

Ts'uubaa-asatx FireSmart Community Plan



Version 4 October 31st, 2021
Land Forest People Consulting Ltd.



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Ts'uu baa-asatx and Land Forest People wish to acknowledge the contributions made to this project by:

- The people of Ts'uubaa-asatx
- Town of Lake Cowichan Fire Department
- Strathcona Forestry Consulting



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1.0 INTRODUCTION

Health and safety, emergency preparedness, and FireSmart activities have become permanent and ongoing programs at Ts'uubaa-asatx.

The emergency management program is well documented in the *Ts'uubaa-asatx All-Hazards Emergency Management Plan*. The program is led by our Emergency Program Coordinator Carlito Livingston.

FireSmart programming began in 2017 at Ts'uu baa-asatx. The program is supported by Nation and member involvement and funding from multiple agencies. This plan is used to provide a single location for all FireSmart related information including a record of activities. The plan is updated periodically.

Climate change is real and now. There is no longer a normal pattern of weather, but we do know that weather events will be more extreme and more frequent. Fire is a natural component of the forests surrounding Ts'uubaa-asatx, and in the future its presence and impacts will only be more strongly felt by the community. Excluding fire is not an option, but how can we live with fire without disastrous loss of life, property, and resources?



2.0 TS'UUBAA-ASATX RESERVE

The Ts'uubaa-asatx reserve is located on Vancouver Island, adjacent to the northwest boundaries of the Town of Cowichan Lake. The community is located along the shores of Kaatza (Lake Cowichan), approximately 26 km west of Duncan, BC.

Latitude/Longitude coordinates: 48° 49'34" N 124°04'12" W.



Figure 1 - Ts'uubaa-asatx Reserve

From Figure 1 - Ts'uubaa-asatx Reserve one can see that the reserve is an interface community - that is, surrounded by forest land and immediately adjacent to the Town of Lake Cowichan.

3.0 TS'UUBAA-ASATX EMERGENCY PROGRAM

The Chief and Council of Ts'uubaa-asatx carry ultimate responsibility for the safety of our members and for emergency preparation, mitigation, response, and recovery efforts within our community. Chief and Council directed Ts'uubaa-asatx staff to establish an emergency preparedness program and through that program staff has prepared the *Ts'uubaa-asatx All-Hazards Emergency Management Plan*.

The purpose of the *All-Hazards Emergency Management Plan* is to provide a framework for support, response, and recovery activities to be undertaken during and after an emergency, and to protect the health and safety of our community members and our critical infrastructure.

Specifically to:

- Save the lives of our members and emergency response personnel;
- Protect and preserve life, safety, health, and the environment and to minimize damage to property in the face of natural and environmental disasters;
- Provide a process for staff and residents to properly prepare for and respond to emergency events;
- Provide for the orderly emergency evacuation of our community should it be required;
- Provide interim shelter for displaced residents; and
- Provide for orderly return to community when safe to do so.

In preparation of the plan, wildfire was identified through hazard, risk, and vulnerability assessment as the highest-risk hazard facing Ts'uubaa-asatx.



4.0 FIRESMART PROGRAM

FireSmart means living with and managing for wildfire. Preparing for the threat of wildfire is a shared responsibility. Community members, community leaders, and all levels of government have a responsibility to lessen the effects of wildfire.

Ts'uubaa-asatx is a recognized FireSmart Community and we will continue to reduce risk to the community associated with wildfire. We will continue to foster a strong relationship with the people of the Town of Lake Cowichan.

The following subsections describe the Ts'uubaa-asatx FireSmart risk mitigation activities. Details can be found in the Appendices which document the program since 2017.

4.1 LAKE COWICHAN FIRE DEPARTMENT

The Lake Cowichan Fire Department has been an integral partner in this work from the beginning. We are grateful for their support. The Fire Department led, Town of Lake Cowichan community wildfire protection planning included Ts'uubaa-asatx lands. The Fire Department led our community level FireSmart assessment in 2017, brush reduction work, and our successful application for FireSmart Community recognition.

4.2 COMMUNITY FIRESMART BOARD

Our community FireSmart Board provides direction and oversight to our FireSmart program.

The Ts'uubaa-asatx FireSmart Board is composed of the following persons:

- Aaron Hamilton, Ts'uubaa-asatx Operations Manager;
- Carlito Livingstone, Emergency Program Coordinator
- Melanie Livingstone;
- Sherry Livingstone;
- Carol Livingstone; and
- Steve Vatcher, Lake Cowichan Fire Department.

Please see

Figure 2 - FireSmart Board Overview for our charge to the Board.





The Chief and Council of Lake Cowichan First Nation carry ultimate responsibility for the safety of our members and for emergency preparation, mitigation, response, and recovery efforts within our community. Chief and Council directed LCFN staff to establish an emergency preparedness program and through that program staff has prepared the *Lake Cowichan First Nation All-Hazards Emergency Management Plan*. In preparation of the plan wildfire was identified through hazard, risk, and vulnerability assessment as a high-risk hazard facing the community.

Climate change is real and now. There is no longer a normal pattern of weather, but we do know that weather events will be more extreme and more frequent. Fire is a natural component of the forests surrounding LCFN, and in the future its presence and impacts will only be more strongly felt by the community. Excluding fire is not an option, but how can we live with fire without disastrous loss of life, property, and resources?

The goal of the FireSmart program is to protect homes and lives using preventative measures. FireSmart is a program that we can use to take action toward greater wildfire safety and compatibility with our wildfire environment. FireSmart means living with and managing for wildfire. Preparing for the threat of wildfire is a shared responsibility. Community members, community leaders, and all levels of government have a responsibility to lessen the effects of wildfire. Lake Cowichan First Nation is a recognized FireSmart community and we are continuing our work in this.

Leading the FireSmart program is usually a local FireSmart Board. The Board is generally composed of a variety of homeowners. Nation staff and fire department staff members participate as invited guests. The Board uses a community assessment to create an agreed-upon, area-specific action plan for the community. The FireSmart board works with the community to implement the plan.

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Figure 2 - FireSmart Board Overview



4.3 COMMUNITY ENGAGEMENT

Individual member and resident involvement is the key to the success of any FireSmart program.

The goal of the FireSmart program is to protect homes and lives. In the communication process we further developed community involvement and enthusiasm.

FireSmart is living with and managing for wildfire. Preparing for the threat of wildfire is a shared responsibility. Community members, community leaders, industry, and government all have responsibility to lessen the effects of wildfire. FireSmart uses preventative measures to reduce wildfire threat to communities.

Community members can take the lead in preparing their homes to be as resistant to wildfire as possible. We will show you how!

Ts'uubaa-asatx FireSmart communication efforts promote and support our program in the following ways:

- Raising awareness and developing enthusiasm;
- Attracting additional community members to get involved;
- Informing members of program activities;
- Involving home owners in FireSmart home and property assessments; and
- Advertising related events.

Tools that we use:

- The actively used Ts'uubaa-asatx Facebook group;
- Ts'uubaa-asatx website: <https://www.lakecowichanfn.ca/emergency-management> ;
- Newsletters and flyers delivered door-to-door;
- Community meetings; and
- Existing materials tools:
 - Video - FireSmart your home: <https://youtu.be/1VZWwCOPhUk>
 - Posters, pamphlets, etc.



4.4 FIRE SMART CHAMPIONS



Ts'uu baa-asatx FireSmart Community Champions, Destiny and Carlito.

4.5 HOME ASSESSMENTS AND RISK REDUCTION

In 2018 all homes on Ts'uubaa-asatx as well as the Kaatza Adventures building and grounds were assessed based on FireSmart principles. Details can be found in Appendix II and Appendix III.

4.6 FUEL MANAGEMENT TREATMENT

As part of our 2019/2020 FireSmart Event, a demonstration of fuel management treatment was undertaken to the west of our Deer Road homes. Details are available in Appendix IV.

4.7 FIRESMART PRINCIPLES FOR LAND DEVELOPMENT

In implementing land code, and with anticipated community growth, Ts'uubaa-asatx is in a good position to build FireSmart principles into our land management policies and procedures.

In the 2019/2020 program year we developed policy and procedures documents aimed at mandating FireSmart planning requirements for land development and construction.

The legislative package consists of draft versions of the following Ts'uubaa-asatx documents:

- A Subdivision, Development, and Servicing Law ready for legal review;
- A summary of the law for community information purposes;
- A Subdivision, Development, and Servicing Permitting Guide for potential developers; and
- A policy document to support administration of the process.

These documents can be found in Appendix VII.

Key pieces with regard to FireSmart are: Section 9.0 of the Permitting Guide; environmental operating procedure (EOP) No. 5 - FireSmart Design; and the FireSmart Design and Construction section of the policy and procedures.



FireSmart Design and Construction

FireSmart Canada leads the development of resources and programs designed to empower the public and increase community resilience to wildfire across Canada. Ts'uubaa-asatx is a Recognized FireSmart Community. We are committed to reducing the risks associated with living within a forest ecosystem in which fire is a natural and necessary element.

Ts'uubaa-asatx takes a multiple program approach to the safety and security of our community. For each potential hazard we assess our vulnerability and risks. With our risks defined, we plan for preparedness, response, and recovery, and work to reduce or mitigate our risks.

We utilize FireSmart principles to guide our preparedness and risk mitigation work with regard to wildfire. Ts'uubaa-asatx is active in the seven FireSmart disciplines of Education, Emergency Planning, Vegetation Management, Legislation, Development, Interagency Cooperation and Cross Training.

This policy focuses on the discipline of FireSmart Development. Ts'uubaa-asatx has entered a time of growth and land development. We are investing in new infrastructure, expanding our commercial and institutional presence on our land, and expanding housing for members and non-members. It is both prudent and our responsibility to reduce and mitigate our collective risk associated with wildfire.

This policy makes it clear to members, partners, developers, and contractors what is expected of them in their development work on Ts'uubaa-asatx lands. The following sections provide guidance. Details can be found in the source documents identified as appendices to this policy.

The Development Permit system is a planning tool that local governments use to manage development, protect the environment, and address health and safety issues. The Ts'uubaa-asatx Development Permit process addresses FireSmart best practices in subdivision design and building construction. Applications for development or building permits are required to include a *FireSmart Development Plan* which will state the intent of the developer or builder to implement to FireSmart principles.

Details of design and construction requirements can be found in EOP No. 5 FireSmart Design to be found in the *Ts'uubaa-asatx Subdivision, Development, and Servicing Permitting Guide* (hereafter referred to as the *Permitting Guide*).

Background information can be found in the following reference documents:

- FireSmart Begins at Home Manual, B.C. FireSmart.
- FireSmart Home Development Guide.
- FireSmart Guide to Landscaping.
- The Home Owners' FireSmart Manual, B.C. Edition.
- Ts'uubaa-asatx FireSmart Community Plan.
- Ts'uubaa-asatx All-hazards Emergency Management Plan.

Figure 3 - FireSmart Design and Construction



5.0 RECOMMENDATIONS

As part of our ongoing program, the following table details the recommended action items for the community to undertake to further reduce risk and losses from wildfire.

Priority	Activity
1	Emergency Planning. Continue to host EOC team training and practicing to ensure the best leverage of efforts in FireSmart planning and implementation, including inter-agency exercises.
2	Education and Training. <ul style="list-style-type: none"> • Utilize existing community engagement tools to advance and maintain community knowledge and participation. • Take advantage of opportunities to provide training to staff, members, and the FireSmart Champion(s). • Expand FireSmart materials presented on the Ts'uubaa-asatx website
3	Home preparedness. Ensure that all homes have functional smoke and CO alarms and fire extinguishers. Ensure all dryer vents are clean. Clean eaves troughs and down spouts. Ensure that all homes have visible reflective house numbers to aid response personnel.
4	Remove combustibles. This includes recyclable materials, potentially hazardous materials, and residual solid waste. Provide appropriate solid waste removal for members to enable them to undertake the cleanup. Assist Elders and others requiring assistance to undertake the cleanup.
5	Vegetation management. Further address vegetation management prescriptions and implementation) west of the community as part of our partnership work with LCFD.



6.0 APPENDICES



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APPENDIX I. 2017/2018 PROGRAM

In full partnership with the Lake Cowichan Fire Department Ts'uubaa-asatx initiated our FireSmart Program and accomplished the following:

- Community wildfire protection planning in conjunction with the Town of Lake Cowichan;
- Community level FireSmart assessment; and
- Brush clean-up and chipping work in the vicinity of our Deer Road homes.

Ts'uubaa-asatx was recognized as a FireSmart Community by FireSmart Canada.



Ts'uu baa-asatx Operations Manager Aaron Hamilton.



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APPENDIX II. 2018/2019 PROGRAM

By taking advantage of being within the geographic scope of the Town of Lake Cowichan's Community Wildfire Protection Plan (CWPP), Ts'uubaa-asatx was able to attract FireSmart planning funding through the Strategic Wildfire Prevention Initiative for the 2018/2019 fiscal year. Through this FireSmart project Ts'uubaa-asatx undertook action toward greater wildfire safety and compatibility with our wildfire environment. The program targeted the residential area of the Ts'uubaa-asatx lands.

Through this project we continued the work of mitigating risk from wildfire on the reserve using FireSmart principles. Within this project we:

- Confirmed Aaron Hamilton in the role of Community Champion;
- Developed a communication strategy and built community awareness;
- Worked with the Town of Lake Cowichan Fire Department;
- Formed a FireSmart Community Board;
- Undertook household level assessments;
- Developed the *FireSmart Community Plan*;
- Held a FireSmart Day Event; and
- Amended our *All-hazards Emergency Management Plan* to reflect FireSmart planning.

FIRESMART BOARD 2018

The Ts'uubaa-asatx FireSmart Board was composed of the following persons:

- Aaron Hamilton, Ts'uubaa-asatx Operations Manager;
- Chief Georgina Livingstone;
- Melanie Livingstone;
- Carol Livingstone; and
- Steve Vatcher, Lake Cowichan Fire Department.

Overview information provided to the board is reproduced in

Figure 2 - FireSmart Board Overview.

COMMUNICATION PROGRAM 2018/19

Communication in this fiscal year was accomplished through three main tools - community meetings, newsletters, and Facebook.

Newsletter pieces were distributed in

- November 2018 – Introductory
- January 2019 – Assessments report

The articles are shared below.



The following community meetings were used to inform members and promote involvement:

- A regularly scheduled community meeting in January was used to share progress with the community. Topics included and introduction to FireSmart, the program's placed at Lake Cowichan First Nation, introduction of the event day, and reporting of the home assessment results. Slides from that presentation appear on the next page.
- February – A community household preparedness workshop was held. As a component of the workshop the FireSmart program was discussed and the community event was introduced and promoted.



Ts'uu baa-asatx
Household Emergency Preparedness Workshop

Thursday February 28th, 2019
4 pm to 7 pm
Jakes at the Lake

-  All members and family welcome
-  Bring the kids
-  Dinner will be served at 4 pm
-  Prepare your own household emergency plan
-  Build your Grab and Go Kit

For more information call David Carson at 250-881-2055



The following slides are drawn from the January community meeting presentation.



LCFN FireSmart Board

- Chief Georgina Livingstone
- Aaron Hamilton
- Melanie Livingstone
- Carol Livingstone



7

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Assessments

- September 2018
- Six houses and Kaatza
 - Combustibles
 - Firewood
 - Grass and brush
 - Forest encroachment
 - Unsheathed decks



8

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Recommendations

Around the homes:

- Remove combustible materials
- Reduce brush, dry grass
- Move firewood
- Brush and prune the nearby forest


10


Facebook posts used for information and advertisement of events are shared below.



David M Carson
December 4 at 9:37 AM

Good Day! My name is David Carson and I hail from Brentwood Bay in Wsanec territory. I know that when I showed up on the community page a few people wondered, who the heck is this guy? Well I have met a few of you over the past year or two as we built the LCFN emergency plan together, and this year I am working with Aaron on improving wildfire preparedness for the community through FireSmart. I am looking forward to getting to know everyone better and sharing what we are doing, and LISTENING to what you have to say and contribute. Lots more to come. Thanks for the picture Aaron. Klecko.





David M Carson
Just now

Merry Christmas to all and hold on to your hats today! Wildfires are not top of mind right now, that's for sure, but #icymi in the newsletter, the attached info sheet introduces our FireSmart work. Please have a look and lets talk some more in January. Happy New Year!

Ts'uu baa-asatx FireSmart Community Report – November 2018 1



The forest fires of 2017 and 2018, and our smoky summer, force us to ask the question: Is our community prepared for wildfire? All communities in B.C. are at some risk, and being surrounded by forest Lake Cowichan is certainly no exception.

