
No Risk	0
Low Risk	1,282
Moderate Risk	540
High Risk	93
Extreme Risk	0
Total:	1,915

**Kyuquot CWPP
Ownership Treatment Map**



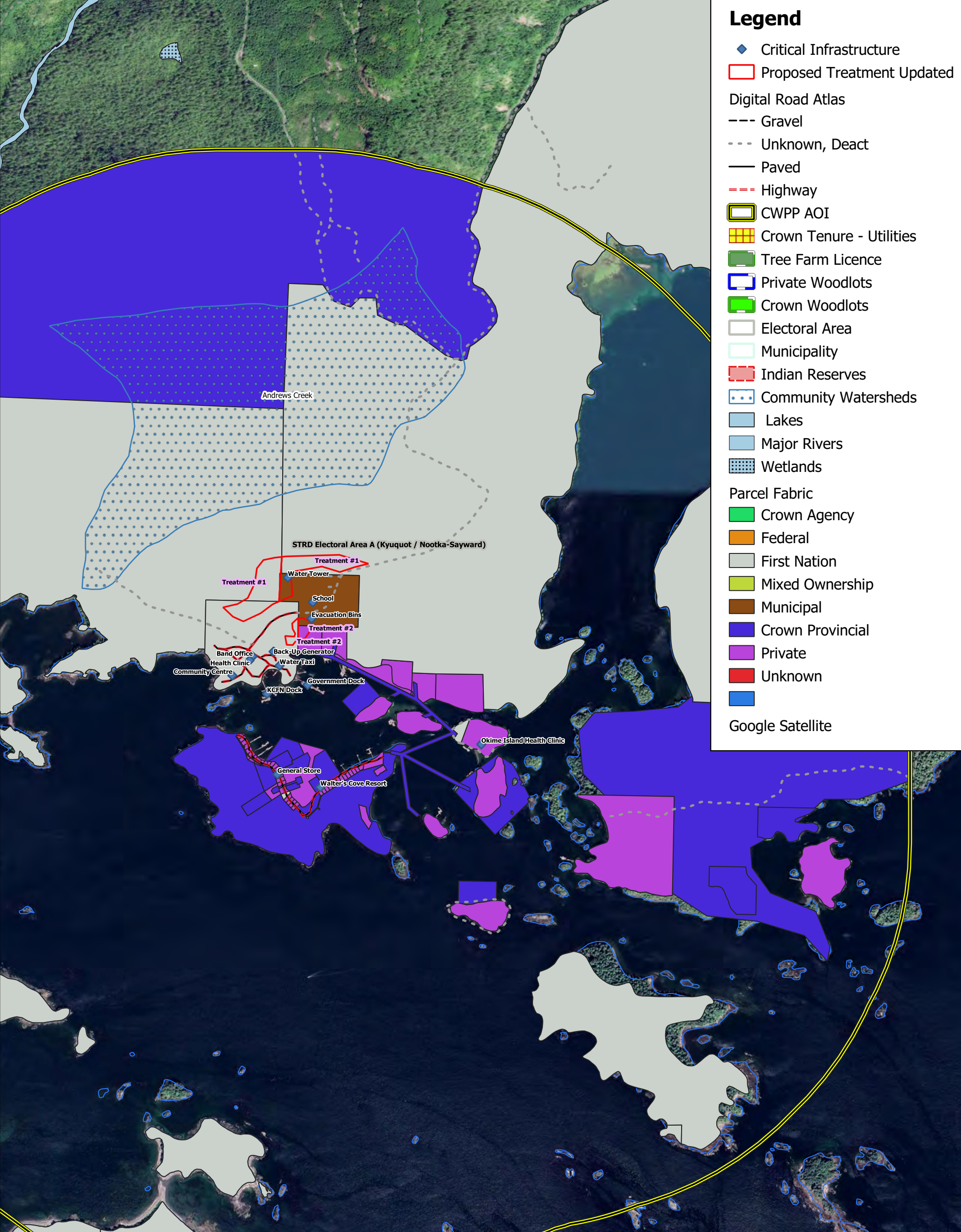
Scale: 1:15000
Strathcona Regional District
Electoral Area A
Kyuquot First Nation



Treatment Area	WUI Threat / Risk	Priority	Approximate Area (ha)	Land Ownership	Comments / Rationale
1	Mod / Mod	Med	5.5	KCFN / Municipal	Moderate risk within the WUI100
2	Mod / Mod	Med	0.7	Private/ KCFN	Moderate risk within the WUI100

Legend

- ◆ Critical Infrastructure
- ▭ Proposed Treatment Updated
- Digital Road Atlas
- Gravel
- Unknown, Deact
- Paved
- Highway
- ▭ CWPP AOI
- ▭ Crown Tenure - Utilities
- ▭ Tree Farm Licence
- ▭ Private Woodlots
- ▭ Crown Woodlots
- ▭ Electoral Area
- ▭ Municipality
- ▭ Indian Reserves
- ▭ Community Watersheds
- ▭ Lakes
- ▭ Major Rivers
- ▭ Wetlands
- Parcel Fabric
- ▭ Crown Agency
- ▭ Federal
- ▭ First Nation
- ▭ Mixed Ownership
- ▭ Municipal
- ▭ Crown Provincial
- ▭ Private
- ▭ Unknown
- ▭ Google Satellite



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