In order to reduce the risk to our community Lake Cowichan First Nation has teamed up with the First Nations Emergency Services Society, the Union of BC Municipalities, and the Lake Cowichan Fire Department. As many will know, we joined the FireSmart program last year and with our partners achieved the status of a FireSmart Recognized Community.



FireSmart means living with and managing for wildfire. Preparing for the threat of wildfire is a shared responsibility. Community members, community leaders, and all levels of government have a responsibility to lessen the effects of wildfire. FireSmart uses preventative measures to achieve this.

We have identified a FireSmart Board consisting of Aaron, Georgina, Melanie, and Carol. This group will lead us in developing and implementing a community FireSmart Plan.

We have been working with Land Forest People Consulting, Margaret Symon of Strathcona Forestry Consulting, and Steve Vatcher of the Fire Department to assess our properties, homes, and buildings and identify what we need to do for each home. The assessments took place on September 12th and we will share those results in our next community report.

We are inviting all community members to work together in preparing their homes to be as resistant to wildfire as possible. While the purpose is to protect lives and property, our goal is to renew our recognition as a FireSmart Community and continue this work every year. This FireSmart graphic on the next page explains the type of thing that we can do!

For more information please contact Aaron at the office.








David M Carson

8 mins

Looking forward to seeing everyone at the community meeting on Monday. We will review developments in our emergency management and FireSmart programs. Klecko Klecko



David M Carson

January 29

Thank you Ts'uu baa-asatx for the opportunity last evening to share what we are up to with emergency planning and wildfire risk mitigation. And congratulations on the many exciting initiatives you have on the go! Land Forest People Consulting Ltd. #itisallconnected



1

Seen by 14

Like

Comment



Write a comment...



 **Sherry Livingstone** was live.
January 28



1 7 Comments Seen by 18

 Like  Comment

 **Sherry Livingstone** uploaded a file.
January 28

FireSmart Community Plan January 2019

 **DRAFT LCFN FireSmart Community Plan January ...** PDF  

Seen by 16

 Like  Comment





FireSmart

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We are inviting all community members to work together in preparing their homes to be as resistant to wildfire as possible. While the purpose is to protect lives and property, our goal is to renew our recognition as a FireSmart Community and continue this work every year. This FireSmart graphic on the next page explains the type of thing that we can do!

For more information please contact Aaron at the office.

FireSmart in Nine Easy Steps

THE DOS AND DON'TS OF PROTECTING YOUR HOME FROM WILDFIRE

 **PreparedBC**



CLEAN YOUR GAVES AND ENCLOSE SOFFITS SO EMBERS CAN'T EASILY GET IN. (Icon: roof gable with red X)

REPLACE OLDER STYLE ROOFS LIKE CEDAR WITH NON-COMBUSTIBLE ONES: (METAL, CERAMIC OR ASPHALT). (Icon: roof tile with green checkmark)

SPACE TREES SO THAT THE CROWNS ARE THREE TO SIX METRES APART. (Icon: trees with green checkmark)

DON'T PLANT HIGHLY COMBUSTIBLE TREE VARIETIES, SUCH AS PINE, SPRUCE OR JUNIPER. (Icon: tree with red X)

STACK FIREWOOD MORE THAN 10 METRES FROM YOUR HOME. (Icon: firewood with green checkmark)

STORE PROPANE TANKS AT LEAST 10 METRES FROM YOUR HOUSE. (Icon: propane tanks with green checkmark)

REGULARLY MOW AND WATER THE GRASS. (Icon: person mowing with green checkmark)

REMOVE DEAD TREES, MATURE TREES AND THICK SHRUBBERY. SPACE CROWNS THREE TO SIX METRES APART WHERE POSSIBLE. (Icon: dead tree with red X)

REDUCE THE NUMBER OF EVERGREENS LIKE PINE AND SPRUCE, WHICH ARE MORE COMBUSTIBLE THAN DECIDUOUS TREES. (Icon: evergreen tree with red X)

ZONE 1
10 METRES

ZONE 2
30 METRES

ZONE 3
100 METRES

SOURCE WEBSITE:
WWW.BCWILDFIRE.CA





FireSmart

FireSmart means living with, and managing for, wildfire. Preparing for the threat of wildfire is a shared responsibility. Community members, community leaders, and all levels of government have a responsibility to lessen the effects of wildfire.

You will likely know that LCFN has been working on reducing the risk of wildfire to our homes and a new phase of FireSmart assessments was undertaken in the fall of 2018 by Steve Vatcher of the Town of Lake Cowichan Fire Department and Margaret Symon RPF PCP of Strathcona Forestry Consulting. This involved the assessment of all homes on the Cowichan Lake Reserve as well as the Kaatza Adventures buildings and grounds.

Of major concern at several residences is the volume of combustible materials within 1.5 m of the home. If there was a fire, these materials (wood, fuel containers, bedding, *etc.*) would quickly ignite, perhaps making it difficult to exit the house and certainly making life more difficult for the firefighters.

Another concern is brush and coniferous trees within 10 m of homes. These increase the risk of wildfire igniting the homes.

We will be looking for everyone's help to address these issues. Please watch for upcoming announcements on our spring cleanup!



For more information please contact Aaron at the office.



HOUSEHOLD ASSESSMENTS

A new phase of FireSmart assessments at Ts'uubaa-asatx was undertaken in the fall of 2018 by Steve Vatcher of the Town of Lake Cowichan Fire Department and Margaret Symon RPF PCP of Strathcona Forestry Consulting. This involved the assessment of all homes on the Cowichan Lake Reserve as well as the Kaatza Adventures building and grounds. Individual assessment forms and photographs are reproduced in Appendix III.

Of major concern at several residences is the volume of combustibile materials within 1.5 m of the home (see photo bottom left). If there was a fire, these materials (wood, fuel containers, bedding, *etc.*) would quickly ignite, impeding the egress of residents, and access by firefighters.

Another concern is coniferous trees within 10 m of homes. These increase the risk of wildfire igniting the homes (see the lower right photo).

Address signage is not reflective. One home did not have any address signage. Wood and vinyl siding provides poor fire resistance.

Summary details of the home assessments are provided in on the following page.



Address	Rating	Key Issues	Priority Actions
313 Deer Rd.	High to Extreme	Home: Vinyl siding, close out-building. 1.5m: Tall grass and firewood within 1.5. 10m: Tall grass, wood pile, brush and forest.	Move firewood. Brushing. Prune forest on west side.
317 Deer Rd.	High to Extreme	Home: Vinyl siding, unsheathed foundation, close wood shed, plugged drier vent. 1.5m: Combustibles, tall grass and firewood. 10m: Tall grass, wood pile, brush, forest.	Remove combustibles. Move firewood. Brushing. Forest pruning.
321 Deer Rd.	High to Extreme	Home: Vinyl siding, unsheathed deck, close wood shed, plugged drier vent. 1.5m: Combustibles. Tall grass and wood. 10m: Tall grass, wood pile, forest.	Remove combustibles. Fuel reduction and prune forest on North side.
8501 N. Shore Rd.	High to Extreme	Home: Wooden siding. Unsheathed deck. 1.5m: Combustibles. Dried grass and wood. 10m: Combustibles.	Remove combustibles. Fuel reduction and prune forest.
8507 N. Shore Rd.	High to Extreme	Home: Wooden siding. Unsheathed deck. 1.5m: Combustibles. Dried grass. 10m: Combustibles. Firewood. Dried grass. Forest	Move firewood. Remove combustibles. Fuel reduction and prune forest.
8511 N. Shore Rd.	High to Extreme	Home: Wooden siding. Unsheathed deck. 1.5m: Combustibles. Dried grass. 10m: Combustibles.	Remove combustibles. Brush and prune forest.
Kaatza	High to Extreme	Buildings: Wooden siding. 1.5m: Combustibles. Dried grass. 10m: Combustibles. Forest and brush	Remove combustibles. Replace bark mulch with crushed stone.

Easy to implement recommendations are:

- Install reflective address signage;
- Engage community member in events and activities to reduce risk around their homes;
- Remove combustibles;
- Brush and remove shrubs and dry grass;
- Move firewood piles; and
- Prune lower limbs of conifers within 10 m of homes.

COMMUNITY EVENT

The community FireSmart event was held in conjunction with the Ts'uubaa-asatx spring clean-up. This allowed us to emphasize the removal of combustibles around the homes as was indicated in assessments as our most immediate challenge.

The event was held over three days with community members gathering trash and recyclables from within and without the homes and bringing it to the curb for pickup.

Associated with the event was the construction of community firewood shelters. These shelters allow members to move their firewood away from their homes and reduce the risk from wildfire.





One of three firewood sheds which allow members to move firewood away from their homes.

APPENDIX III. HOME ASSESSMENT DETAILS



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Home & Property Assessment

Address: 313 Deer Road, Lk Cowichan Name(s): Georgina Livingstone (not present) Ph: Not available

Email: Not available

Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	SF residence located near band office at south end of row of homes at upper portion of LCFN reserve.		
HOME/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	
	Combustibles, long grass, fuel containers, etc.	30	20
	Clumps of tall grass, firewood located within this zone		
HOME/10 metres	FireSmart Zone 10 m Around Structure	0	
	Combustible Vegetation and/or other Fuel	30	15
	A/A Clumps of tall grass, wood. Brush/low forest W side home approx. 10 m		
Roofing Material	Metal, clay tile, <u>asphalt shingle</u> or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Roof of home is clean. However, roof of nearby garage is older, and has dried moss, especially on north aspect		
Home Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Vinyl siding above base concrete		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
	Stickers on windows – indicate new windows		
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Vents appear in good shape		
Chimney	If chimney present, spark arrestor		0
	Chimney has spark arrestor		
Balcony, deck, porch, or open	Sheathed, with fire-resistant materials	0	

foundation				
	Sheathed w combustible materials		2	
	Not sheathed		6	6
	Wood deck, not sheathed. Various combustibles on deck.			
Position wrt slope	Building located on bottom or lower portion of hill		0	
	Building located on mid - upper portion of a hill or crest of hill		6	
			HOME SCORE	47
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	
	Less than 10 m from home		6	6
	Garage to NW < 10 m from home.			
Woodpile	More than 10 m from any building		0	
	Less than 10 m from any building		6	6
	Woodpile against home, beneath deck, on N side of house			
Forest type within 10 m of home	Deciduous		0	
	Mixed wood		30	30
	Coniferous		30	
	Second-growth, mixed wood W side < 10 m			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Scattered clumps of dried grass, occasional broom in yard surrounding home. Forest edge on W side of home comprises immature conifer stand. Young conifers (Fd) have branches to ground. Scattered dead conifers varying ages. This stand situated on slope that extends SW to N Shore Rd			
Ember Accumulator Features				
		YARD within 10 m of home SCORE		57

YARD/ 10-30 m from home				
Type of Forest Surrounding Home	Deciduous Mixed Wood		0 10	20
Surface Vegetation within 10-30 m of home	Conifer Separated Continuous		10 30	
Surface Vegetation around buildings	Twigs, Branches, Needles on ground Scattered Abundant Uncut grass or shrubs		5 30 5	
Shrubs and low branches (within 2 m of ground) in surrounding forest	None within 10-30 m Scattered within 10-30 m of buildings Abundant within 10-30 m of buildings		0 5 10	10
		YARD (10-30M) SCORE		30
SITE				
Zone 1/ Home and Yard		Home		47
		10 m from home		57
Zone 2 / Yard		10-30 m from home		30
Hazard score: Low: < 21 Moderate: 21-29 High: 30-35 Extreme: > 35				
Home and Property Assessment: High+				
Other Features				
Driveway Access	Good driveway access, with turnaround.			
Signposting	LCFN address sign. Home address sign present, not lit up, not florescent		Fluorescent sign recommended. Best to be lit.	
Fire Fighting Equipment: hose, shovel, ladder	Did not ascertain		Basic fire fighting equipment recommended. If homeowner is not able to provide this equipment, it is recommended neighbours have equipment	
Emergency Response Plan	Did not ascertain		ERP recommended	
Smoke Alarms	Did not ascertain		Check that smoke alarms installed, and working	
Comments: 3 Easy To Do's: 1) Replace existing address sign on home with flurescent signage 2) Consider enlisting band members to do basic pruning, brushing of forest stand on W side of home 3) Store bulk of firewood at least 10 m from home.				

Photos

321 Deer Road



Home & Property Assessment

Address: 317 Deer Road, Lk Cowichan Name(s): Charlene & Carleto (not present) Ph: Not available

Email: Not available

Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	SF residence located in middle of row of 3 homes at upper portion of LCFN reserve.		
HOME/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	
	Combustibles, long grass, fuel containers, etc.	30	20
	Clumps of tall grass, wood located within this zone		
HOME/10 metres	FireSmart Zone 10 m Around Structure	0	
	Combustible Vegetation and/or other Fuel	30	15
	A/A Clumps of tall grass, wood. Brush edges between homes		
Roofing Material	Metal, clay tile, <u>asphalt shingle</u> or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Roof of home is clean.		
Home Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Vinyl siding above base concrete		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
	Stickers on windows – indicate new windows		
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Dryer vent plugged.		6
Chimney	If chimney present, spark arrestor		0
	Chimney has spark arrestor		
Balcony, deck, porch, or open	Sheathed, with fire-resistant materials	0	

foundation				
	Sheathed w combustible materials		2	
	Not sheathed		6	6
	Wood deck not sheathed. Wooden steps. Various combustibles on deck.			
Position wrt slope	Building located on bottom or lower portion of hill		0	
	Building located on mid - upper portion of a hill or crest of hill		6	6
	Home located at top of short, continuous slope vegetated with mixed second-growth forest. N. Shore Rd below.			
			HOME SCORE	59
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	
	Less than 10 m from home		6	6
	Wood shed < 10 m from home.			
Woodpile	More than 10 m from any building		0	
	Less than 10 m from any building		6	6
	Woodpile against home, beneath deck, on N side of house			
Forest type within 10 m of home	Deciduous		0	
	Mixed wood		30	20
	Coniferous		30	
	Second-growth, mixed wood, brush < 10 m			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Yard contains dried grass, scattered combustible. Forest stand to West, downslope, extends W downhill to N Shore Rd			
Ember Accumulator Feature(s)	FireWood, Derelict machinery, etc. Clean yard, surroundings		30 0	15
	Log pile (being cut for firewood) located in front yard area			
		YARD within 10 m of home SCORE		62
YARD/ 10-30 m from home				
Type of Forest	Deciduous		0	
	Mixed Wood		10	

Photos

317 Deer Road



Removal of combustibles recommended for Zone 1a and Zone 1



Plugged drier vent

Home & Property Assessment

Address: 321 Deer Road, Lk Cowichan Name(s): Carol Ph: Not available Email: Not available
 Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	SF residence located at N end of row of 3 homes at upper portion of LCFN reserve.		
HOME/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	20
	Combustibles, long grass, fuel containers, etc.	30	
	Clumps of tall grass, wood located within this zone		
HOME/10 metres	FireSmart Zone 10 m Around Structure	0	15
	Combustible Vegetation and/or other Fuel	30	
	A/A Clumps of tall grass, wood. N side faces forest edge < 10 m from home		
Roofing Material	Metal, clay tile, <u>asphalt shingle</u> or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Roof of home is clean.		
Home Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Vinyl siding above base concrete		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
	new windows		
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Check gutters. Visual observation indicates that gutters might be clogged.		
Chimney	If chimney present, spark arrestor		0
	Chimney has spark arrestor		
Balcony, deck, porch, or open foundation	Sheathed, with fire-resistant materials	0	

	Sheathed w combustible materials		2	
	Not sheathed		6	6
	Wood deck not sheathed. Wooden steps. Various combustibles on deck.			
Position wrt slope	Building located on bottom or lower portion of hill		0	
	Building located on mid - upper portion of a hill or crest of hill		6	6
	Home located at top of short, continuous slope vegetated with mixed second-growth forest. N. Shore Rd below.			
			HOME SCORE	53
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	
	Less than 10 m from home		6	0
Woodpile	More than 10 m from any building		0	
	Less than 10 m from any building		6	6
	Wood within 10 m of home			
Forest type within 10 m of home	Deciduous		0	
	Mixed wood		30	20
	Coniferous		30	
	Second-growth, mixed wood, brush < 10 m, especially N side of home. ----- Property owner has pruned, reduced brush in forest edge on W side of property. Good work!			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Yard contains dried grass, scattered combustible, empty oil containers. Forest stand to west downslope, extends W downhill to N Shore Rd. As noted, property owner has pruned conifers and reduced surface fuels. Forest stand to North needs fuel reduction.			
Ember Accumulator Feature(s)	FireWood, Derelict machinery, etc.		30	15
	Clean yard, surroundings		0	
	Log pile (being cut for firewood) located in front yard area			

		YARD within 10 m of home SCORE		56
YARD/ 10-30 m from home				
Type of Forest Surrounding Home	Deciduous Mixed Wood		0 10	20
Surface Vegetation within 10-30 m of home	Conifer Separated Continuous		10 30	
Surface Vegetation around buildings	Twigs, Branches, Needles on ground Scattered Abundant Uncut grass or shrubs		5 30 5	
Shrubs and low branches (within 2 m of ground) in surrounding forest	None within 10-30 m Scattered within 10-30 m of buildings Abundant within 10-30 m of buildings		0 5 10	10
		YARD (10-30M) SCORE		30
SITE				
Zone 1/ Home and Yard		Home		53
		10 m from home		56
Zone 2 / Yard		10-30 m from home		30
Hazard score: Low: < 21 Moderate: 21-29 High: 30-35 Extreme: > 35				
Home and Property Assessment				
Other Features				
Driveway Access	Good driveway access, with turnaround.			
Signposting	LCFN address sign. Home address sign present, not lit up, not florescent		Fluorescent sign recommended. Best to be lit.	
Fire Fighting Equipment: hose, shovel, ladder	Did not ascertain		Basic fire fighting equipment recommended.	
Emergency Response Plan	Did not ascertain		ERP recommended	
Smoke Alarms	Did not ascertain		Check that smoke alarms installed, and working	
Comments: 3 Easy To Do's: <ol style="list-style-type: none"> 1) Replace existing address sign on home with flurescent signage 2) Enlist band members to do basic pruning, brushing of forest stands surrounding these 3 homes 3) Work to remove combustibles in Zone 1a and Zone 1 				

Photos

321 Deer Road



Check gutters



Combustibles in Zone 1a and Zone 1. Good to see pruning on trees at back. Continue with pruning work on trees along north boundary.



Home & Property Assessment

Address: 8501 N Shore Road, Lk Cowichan Name(s): Sherri, Caletto Ph: Email:
 Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	Empty SF residence located at E end of row of 3 homes at lower portion of LCFN reserve.		
HOME/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	
	Combustibles, long grass, fuel containers, etc.	30	10
	Dried grass, various combustibles: wood, building materials		
HOME/10 metres	FireSmart Zone 10 m Around Structure	0	
	Combustible Vegetation and/or other Fuel	30	15
	Various combustibles A/A		
Roofing Material	Metal, clay tile, <u>asphalt shingle</u> or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Roof of home is clean.		
Home Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Wood siding		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Check that gutters are clean. Visual observation indicates that gutters might be clogged.		
Chimney	If chimney present, spark arrestor		0
	Chimney has spark arrestor		
Balcony, deck, porch, or open foundation	Sheathed, with fire-resistant materials	0	
	Sheathed w combustible materials	2	

	Not sheathed		6	6
	Old wooden deck, not sheathed. Deck scheduled for replacement.			
Position wrt slope	Building located on bottom or lower portion of hill		0	0
	Building located on mid - upper portion of a hill or crest of hill		6	0
	Home located at bottom of slope, above N Shore Rd			
			HOME SCORE	42
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	0
	Less than 10 m from home		6	
	N/A			
Woodpile	More than 10 m from any building		0	
	Less than 10 m from any building		6	6
	Wood within 10 m of home			
Forest type within 10 m of home	Deciduous		0	
	Mixed wood		30	20
	Coniferous		30	
	Second-growth, mixed wood, brush on forested slope to rear (extends uphill to N)			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Yard contains dried grass, scattered combustibles. Forest stand to N extends uphill to upper part part of LCFN.			
Ember Accumulator Feature(s)	Wood, various combustibles.		30	12
	Clean yard, surroundings		0	
	Wood, various combustibles, dried vegetation			
		YARD within 10 m of home SCORE		53
YARD/ 10-30 m from home				
Type of Forest Surrounding Home	Deciduous		0	10
	Mixed Wood		10	
Surface Vegetation within 10-30 m of home	Conifer		10	10
	Separated		30	
	Continuous			
	Twigs, Branches, Needles on			

Surface Vegetation around buildings	ground Scattered Abundant Uncut grass or shrubs		5 30 5	
Shrubs and low branches (within 2 m of ground) in surrounding forest	None within 10-30 m Scattered within 10-30 m of buildings Abundant within 10-30 m of buildings		0 5 10	10
			YARD (10-30M) SCORE	30
SITE				
Zone 1/ Home and Yard		Home		41
		10 m from home		53
Zone 2 / Yard		10-30 m from home		30
Hazard score: Low: < 21 Moderate: 21-29 High: 30-35 Extreme: > 35				
Home and Property Assessment: High+				
Other Features				
Driveway Access	Fire trucks would park off N Shore Rd, or would back in.			
Signposting	Address signage on home, not fluorescent.		Fluorescent sign recommended. Best to be lit.	
Fire Fighting Equipment: hose, shovel, ladder	Did not ascertain		Basic fire fighting equipment recommended.	
Emergency Response Plan	Did not ascertain		ERP recommended	
Smoke Alarms	Did not ascertain		Check that smoke alarms installed, and working	
Comments: 3 Easy To Do's: <ol style="list-style-type: none"> 1) Replace existing address sign on home with flurescent signage 2) Prune and brush forest stand surrounding homes 3) Remove combustibles within Zones 1a and 1. 				

Photos

8501 North Shore Road



Combustibles within Zones 1 a and 1 include wood, construction materials, and brush.

Home & Property Assessment

Address: 8507 N Shore Road, Lk Cowichan Name(s): Sherri, Caletto Ph: Email:

Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	SF residence located in middle of row of 3 homes at lower portion of LCFN reserve.		
HOME/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	10
	Combustibles, long grass, fuel containers, etc.	30	
	Dried grass, various combustibles		
HOME/10 metres	FireSmart Zone 10 m Around Structure	0	15
	Combustible Vegetation and/or other Fuel	30	
	Various combustibles, incl firewood, dry grass		
Roofing Material	Metal, clay tile, <u>asphalt shingle</u> or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Roof of home is clean.		
Home Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Wood siding		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Check that gutters are clean. Visual observation indicates that gutters might be clogged.		
Chimney	If chimney present, spark arrestor		0
	Chimney has spark arrestor		
Balcony, deck, porch, or open foundation	Sheathed, with fire-resistant materials	0	
	Sheathed w combustible materials	2	

	Not sheathed		6	6
	Old wooden deck, not sheathed. Wooden steps. Various combustibles on deck. Deck scheduled for replacement.			
Position wrt slope	Building located on bottom or lower portion of hill		0	0
	Building located on mid - upper portion of a hill or crest of hill		6	0
	Home located at bottom of slope, above N Shore Rd			
			HOME SCORE	42
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	0
	Less than 10 m from home		6	
	N/A			
Woodpile	More than 10 m from any building		0	
	Less than 10 m from any building		6	6
	Wood within 10 m of home			
Forest type within 10 m of home	Deciduous		0	
	Mixed wood		30	20
	Coniferous		30	
	Second-growth, mixed wood, brush on forested slope to rear (extends uphill to N)			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Yard contains dried grass, scattered combustibles. Forest stand to N extends uphill to upper part part of LCFN.			
Ember Accumulator Feature(s)	Wood, various combustibles.		30	12
	Clean yard, surroundings		0	
		YARD within 10 m of home SCORE		53
YARD/ 10-30 m from home				
Type of Forest Surrounding Home	Deciduous		0	10
	Mixed Wood		10	
Surface Vegetation within 10-30 m of home	Conifer		10	10
	Separated		30	
	Continuous			
	Twigs, Branches, Needles on			

Surface Vegetation around buildings	ground Scattered Abundant Uncut grass or shrubs		5 30 5	
Shrubs and low branches (within 2 m of ground) in surrounding forest	None within 10-30 m Scattered within 10-30 m of buildings Abundant within 10-30 m of buildings		0 5 10	10
		YARD (10-30M) SCORE		
SITE				
Zone 1/ Home and Yard		Home		42
		10 m from home		53
Zone 2 / Yard		10-30 m from home		30
Hazard score: Low: < 21 Moderate: 21-29 High: 30-35 Extreme: > 35				
Home and Property Assessment: High+				
Other Features				
Driveway Access	Fire trucks would park off N Shore Rd, or would back in.			
Signposting	Address signage on home, not fluorescent.		Fluorescent sign recommended. Best to be lit.	
Fire Fighting Equipment: hose, shovel, ladder	Did not ascertain		Basic fire fighting equipment recommended.	
Emergency Response Plan	Did not ascertain		ERP recommended	
Smoke Alarms	Did not ascertain		Check that smoke alarms installed, and working	
Comments: <p>3 Easy To Do's:</p> <ol style="list-style-type: none"> 1) Replace existing address sign on home with flurescent signage 2) Prune, brush forest stand out back 3) As planned, replace deck. Store firewood away from under new deck, at least 10 m from home. 				

Photos

8507 North Shore Road



Home & Property Assessment

Address: 8511 N Shore Road, Lk Cowichan Name(s): Aaron Hamilton Ph: Email:
 Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	SF residence located at W end of row of 3 homes at lower portion of LCFN reserve.		
HOME/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	10
	Combustibles, long grass, fuel containers, etc.	30	
	Concrete walkway partially surrounding home		
HOME/10 metres	FireSmart Zone 10 m Around Structure	0	15
	Combustible Vegetation and/or other Fuel	30	
	Various combustibles W side of home		
Roofing Material	Metal, clay tile, <u>asphalt shingle</u> or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Roof of home is clean.		
Home Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Wood siding		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Check that gutters are clean. Visual observation indicates that gutters might be clogged.		
Chimney	If chimney present, spark arrestor		0
	Chimney has spark arrestor		
Balcony, deck, porch, or open foundation	Sheathed, with fire-resistant materials	0	
	Sheathed w combustible materials	2	

	Not sheathed		6	6
	New wood deck, not sheathed. Wooden steps. Various combustibles on deck.			
Position wrt slope	Building located on bottom or lower portion of hill		0	0
	Building located on mid - upper portion of a hill or crest of hill		6	0
	Home located at bottom of slope, above N Shore Rd			
			HOME SCORE	31
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	0
	Less than 10 m from home		6	
	N/A			
Woodpile	More than 10 m from any building		0	
	Less than 10 m from any building		6	6
	Wood within 10 m of home			
Forest type within 10 m of home	Deciduous		0	
	Mixed wood		30	20
	Coniferous		30	
	Second-growth, mixed wood, brush on forested slope to rear (extends uphill to N)			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Yard contains dried grass, scattered combustibles. Forest stand to N extends uphill to upper part part of LCFN.			
Ember Accumulator Feature(s)	Wood, various combustibles.		30	12
	Clean yard, surroundings		0	
	Log pile (being cut for firewood) located in front yard area			
		YARD within 10 m of home SCORE		53
YARD/ 10-30 m from home				
Type of Forest Surrounding Home	Deciduous		0	10
	Mixed Wood		10	
Surface Vegetation within 10-30 m of home	Conifer		10	10
	Separated		30	
	Continuous			
Surface Vegetation	Twigs, Branches, Needles on ground			

around buildings	Scattered Abundant Uncut grass or shrubs		5 30 5	
Shrubs and low branches (within 2 m of ground) in surrounding forest	None within 10-30 m Scattered within 10-30 m of buildings Abundant within 10-30 m of buildings		0 5 10	10
			YARD (10-30M) SCORE	30
SITE				
Zone 1/ Home and Yard		Home		31
		10 m from home		53
Zone 2 / Yard		10-30 m from home		30
Hazard score: Low: < 21 Moderate: 21-29 High: 30-35 Extreme: > 35				
Home and Property Assessment: High+				
Other Features				
Driveway Access	Fire trucks would park off N Shore Rd, or would back in.			
Signposting	Address signage on home, not fluorescent.		Fluorescent sign recommended. Best to be lit.	
Fire Fighting Equipment: hose, shovel, ladder	Did not ascertain		Basic fire fighting equipment recommended.	
Emergency Response Plan	Did not ascertain		ERP recommended	
Smoke Alarms	Did not ascertain		Check that smoke alarms installed, and working	
Comments: 3 Easy To Do's: <ol style="list-style-type: none"> 1) Replace existing address sign on home with fluorescent signage 2) Prune, brush forest stands upslope from home 3) Ensure no combustibles within Zone 1a 1.5 m around home, and remove combustibles on west side of home in Zone 1. 				

Photos

8511 North Shore Road



Home & Property Assessment

Address: Kaatza, Lk Cowichan Name(s):

Ph: Email:

Date: Sept 12 2018 Assessors: Steve Vatcher LFR, Margaret Symon RPC LFR

Feature	Zone 1		
Structure Location	Kaatza at Ts'uubaa -asatx		
Structure/1.5 metres	Actual Score		
	FireSmart zone immediately around structure	0	
	Combustibles, long grass, fuel containers, etc.	30	10
	Dried grass, various combustibles		
Structure/10 metres	FireSmart Zone 10 m Around Structure	0	
	Combustible Vegetation and/or other Fuel	30	15
	Various combustibles, incl firewood, dry grass		
Roofing Material	Metal, clay tile, asphalt shingle or ULC-rated shakes	0	0
	Unrated wood shakes	30	
Roof Cleanliness	No needles, leaves, or other combustible material	0	0
	Scattering of needles and leaves	2	
	Clogged gutters & extensive leaves	3	
	Metal roof on shop. Plexi-glass on small longhouse.		
Building Exterior	Non-combustible material, stucco, metal siding or brick	0	
	Logs or heavy timbers	1	
	Wood, vinyl siding, wood shakes	6	6
	Wood siding		
Windows and doors	Tempered glass in all doors/windows	0	0
	Double-pane glass – small/medium (smaller than 1 m x 1 m)	1	
	Single-pane glass – small/medium (smaller than 1 m x 1 m)	2	
	Single-pane glass – small/medium (< than 1m x 1m)	2	
	Single-pane glass – large (greater than 1 m x 1 m)	4	
	New windows on shop; no windows on small longhouse structure.		
Eaves and Vents	Closed eaves, vents screened with 3 mm wire mesh	0	0
	Closed eaves, vents without mesh	1	
	Open eaves, vents not screened	6	
	Eaves appear to be clean		
Chimney	If chimney present, spark arrestor		0
Balcony, deck, porch, or open foundation	Sheathed, with fire-resistant materials	0	0

	Sheathed w combustible materials		2	
	Not sheathed		6	
	No decks			
Position wrt slope	Building located on bottom or lower portion of hill		0	0
	Building located on mid - upper portion of a hill or crest of hill		6	
	Structures located on lower side of N Shore Rd, at bottom of slope			
			HOME SCORE	31
YARD/ within 10 m of home				
Outbuildings	More than 10 m from home		0	0
	Less than 10 m from home		6	
	Shop and small longhouse feature located w/i 10 m distance			
Woodpile	More than 10 m from any building		0	0
	Less than 10 m from any building		6	
	N/A			
Forest type within 10 m of home or structure	Deciduous		0	
	Mixed wood		30	10
	Coniferous		30	
	Second-growth, mixed wood, brush surrounds N/W side of structures (between structures and N Shore Rd)			
Surface vegetation, combustible materials within 10 m of home and outbuildings	Well-drained lawn or non-combustible landscaping material		0	
	Uncut grass or shrubs		30	5
	Twigs, branches and tree needles on the ground		30	10
	Area still being developed. Surface a mix of crushed rock, bark mulch			
Ember Accumulator Feature(s)	Wood, various combustibles.		30	12
	Clean yard, surroundings		0	
		YARD within 10 m of home SCORE		37
YARD/ 10-30 m from home				
Type of Forest Surrounding Home	Deciduous		0	10
	Mixed Wood		10	
Surface Vegetation within 10-30 m of	Conifer		10	10
	Separated		30	

structure(s)	Continuous			
Surface Vegetation around buildings	Twigs, Branches, Needles on ground Scattered Abundant Uncut grass or shrubs		5 30 5	
Shrubs and low branches (within 2 m of ground) in surrounding forest	None within 10-30 m Scattered within 10-30 m of buildings Abundant within 10-30 m of buildings		0 5 10	10
YARD (10-30M) SCORE				20
SITE				
Zone 1/ Home and Yard	Structure(s)			31
	10 m from structure(s)			37
Zone 2 / Yard	10-30 m from structure(s)			30
Hazard score: Low: < 21 Moderate: 21-29 High: 30-35 Extreme: > 35				
Structure and Property Assessment High+				
Other Features				
Driveway Access	Fire trucks would park off N Shore Rd, or would back in.			
Signposting	Address signage on home, not fluorescent.		Fluorescent sign recommended. Best to be lit.	
Fire Fighting Equipment: hose, shovel, ladder	Did not ascertain		Basic fire fighting equipment recommended.	
Emergency Response Plan	Did not ascertain		ERP recommended	
Smoke Alarms	Did not ascertain		Check that smoke alarms installed, and working	
Comments: 3 Easy To Do's: 1) Install fluorescent address sign 2) Ensure no combustibles within Zone 1a 1.5 m around structure 3) Replace bark mulch with crushed stone landscaping (as is already installed around picnic talbes along beach)				

Photos

Kaatza



Various combustibles within Zone 1a 1.5 m around home



Bark mulch downslope, especially in wood chopping/carving area, could eventually be replaced with pea gravel

APPENDIX IV. 2019/2020 PROGRAM

The Ts'uubaa-asatx 2019/2020 program was funded by the Province of British Columbia's Community Resiliency Investment Program (CRIP).

EDUCATION AND ENGAGEMENT

Education and engagement is a core component of our program. Unfortunately the limitations of COVID-19 require flexibility in delivery community engagement programs but Ts'uubaa-asatx has been innovative in addressing this.

COMMUNITY MEETING

At a general meeting of the community on September 9th, 2019 an update presentation was given on both the Ts'uubaa-asatx emergency preparedness and FireSmart programs.

With regard to FireSmart, presented was a review of community involvement and what motivates the program. We introduced the expanded FireSmart Board, reported on the household assessments completed in the previous year, and introduced the *FireSmart Community Plan*.

The 2020 Ts'uubaa-asatx FireSmart Board was composed of the following persons:

- Aaron Hamilton, Ts'uubaa-asatx Operations Manager;
- Chief Georgina Livingstone;
- Carlito Livingstone, Emergency Program Coordinator;
- Melanie Livingstone;
- Carol Livingstone; and
- Steve Vatcher, Lake Cowichan Fire Department.

The presentation went on to link upcoming activities and events to the Plan.

The presentation is available in Appendix V.

CHIEF AND COUNCIL MEETING

An emergency management briefing was held for Ts'uubaa-asatx Chief and Council on January 28th, 2020. This was an update of all emergency activities and discussions of priorities going forward.

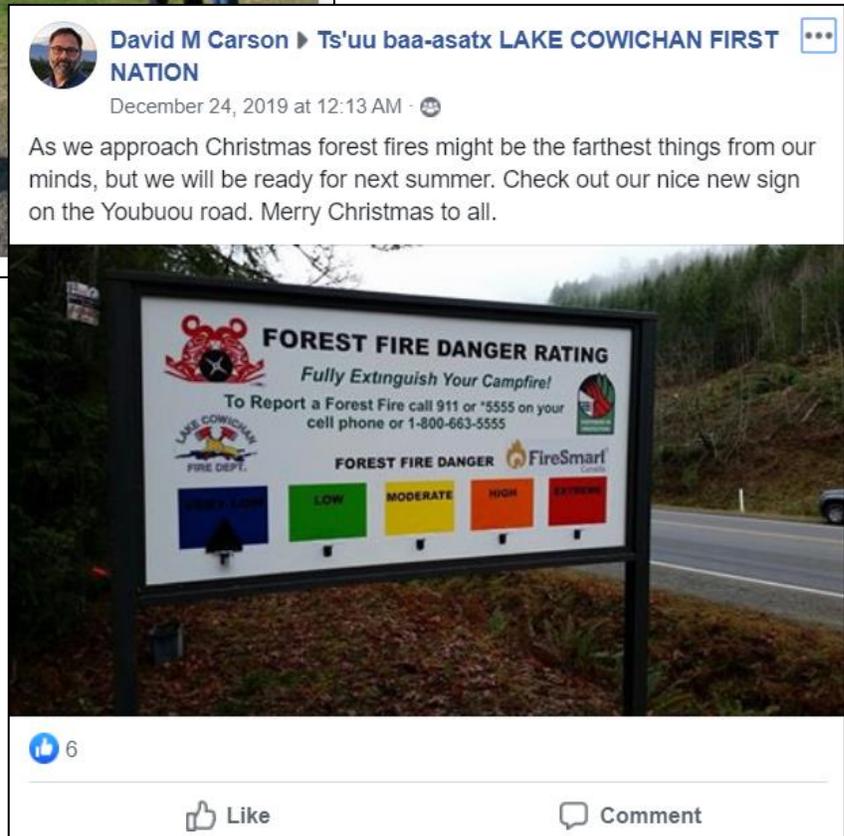
Among the discussion items with regard to FireSmart were:

- Community Meeting/Open House in February or March to be scheduled;
- Ideas for community engagement for March;
- Public display materials and sign construction;
- Development/construction considerations for FireSmart; and
- Submission of renewal application for FireSmart community recognition.



COMMUNICATIONS

Facebook remains the main method of advertising programs and events at Ts'uubaa-asatx. Shared below and on the following pages are the messages used to keep members in the know.





David M Carson ▶ Ts'uu baa-asatx LAKE COWICHAN FIRST NATION ***

September 18, 2019 · 🌐

As part of our efforts to protect the community from wildfire we will be "FireSmarting" the forest next to the homes on Deer Road. Please see the attached information and if you have questions contact Carlito Livingstone for more information. Thanks.



Notice of Fuel Management Treatment

In order to reduce the risk of wildfire to our homes Ts'uu baa-asatx will soon be undertaking work in the forest north of the Deer Road houses. We will be thinning the trees and brush, pruning some trees, and removing downed wood. Pruning of lower branches blocks a fire from traveling from the ground into the trees. Thinning spaces the trees apart and prevents a fire from spreading from tree to tree. All of this will make it much easier for the fire department to protect our homes.



The before and after diagrams below give you an idea of how the forest will look when we are done.



The figure below-left describes the danger to the Deer Road homes. Prevailing winds from the north threaten us with fire from that direction. Fires travel faster up-hill, so the hill from the North Shore Road also represents a higher risk. The figure below-right indicates the area to be treated.



Once the work is scheduled we will let you know when to expect the activity. If you have any other questions please contact the office.

Land Forest People,

👍 Like



David M Carson Hi Everybody. This treatment will be happening Wednesday and Thursday this week (Sept 25th and 26th) starting at 8am each day. There will be a bit of noise and activity behind the houses on Deer Road. Many thanks to our friends Khowutzun Forest Services for their help.



Like · Reply · 16w



Write a comment...



 **David M Carson**
September 26, 2019

A few pics from the FireSmart treatment activity yesterday and today. After the work the homes on Deer Road will be much more defensible in the face of wildfire. Note also one of the new firewood sheds. Getting the firewood away from the homes is another way of reducing risk.



 You and 3 others  Seen by 14

 Like  Comment

 Write a comment...    



FIRE DANGER SIGNAGE

Two double-sided roadside fire danger signs and one single sided sign were built.

A two sided fire danger rating sign was installed on the Youbou Road off of the right-of-way but visible from either direction.

The remaining two signs are currently in storage due to concerns with visual impacts in the chosen locations.



PUBLIC EDUCATION DISPLAY

As a component of our education initiative, we created a Ts'uubaa-asatx FireSmart public information banner. Originally imagined as a permanent installation at Kaatza, we opted for an exterior quality vinyl banner which could serve multiple uses both internally and for public displays such as our open houses and the annual parade.

The banner is an attractive and informative information source on the realities of wildfire risk and preparedness at Ts'uubaa-asatx. We thank FireSmart Canada, FireSmart BC, and the Lake Cowichan Fire Department for their support.



TS'UUBAA-ASATX IS A FIRESMART COMMUNITY

Wildfire is a natural and necessary element of the forest ecosystem that surrounds our community. FireSmart is a way of living with wildfire while minimizing the risks. Managing wildfire appropriately requires balancing its natural role with the protection of human life, property, and economic values. Since 2017 Ts'uubaa-asatx has been recognized by FireSmart Canada as a FireSmart Community.

Education

Public awareness and community involvement are central to the FireSmart way. By empowering people we are building a resilient community.





Risk Reduction

Ts'uubaa-asatx has assessed our homes for vulnerability to wildfire and taken action to increase their survivability. For example, we have built firewood sheds and moved to wood piles away from the homes.

Fuel Management

A less-dense forest with little dead woody material and no branches on the first two metres of the trees will slow down an advancing fire, keep it from spreading into the crowns and make it much easier to fight.

Emergency Planning

Ts'uubaa-asatx utilizes an all-hazards emergency management system in order to efficiently and effectively prepare for all manner of potential disaster events, including wildfire. Our activities are guided by our FireSmart Community Plan.





Ts'uubaa-asatx also supported a Lake Cowichan Chamber of Commerce public safety communication program.

RECOGNITION STATUS

This FireSmart Community Plan will be submitted with an application for renewal of our FireSmart Community recognition status.

FIRESMART EVENT

As we have found in previous years, the “FireSmart Event” as a single event with community members attending does not work well in this small community. The vast majority of members live within a small area of each other and interaction is on a daily basis.

Addressing the FireSmart Event phase of this project were the following activities.

FUEL MANAGEMENT TREATMENT

The highest risk of wildfire spread into our community is from the west along the shore of Kaatza south of the Youbou road. As a concrete action to reduce risk to the community and as a highly visible demonstration project a small fuel management project was undertaken as per the notice displayed below. Community youth assisted in fuel removal. Some photographs associated with the treatment are presented on the next page.



Notice of Fuel Management Treatment

In order to reduce the risk of wildfire to our homes Ts'uu baa-asatx will soon be undertaking work in the forest west of the Deer Road houses. We will be thinning the trees and brush, pruning some trees, and removing downed wood. Pruning of lower branches blocks a fire from traveling from the ground into the trees. Thinning spaces the trees apart and prevents a fire from spreading from tree to tree. All of this will make it much easier for the fire department to protect our homes.

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Once the work is scheduled we will let you know when to expect the activity. If you have any other questions please contact the office.





FIREWOOD SHED CONSTRUCTION

Following the lead of the well-received firewood sheds in the Deer Road area, a communal firewood shed was built for the North Shore Road residences. There is limited space at this location so a single shed within the confines of a concrete retaining wall was judged to be the safest and most convenient possible.

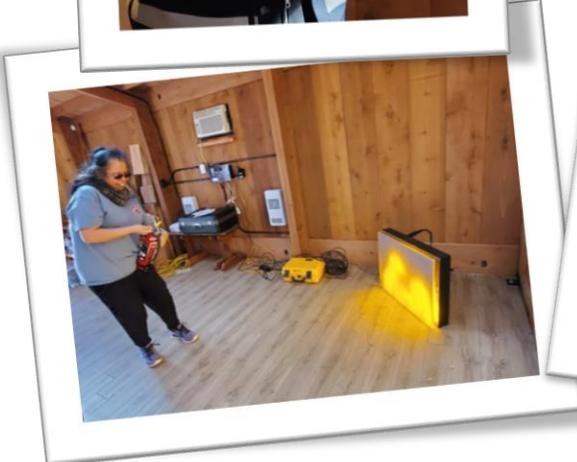


SPRING OPEN HOUSE

The Ts'uubaa-asatx Spring Emergency Program Open House was held on March 11th, 2020 at the Kaatza Mini-longhouse.

Following a lunch provided compliments of Land Forest People; we covered an ambitious agenda of:

- Fire extinguisher training provided by the LCFD;
- Report to the Ts'uubaa-asatx Emergency Management Committee;
- Report to the FireSmart Board; and
- Review of upcoming emergency management projects.



DEVELOPMENT CONSIDERATIONS

In implementing land code, and with anticipated community growth, Ts'uubaa-asatx is in a good position to build FireSmart principles into our land management policies and procedures.

Through this project we have developed policy and procedures documents mandating participation in FireSmart, continuation of our relationship with the Lake Cowichan Fire Department, and mandating FireSmart planning requirements for land development and construction.

In the absence of existing regulatory tools into which FireSmart principles could be inserted, we developed a *Subdivision, Development, and Servicing Law* and associated tools. The purpose of the law is to enable land development which meets community goals, protects Ts'uubaa-asatx values, and supports socio-economic objectives. A Development Permit process was defined. The Law will apply to the whole area of the Ts'uubaa-asatx lands, including land held under allotment, and to members and non-members.

Key pieces with regard to FireSmart are: Section 9.0 of the Permitting Guide; environmental operating procedure (EOP) No. 5 - FireSmart Design; and the FireSmart Design and Construction section of the policy and procedures.

The legislative package consists of draft versions of the following Ts'uubaa-asatx documents:

- A Subdivision, Development, and Servicing Law ready for legal review;
- A summary of the law for community information purposes;
- A Subdivision, Development, and Servicing Permitting Guide for potential developers; and
- A policy document to support administration of the process.

These documents can be found in Appendix VII.

The products were reviewed by community partners for evaluation against other community interests.

EMERGENCY PLANNING

A tabletop exercise was held on October 8th, 2019, with Ts'uubaa-asatx, Emergency Management BC (EMBC), the Cowichan Valley Regional District (CVRD), and the Lake Cowichan Fire Department (LCFD) in attendance:

- Ts'uubaa-asatx EOC staff: Aaron Hamilton, Sherry Livingston, Carole Livingston, Carlito Livingstone;
- LCFD: Fire Chief Doug Knott and Steve Vatcher, Fire Risk Manager;
- EMBC: Ryan Wainwright, Senior Regional Manager;
- CVRD: Sybille Sanderson; and
- Land Forest People: Linden Baker and David Carson.

The agenda was as follows:

10:00 am	Welcome - Aaron Hamilton Introductions - David Carson
10:15	Response Structure and Roles - Linden Baker
11:00	Response Procedures and Tools - David Carson
12:30	Lunch - Compliments of Land Forest People
1:30 pm	Hazard Scenarios - Sybille Sanderson
3:30	Wrap-up



Ts'uubaa-asatx expressed thanks to EMBC, the CVRD, and the LCFD for their on-going support. The positive experience with the previous year's winter storm was very encouraging.

The LCFD expressed their pleasure in partnering and recognized the importance of the FireSmart work being done at Ts'uubaa-asatx.

The opportunity was taken to discuss priorities for upcoming emergency support services (ESS) and emergency planning projects.

Sybille Sanderson took the group through various emergency scenarios with an emphasis on process and documentation familiarity.

Presentations made are available in Appendix VI

The Ts'uubaa-asatx *All-hazards Emergency Management Plan* was updated to reflect FireSmart mitigation measures.

CROSS TRAINING

Within the cross training phase of the CRIP project we added two FireSmart Community Champions who join Aaron Hamilton in this role: Carlito Livingstone and Destiny Hamilton.

We thank Steve Vatcher of the LCFD who provided the training without charge to the project.



The new Ts'uubaa-asatx FireSmart Community Champions, Destiny and Carlito.

APPENDIX V. COMMUNITY MEETING SEPT 2019



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TS'UU BAA-ASATX EMERGENCY PREPAREDNESS

Community Meeting
September 9th, 2019



Land
Forest
People.®

Thank you for your welcome and hospitality on
the land of your ancestors



Emergency Program Coordinator

- The Emergency Program Coordinator is responsible for operating the program and for the development and maintenance of the plan
- Welcome Carlito to the role
- Carlito will transition to leading all things emergency management







FireSmart

**Community involvement in
wildfire safety**

Why FireSmart?

- Responsibility for health and safety
- Fire is natural to the forests around our community
- Climate change is driving increased risk
- Excluding fire is not an option
- How can we live with fire without disaster?



LCFN FireSmart Board

- Chief Georgina Livingstone
- Aaron Hamilton
- Carlito Livingstone
- Melanie Livingstone
- Carol Livingstone
- Steve Vatcher, LCFD

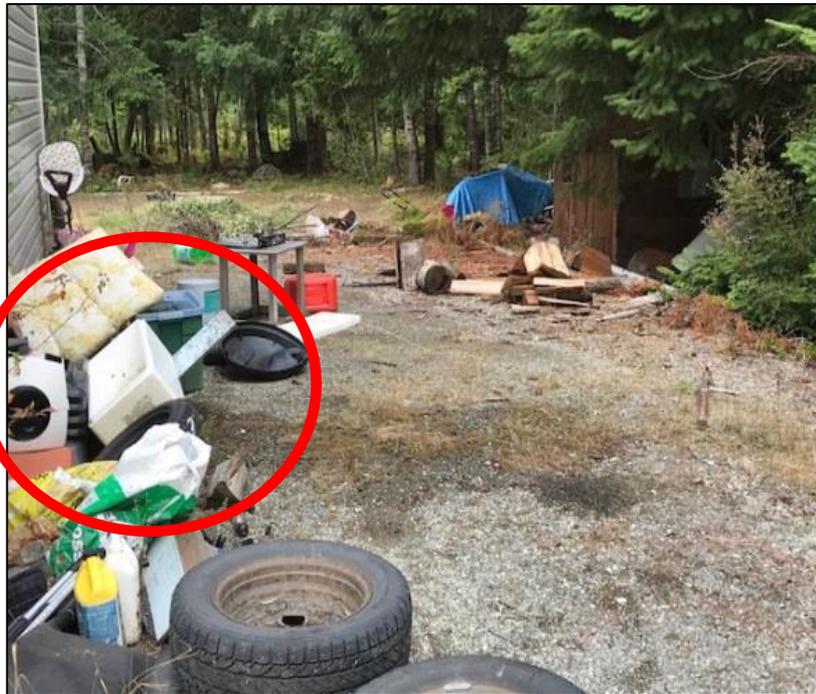




Assessments

- September 2018
- Six houses and Kaatza
 - Combustibles
 - Firewood
 - Grass and brush
 - Forest encroachment
 - Unsheathed decks





FireSmart Community Plan



**Ts'uu baa-asatx
Lake Cowichan First Nation**

FireSmart Community Plan



April 2019

Land Forest People Consulting Ltd.



**Land
Forest
People.**

Recommendations

Around the homes:

- Remove combustible materials
- Reduce brush, dry grass
- Move firewood
- Brush and prune the nearby forest



Upcoming Events

- Community meetings
- Information sharing by newsletters and social media
- Fire danger signs
- Education display at Kaatza
- FireSmart event
- FireSmart open house evening of Oct 8th



FireSmart Event - I

- Combustibles pickup continued
 - Householders, youth
- Fuel reduction (brushing, thinning, pruning)
 - Deer Road area
 - Khowutzun Forest Services, Margaret, youth
- Materials removal
 - Staff, youth



FireSmart Event - II

- Firewood sheds, move firewood
- Steve Johnson, youth
- Celebration meal



Huy ch q'u

David M. Carson, R.P.F.

250-881-2055

davidmcarson@landforestpeople.com

www.landforestpeople.com



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APPENDIX VI. EOC FUNDIMENTALS OCTOBER 2019



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RESPONSE AND SUPPORT STRUCTURES AND ROLES

October 8th, 2019



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EMERGENCY MANAGEMENT



Emergency Management

The systems and processes for:

1. Preventing and mitigating;
 2. Preparing for;
 3. Responding to; and
 4. Recovering from;
- emergencies and disasters.



Preventing and Mitigating

- Avoid or prevent an emergency
- Reduce impacts from emergencies
- Minimize losses
 - Life or injury
 - Social or economic



Mitigation by Lake Cowichan

- FireSmart 2018
 - Home assessments
 - Upcoming spring clean-up
- FireSmart 2019
 - Brush clearing
 - Firewood shed



Preparing

- Public awareness
- Plans and procedures
- Roles and responsibilities
- Relationships with response and support agencies
- Training and practice



Preparations by Lake Cowichan

- All-hazards Emergency Management Plan
- Household plans
- Home information packages
- Foundational training

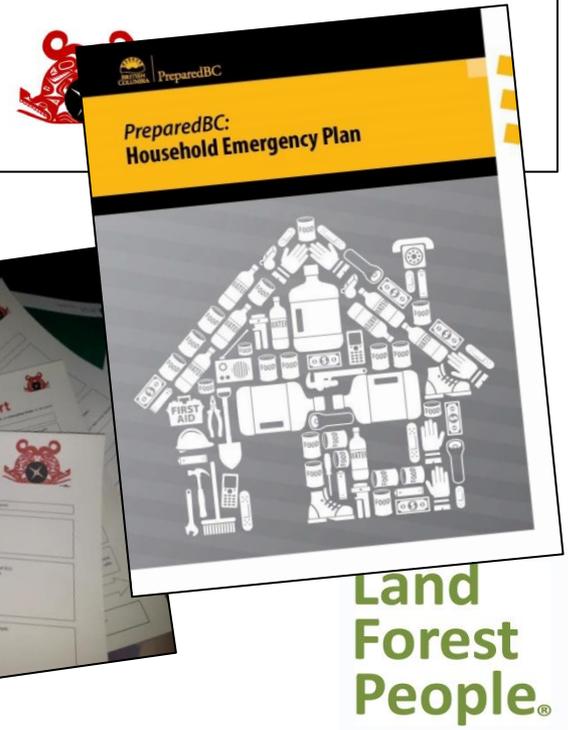


Lake Cowichan First Nation All-Hazards Emergency Management Plan



Version 1.2
March 31st, 2019

Prepared by:
Land Forest People Consulting Ltd.



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Response

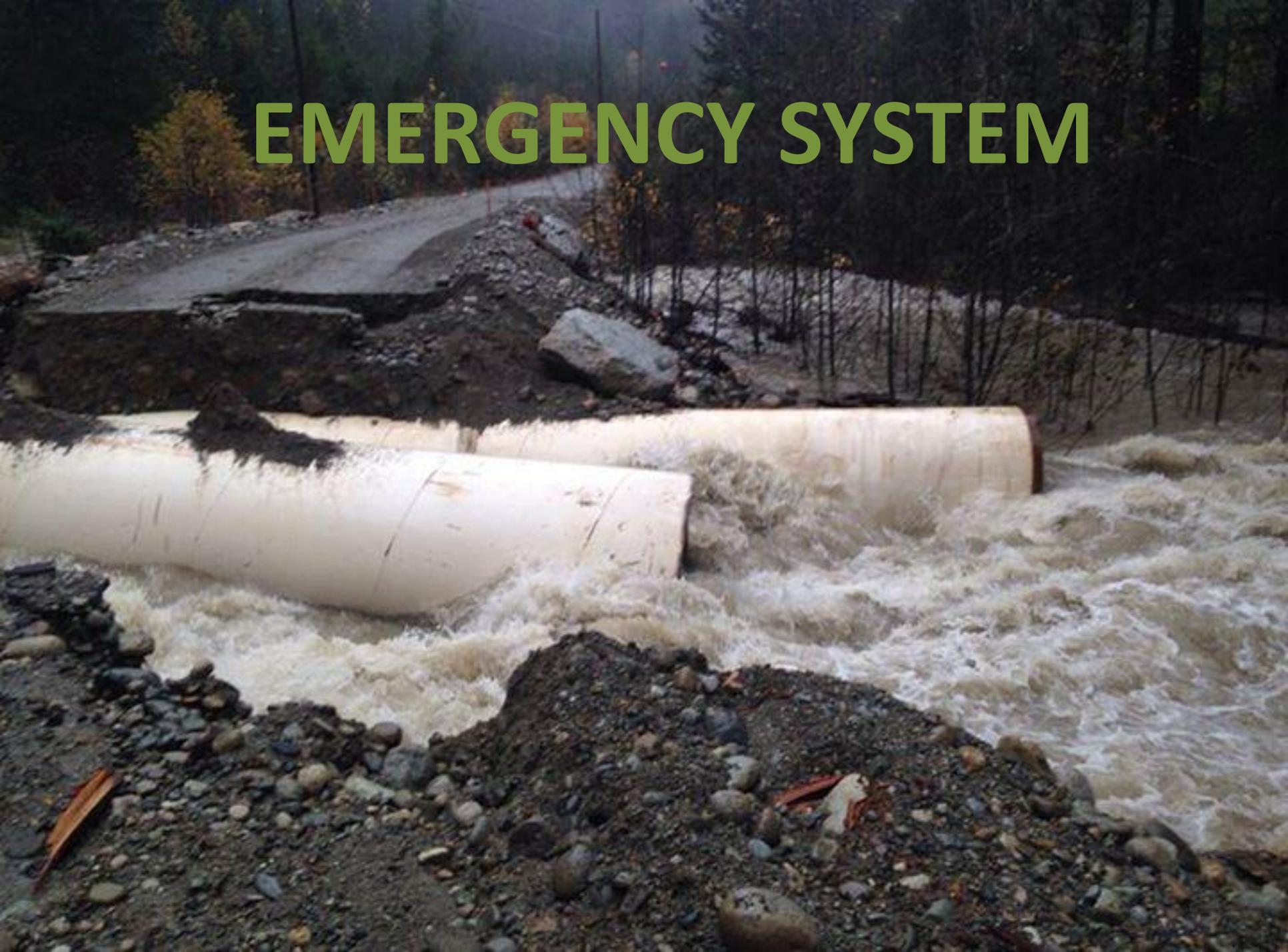
- Act during an emergency
- Limit loss of life, injury, property damage

Recovery

- Support the people
- Rebuild infrastructure
- Learn from the experience



EMERGENCY SYSTEM



Emergency Management Systems

- Site response
 - Fire, police, ambulance, search and rescue
- Site support
 - LCFN Emergency Operations Centre
 - Provincial Regional EOC
 - Provincial Emergency Coordination Centre
- All standardized to ICS and BCEMS



BC Emergency Management System (BCEMS)

Comprehensive framework for a coordinated and organized approach to mitigating, preparing, responding and recovering from the effects of emergencies and disasters.



BCEMS

- Four-phase emergency management system
 - Mitigation
 - Preparedness
 - Response
 - Recovery



BCEMS Response Goals

1. Ensure the health and safety of responders
2. Save lives
3. Reduce suffering
4. Protect public health
5. Protect infrastructure
6. Protect property
7. Protect the environment
8. Reduce economic and social losses



BCEMS Operating Levels

- Site level
 - 90-95% of incidents resolved at this level
- Site support level
 - Local EOC support
- Provincial regional coordination
- Provincial central coordination



BC Emergency Management System (BCEMS)

More information is available at

<http://www.gov.bc.ca/emergencymanagementsystem>



LCFN Emergency Program

- Emergency Program Coordinator (EPC)
 - Carlito Livingstone
- Emergency Management Committee
 - Council representative, EPC, health representative, lands representative, fire department representative, financial representative
- All-hazards Emergency Management Plan



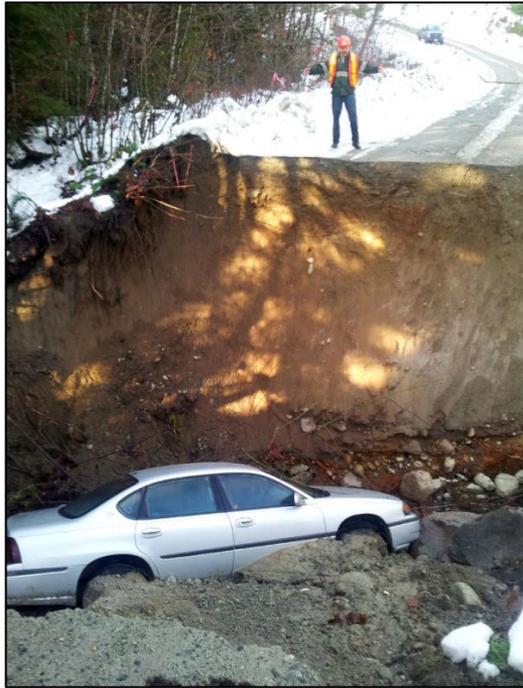
INCIDENT COMMAND



Incident Command System (ICS)

- Standardized site-level emergency management system
- Applicable to all hazards
- Flexible and expandable
- Designed for efficiency and effectiveness





ICS Design

- Interoperability
 - Common terminology
 - Communication and information management
- Functions
 - Five primary management functions
 - Modular design
- Command structure
 - Establishment and transfer of command
 - Unity and chain of command
 - Manageable span of control
 - Single and unified command
- Incident management
 - Management by objectives
 - Action planning
 - Comprehensive resource management
 - Personnel accountability

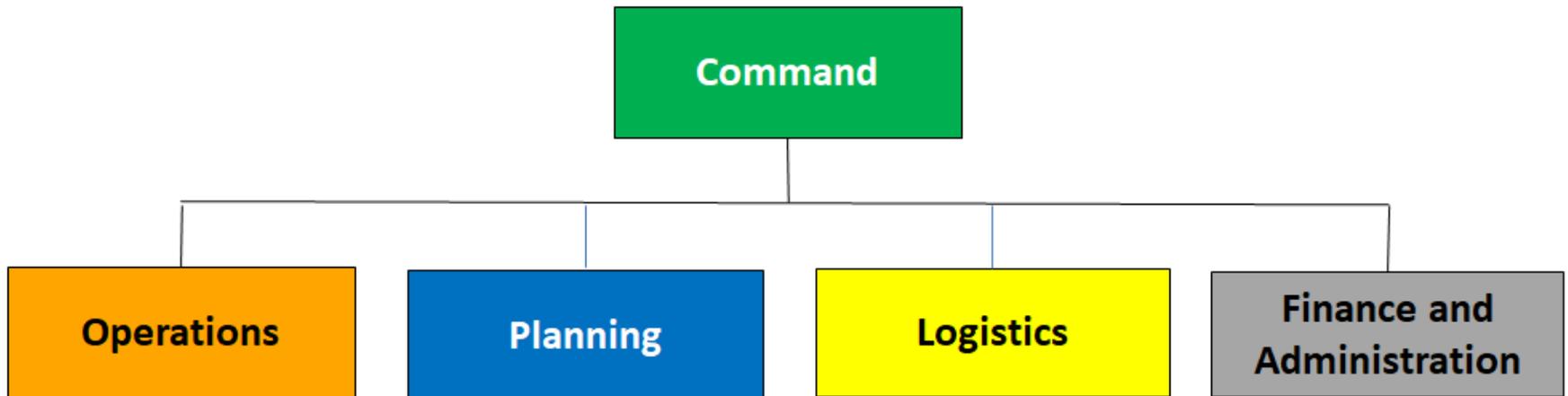


Interoperability

- Common terminology
 - Essential for collaborative approach
 - Terms, titles *10-50-F ?*
 - Mapping symbols
- Communication and information
 - Accurate, consistent, timely information
 - Equipment and protocols
 - Clear language



Five Primary Functions

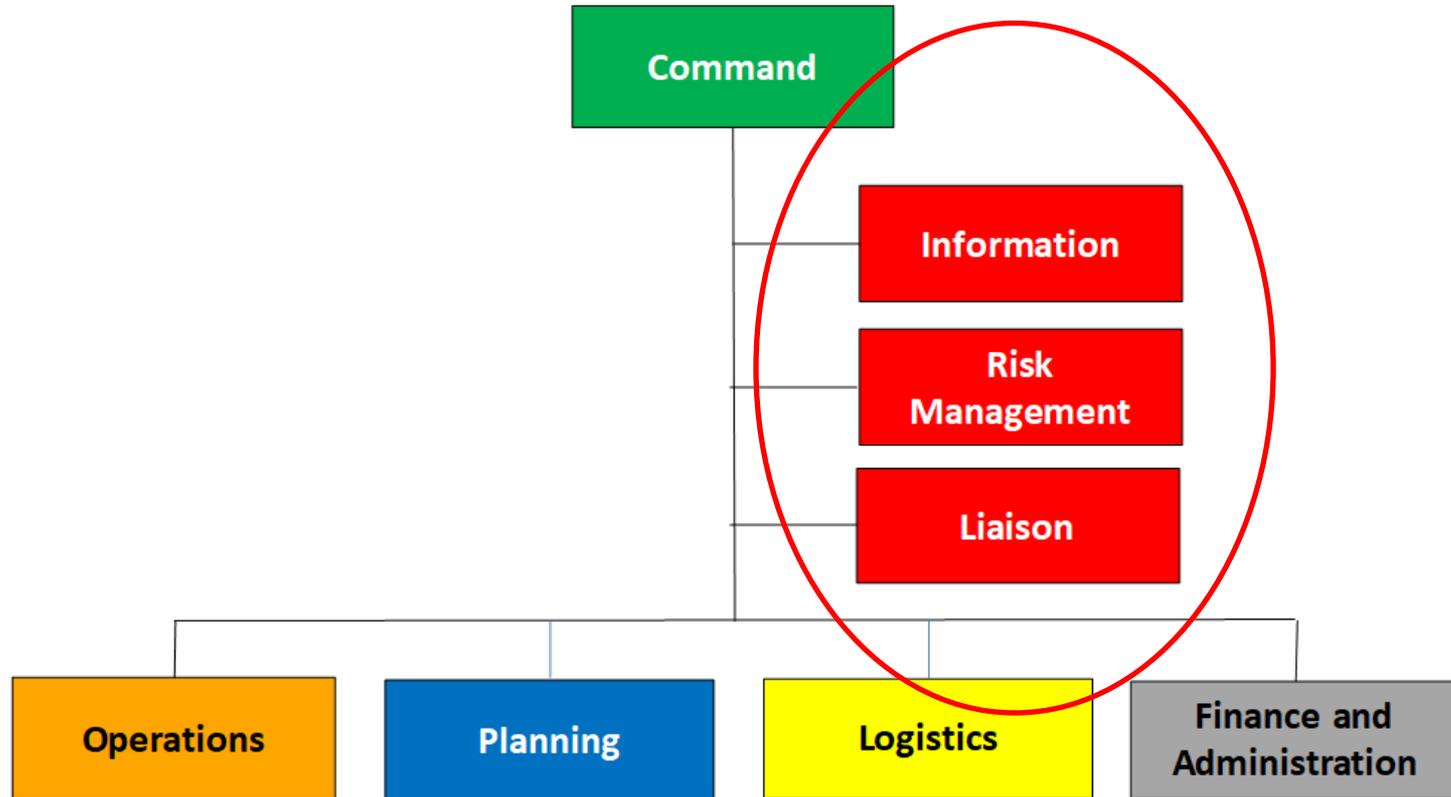


Command

- Ensure safety
- Set objectives and priorities
- Determine strategies
- Establish action plan
- Acquire and direct resources
- Monitor impacts, safety, and risk
- Track costs
- Terminate response



Command Staff



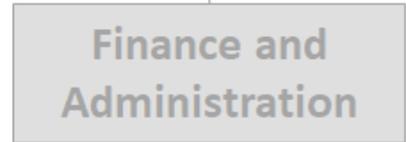
Command Staff

- Information
 - Point of contact for public, media
- Safety
 - Responsible for safety of responders
- Liaison
 - Point of contact for cooperating agencies (not for response agencies such as fire, police)

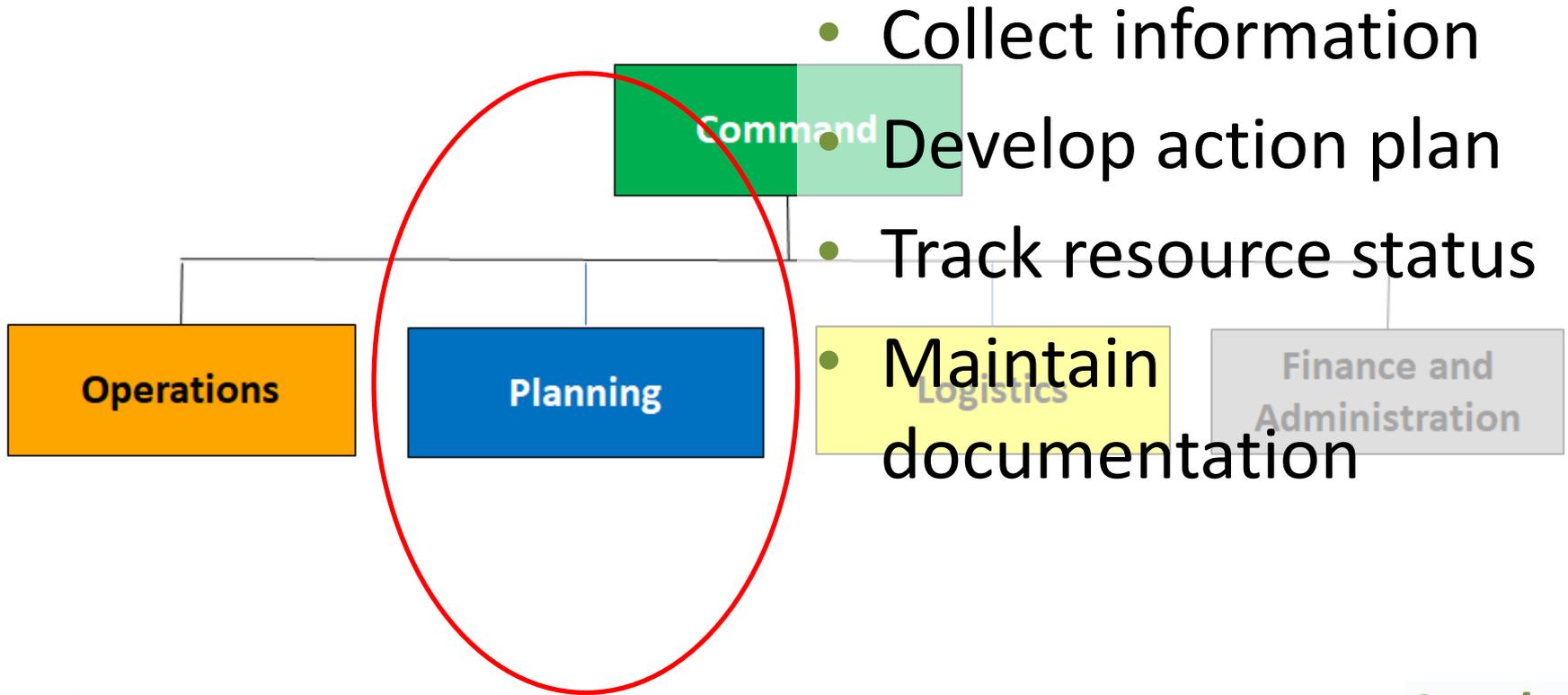


Operations

- Ensure safety
- Request and release resources
- Direct all tactical operations
- Carry out action plan
- Report to Command

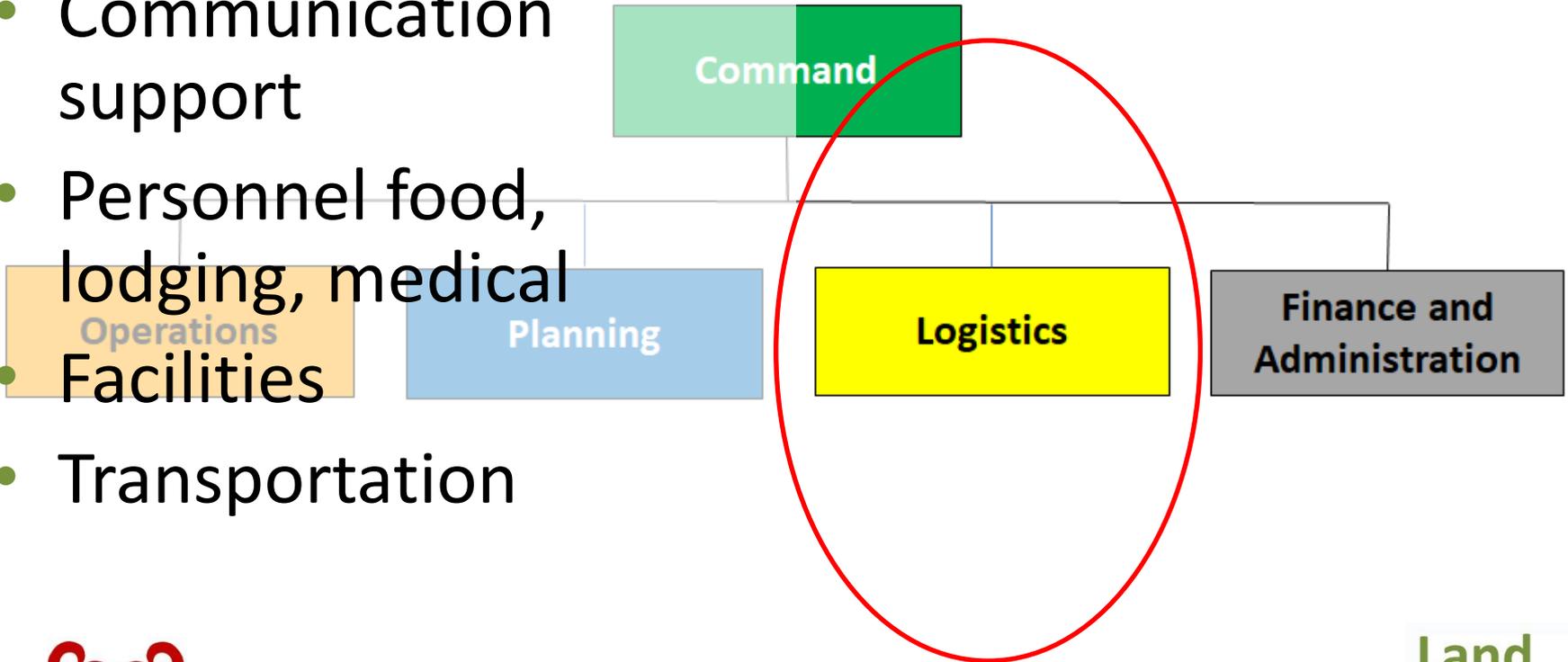


Planning



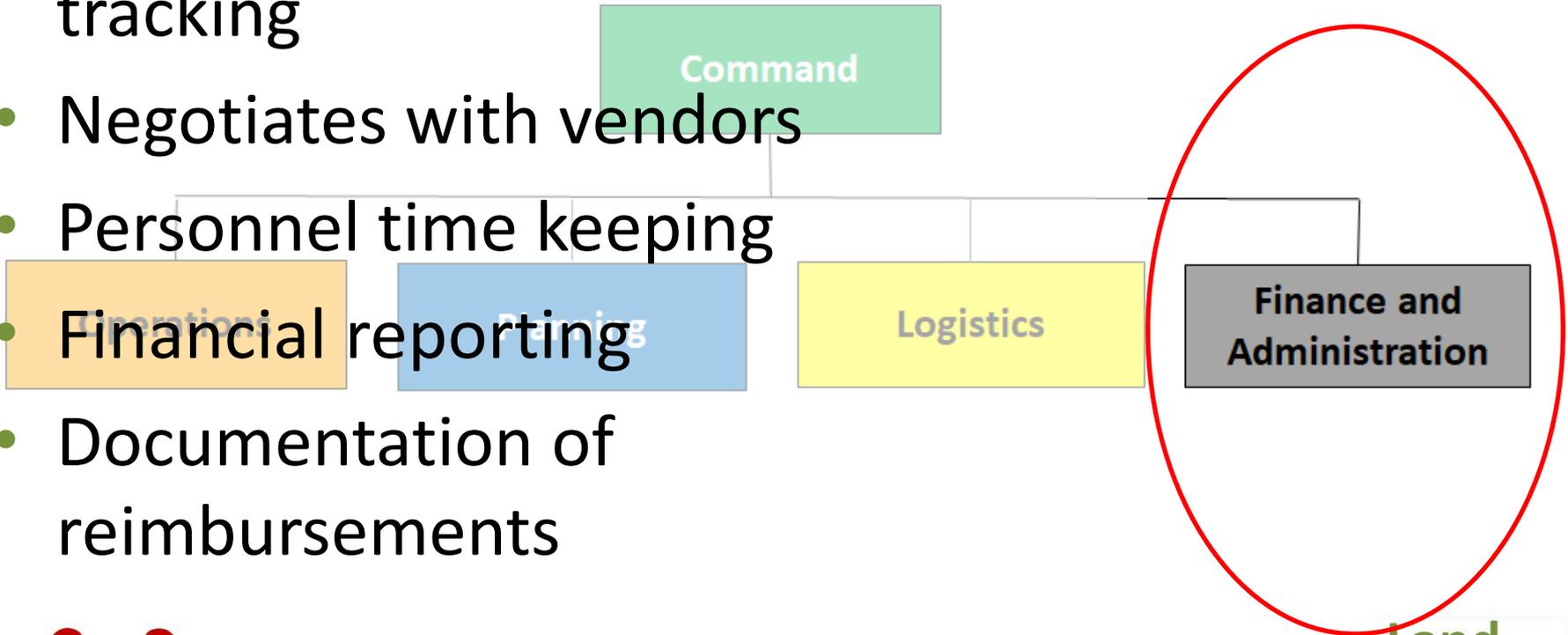
Logistics

- Tracks all resources
- Communication support
- Personnel food, lodging, medical Facilities
- Transportation

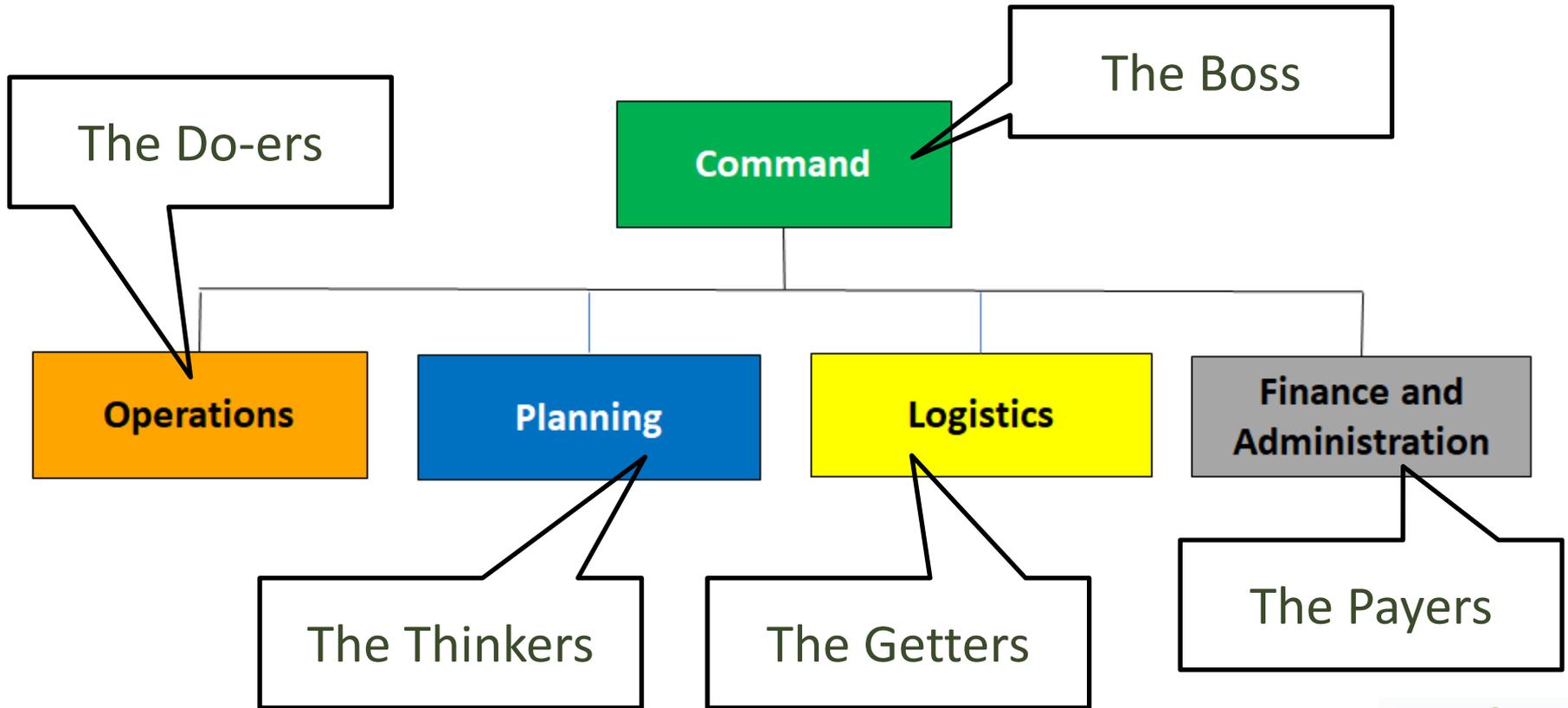


Finance and Administration

- Financial projections and cost tracking
- Negotiates with vendors
- Personnel time keeping
- Financial reporting
- Documentation of reimbursements



ICS Functions



Modular Design

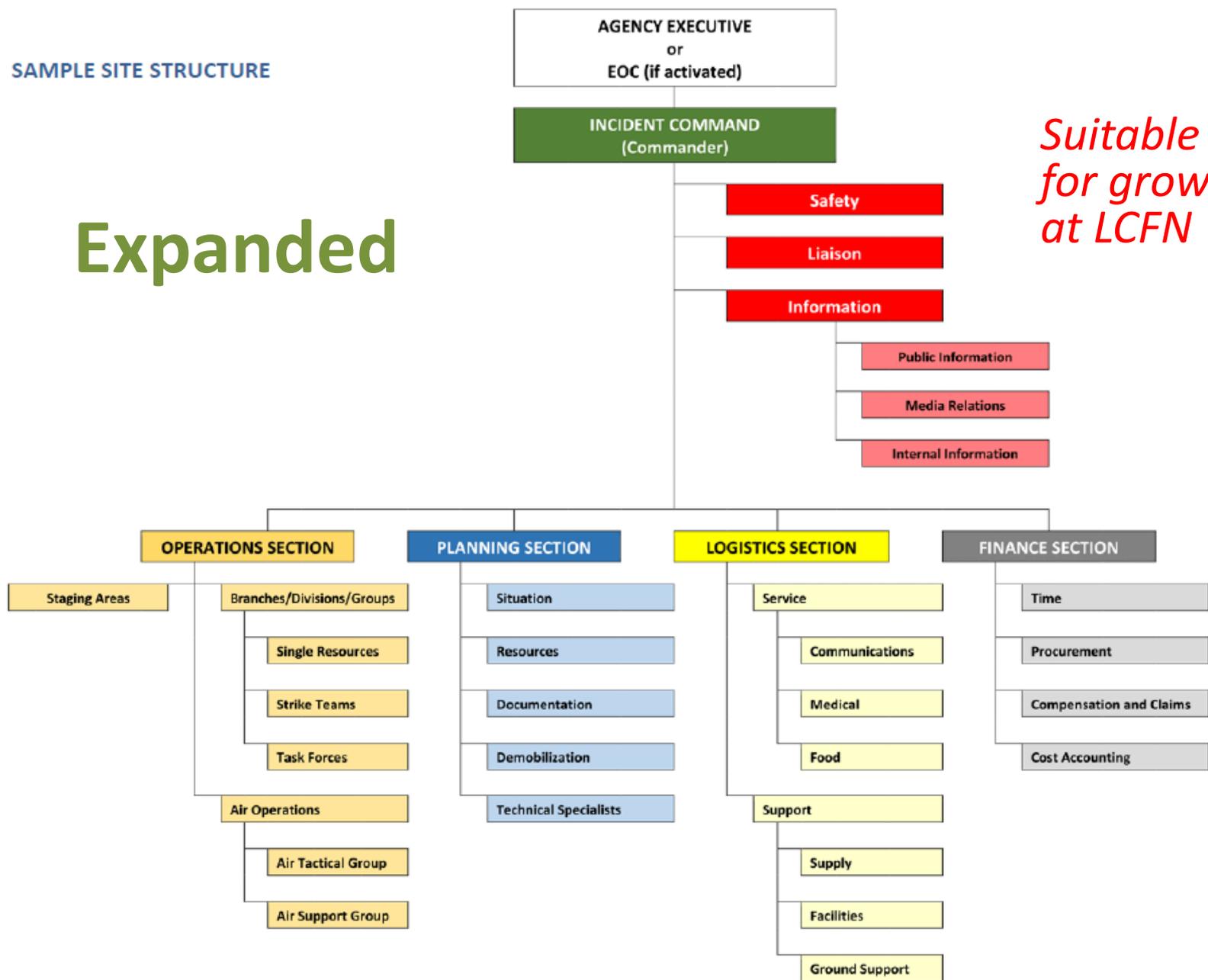
- Flexible and scalable
 - Complexity and nature of incident
 - Size of incident
 - Number of resources assigned
 - Length of incident
 - Risk created by the incident



SAMPLE SITE STRUCTURE

Expanded

Suitable for growth at LCFN



Unified Command

- Jurisdictional authority overlap
- Collaborative
- Common objectives and strategies
- Joint planning for operational activities

*Recommended
for LCFN*





EMERGENCY OPERATIONS CENTRES

Emergency Operations Centre

A physical location where key personnel collaboratively **support site activities**

- Provide strategic direction
- Manage information
- Coordinate support agencies
- Manage resources
- Provide public information



EOC Activation

- People at risk
- Site response coordination required
- Uncertain conditions (weather?)
- Potential threat

Do not hesitate to activate, all you have to lose is the opportunity to learn.



EOC Activation Levels

- Level 1 - Monitoring
 - Awareness due to threat or site incident
- Level 2 - Partial activation
 - All functions notified
- Level 3 - Full scale activation
 - All functions activated



Community Map

321 Two Residents

321

317 Two Residents with medical concerns (one ELDER)

317

313 One Resident ELDER

313

EOC and Muster Location (Nation Office)

Health Center Under Development

8501 One Resident

8507 Three Residents (One Child)

8511 Four Residents (Two Children)

Recreation Under Development

8
5
1
1

8
5
0
7

8
5
0
1

Deer Rd

River R

Local State of Emergency

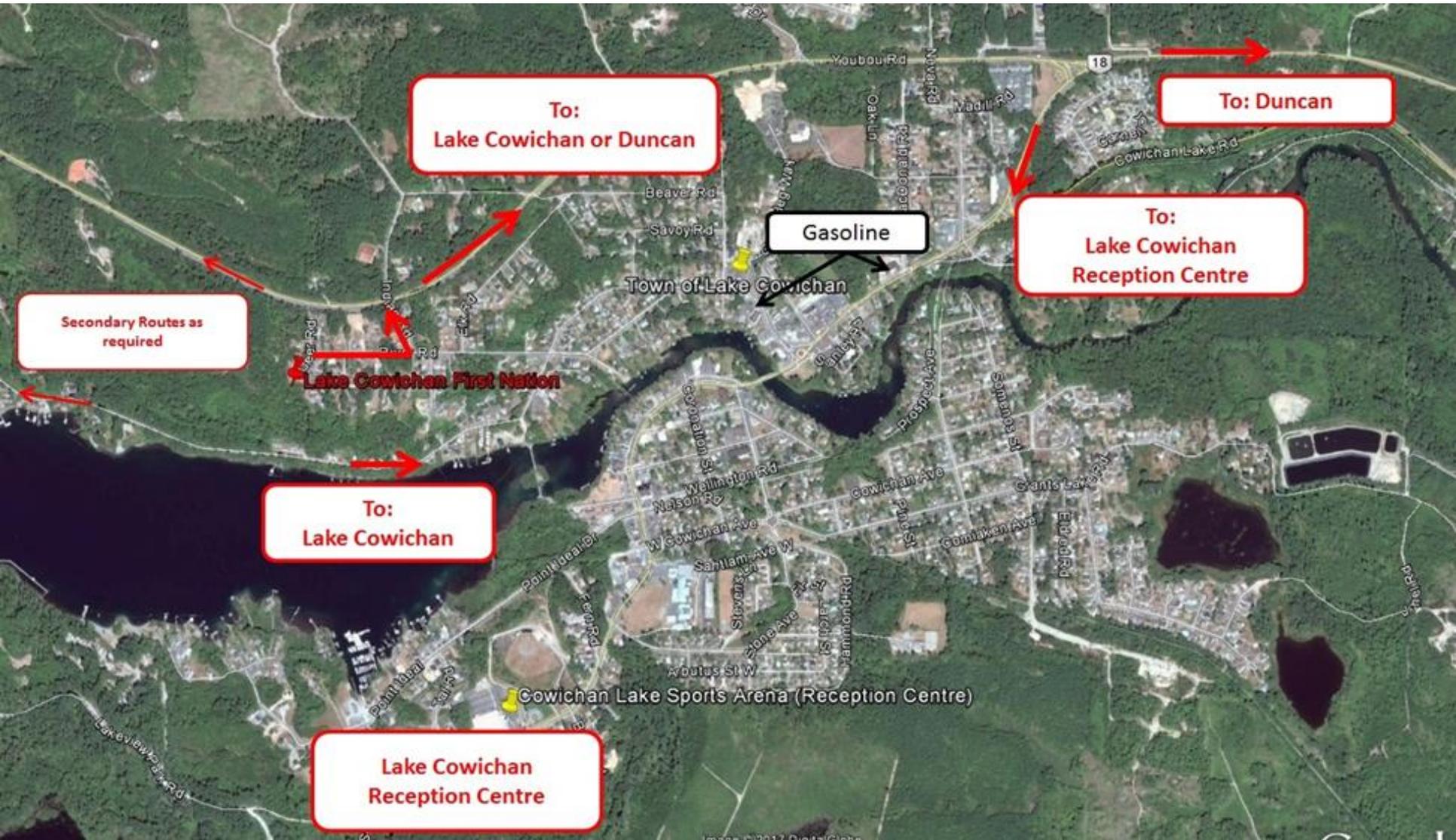
- Only if extraordinary powers are required

Evacuation

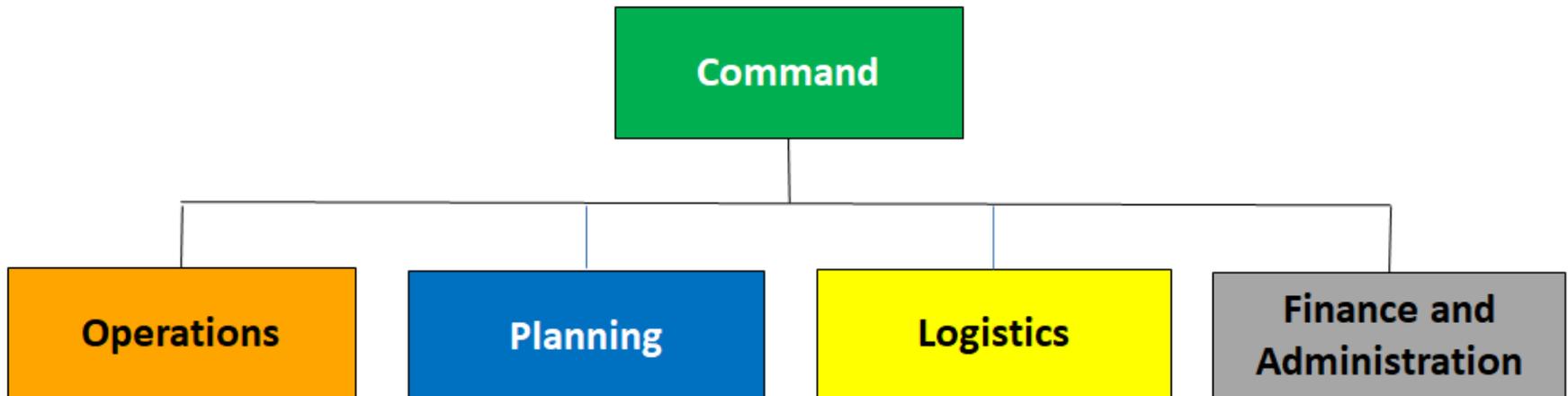
- Stage 1 - Evacuation Alert
- Stage 2 - Evacuation Order
- Stage 3 - Order Rescinded



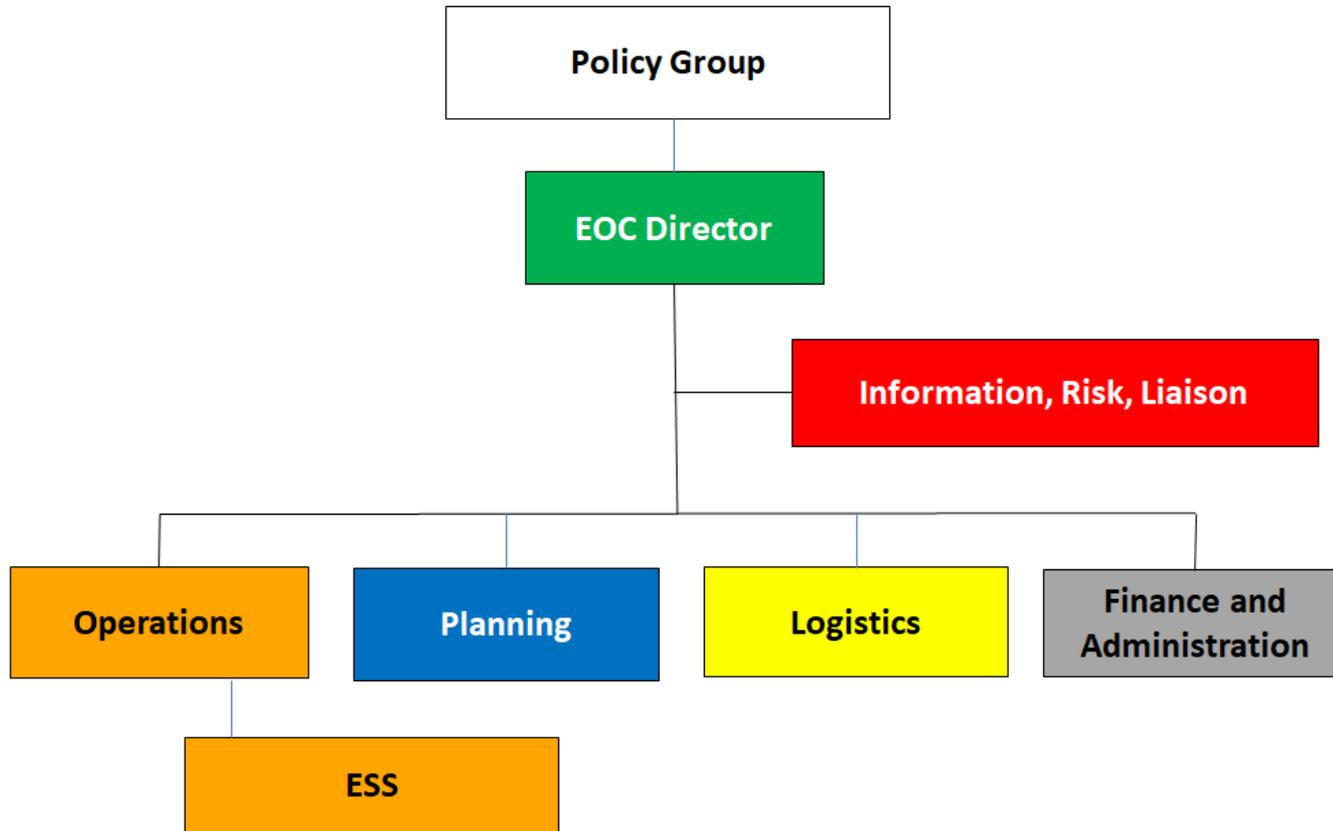
Egress Map



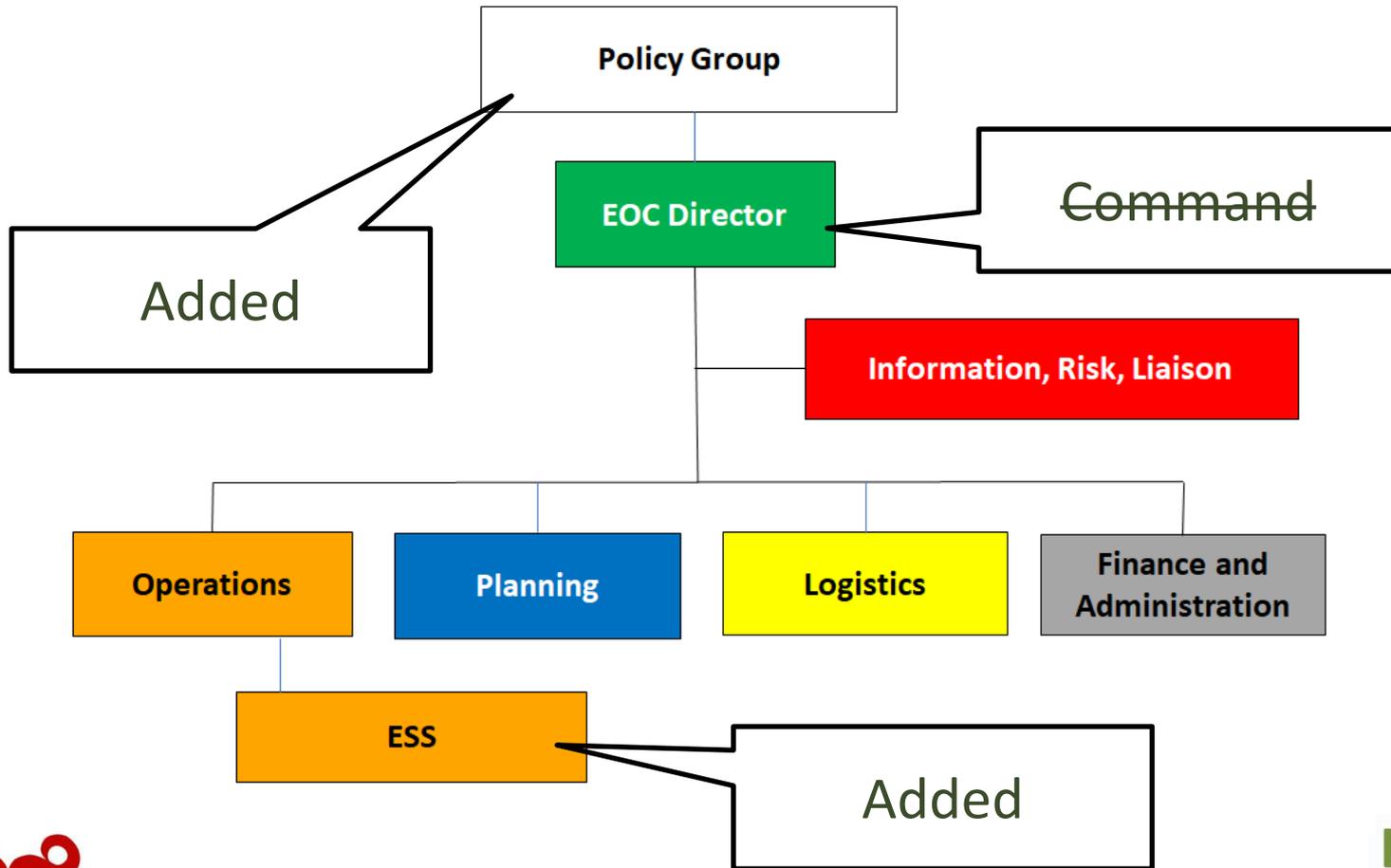
Five Primary ICS Functions



LCFN EOC Structure



LCFN EOC Structure



THANK YOU



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RESPONSE PROCEDURES AND TOOLS

October 8th, 2019



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RESPONSE PROCEDURES AND TOOLS

Emergency Operations Centre

A physical location where key personnel collaboratively **support site activities**

- Provide strategic direction
- Manage information
- Coordinate support agencies
- Manage resources
- Provide public information



EOC Facility

- Chose location most likely to survive and with access to communication links
- Co-locate in office has advantages
- Large enough for all functions
- Accommodate rest areas, food preparation
- EOC storage area
- Backup power



EOC Activation

- People at risk
- Site response coordination required
- Uncertain conditions (weather?)
- Potential threat

Do not hesitate to activate, all you have to lose is the opportunity to learn.



EOC Activation Levels

- Level 1 - Monitoring
 - Awareness due to threat or site incident
- Level 2 - Partial activation
 - All functions notified
- Level 3 - Full scale activation
 - All functions activated



Community Map



321 Two Residents

321

317 Two Residents with medical concerns (one ELDER)

317

313 One Resident ELDER

313

EOC and Muster Location (Nation Office)

Health Center Under Development

8501 One Resident

8507 Three Residents (One Child)

8511 Four Residents (Two Children)

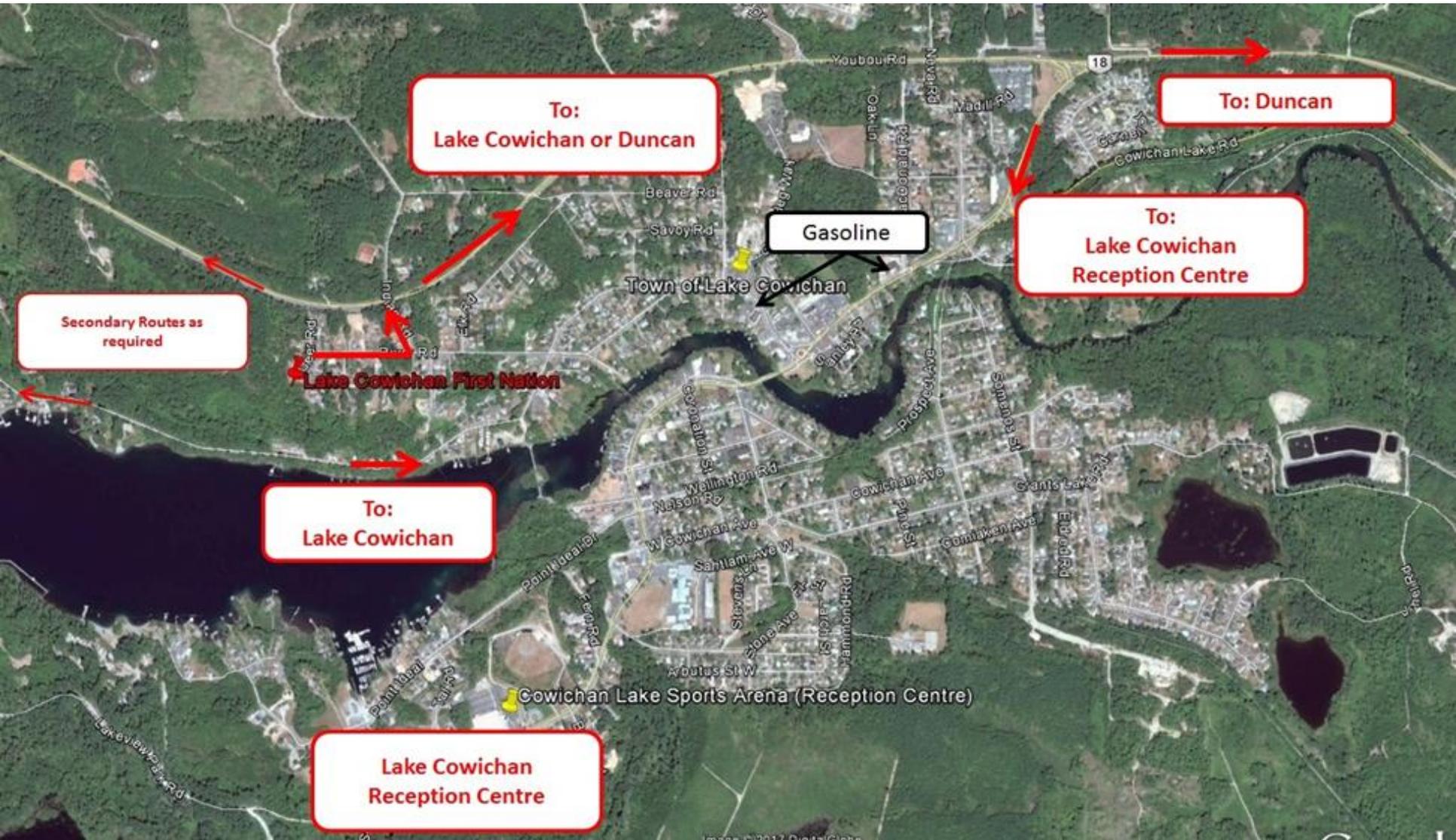
Recreation Under Development

8
5
1
1

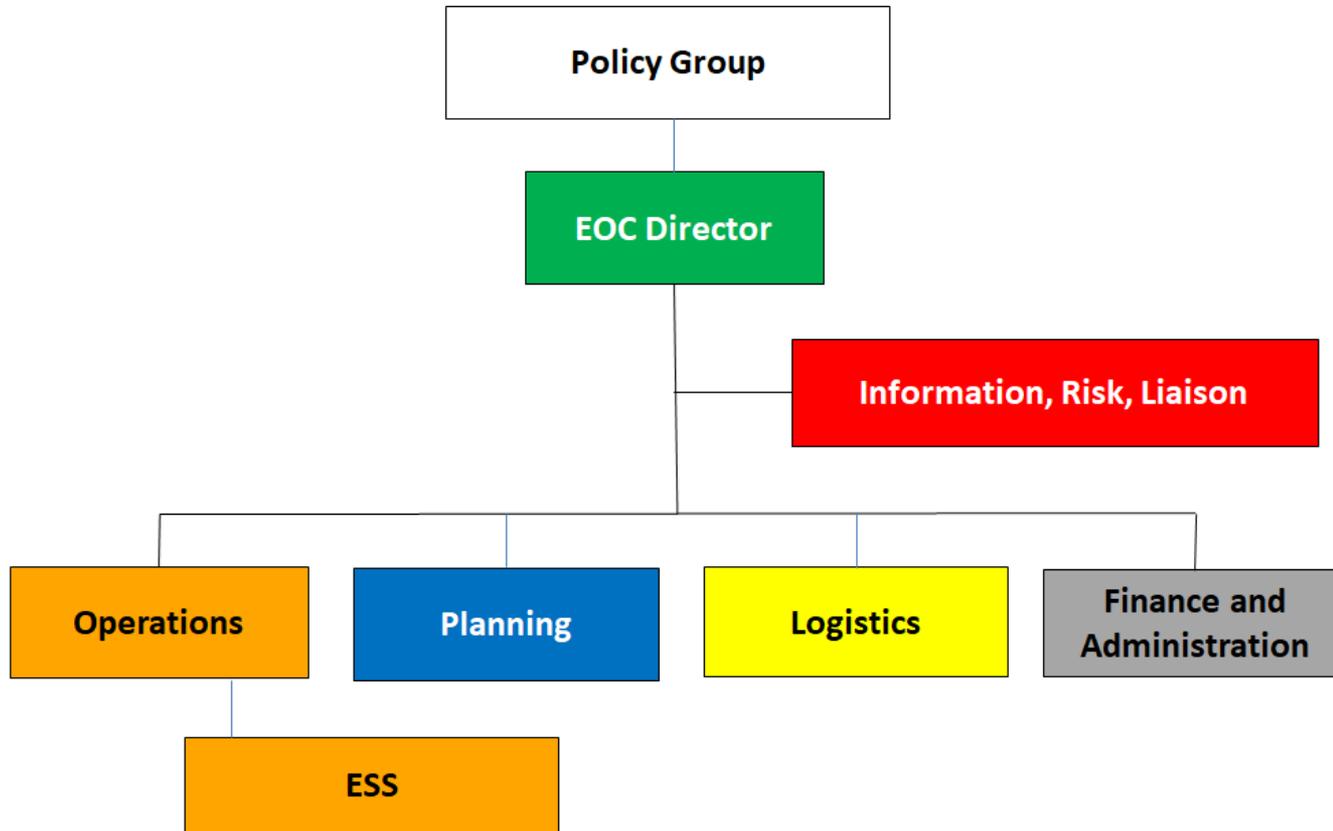
8
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7

8
5
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1

Egress Map



LCFN EOC Structure



Function - Policy Group

- Policy direction
- Strategic support
- Formally requests assistance
- No operational role
- Direction on public information
- Authorize declarations



Function - EOC Director

- Overall authority, management, and coordination
- Approves priorities and objectives
- Approves public information
- Approves plans and reports
- All tasks unless other functions are in place



Function - Command Staff

- **Information**
 - Point of contact for public, media
- **Safety**
 - Responsible for safety of EOC and stays in touch with site safety officers
 - Identifies loss exposures
- **Liaison**
 - Point of contact for cooperating agencies and other EOCs



Function - Operations

- Communication with incident site
- Coordinating site support activities
- Implements plans and strategies
- Directs deployment of all EOC issued resources



Emergency Support Services

Emergency Social Services

ESS

- Necessary part of every EOC activation
- Preserve the well-being of people
- Provide basic needs
- Re-unite families
- Work with CVRD Emergency Program Coordinator



Function - Planning

- Collecting, evaluating, disseminating information
- Preparing plans and reports
- Long range planning
- Maintaining resource status information
- All EOC documentation



Function - Logistics

- Technological support
- Arranges for resources
 - Personnel
 - Facilities
 - Equipment and supplies



Function - Finance and Admin

- Cost monitoring
- Expenditure limits
- Time recording
- Contracts and procurement
- Compensation and claims
- Disaster financial assistance
- Recovery



EOC Summary

- Understand the situation
- Refer to relevant plans and procedures
- Identify required support
- Select appropriate strategies
- Consult with others
- Issue directives implementing strategy
- Monitor progress



THANK YOU

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APPENDIX VII. FIRESMART LEGISLATION AND POLICY



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Ts'uubaa-asatx

Summary of Information

Subdivision, Development, and Servicing Law 2020

Given the inherent right of Ts'uubaa-asatx to self-government and stewardship of our lands, and as enabled by the *Ts'uubaa-asatx Land Code*, we recommend to Chief and Council the enactment of the *Ts'uubaa-asatx Subdivision, Development and Servicing Law 2020*.

The purpose of the *Ts'uubaa-asatx Subdivision, Development and Servicing Law* is to enable land development which meets community goals, protects Ts'uubaa-asatx values, and supports socio-economic objectives. A Development Permit process is defined. The harvest of trees requires a Tree Harvest Permit. The Law will apply to the whole area of the Ts'uubaa-asatx lands, including land held under allotment, and to members and non-members.

Development is defined as:

- Subdivision or partitioning of land;
- Stratification or other division of legal interests in lands or structures into strata units, sub-leases or shares;
- Development of land;
- Installation of roads, intersections, sewer, water, and other infrastructure;
- Construction, alteration, enlargement, addition, demolition or removal of industrial, commercial or residential structures, including the installation, demolition, or removal of swimming pools and decks;
- Cutting of trees or disturbance of soil; and
- Deposit or removal of more than 6 m³ of soil, gravel or other materials.

The following do not require a permit:

- Construction of any non-residential structure the footprint of which is less than 200 square feet;
- Construction or finishing of trails, driveways, or internal roads for single family residential sites on which the internal road or driveway is completely within a single parcel of land;
- Landscaping and minor yard work which does not require excavation deeper than 1.5 m or the removal or deposit of more than 6 m³ of soil, gravel, or other material; and
- Installation of trailers and temporary structures provided such trailers and temporary structures have no hook-ups or connections to services.

The *Ts'uubaa-asatx Subdivision, Development and Servicing Law* provides for:

- The definition of works or activities requiring a development permit;
- The distinction between minor and major projects and the definition of a permitting process specific to each;
- A *Development and Permitting Guide* which provides clear and transparent processes for the developer;
- Policy which guides administration of the processes by Ts'uubaa-asatx staff including internal review, Council decision making, and community input and approval as required; and
- The definition of fees supporting the application and development processes.

For more information please refer to the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law*.

Any questions can be directed to the Operations Manager at the Ts'uubaa-asatx administration office. Potential applicants are required to discuss their project with the Operations Manager before submitting an application.

Copies of the Law are available on line or in hard copy at the administration office.

TS'UUBAA-ASATX

SUBDIVISION, DEVELOPMENT, AND SERVICING LAW 2020

DRAFT



PREAMBLE

WHEREAS Ts'uubaa-asatx (formerly known as Lake Cowichan First Nation) has an inherent right to self-government which emanates from its people, culture, language, and land and which is recognized and affirmed by section 35 of the Constitution Act, 1982;

WHEREAS our Nation has chosen to assume control of our Indian reserve lands pursuant to the First Nation Lands Management Act, S.C. 1999, c. 24 by entering into the Individual Agreement on First Nation Land Management between Ts'uubaa-asatx and Her Majesty the Queen in Right of Canada and by adopting the Ts'uubaa-asatx land Code;

WHEREAS under the Ts'uubaa-asatx land Code, Council is authorized to pass various Laws relating to lands consistent with the Land Code as per Sections 9.1 and 9.2;

THEREFORE BE IT RESOLVED THAT Ts'uubaa-asatx First Nation hereby enacts the following Law:

PART 1 - INTERPRETATION

Short Title

1 This Law may be cited as the "Ts'uubaa-asatx Subdivision, Development, and Servicing Law 2020".

Purpose

2 The purpose of this Law is to enable land development which meets community goals, protects Ts'uubaa-asatx values, and supports socio-economic objectives.

Definitions

3 For the purposes of this Law, terms have the same definitions as in the Land Code;

4 In addition, the following definitions apply:

- (a) "**Development Permit**" means a permit issued by Ts'uubaa-asatx authorizing activities on Ts'uubaa-asatx lands as per this Law.
- (b) "**Development Permitting Guide**" means the Ts'uubaa-asatx Subdivision, Development, and Permitting Guide.
- (c) "**Harvest of Trees**" means the cutting of whole trees or the removal of parts of trees such as bark, roots, or foliage.
- (d) "**Land Code**" means the Ts'uubaa-asatx land Code dated for reference September 9, 2019 and any amendments thereto.
- (e) "**Project**" means the process and activities required to bring works defined in a permit application from the approval-in-principle stage to completion.
- (f) "**Reserve**" means the whole of Cowichan Lake Reserve and any future reserve additions.



- (g) “**Ts’uubaa-asatx Enforcement Officer**” means any person or class of persons designated as an enforcement officer under Ts’uubaa-asatx Law.

PART 2 - APPLICATION

Where This Law Applies

5 The provisions of this Law apply to all of the Ts’uubaa-asatx lands including all Ts’uubaa-asatx lands held under allotment, community land, and all other interests in Ts’uubaa-asatx lands.

Paramountcy

6 If there is a conflict between this Subdivision, Development, and Servicing Law and the Land Code, the Land Code will apply.

Authority

7 Except as otherwise provided in this Subdivision, Development, and Servicing Law, the Land Code, or the First Nations Land Management Act, Ts’uubaa-asatx acts through Council in exercising its powers and functions under this Subdivision, Development, and Servicing Law.

8 Council must exercise its powers and functions in accordance with this Subdivision, Development, and Servicing Law, the Land Code, and all other applicable Laws.

PART 3 - SUBDIVISION, DEVELOPMENT AND SERVICING

Prohibited Activities without Authorization

9 None of the following are permitted within Ts’uubaa-asatx lands except in strict conformity with the requirements of this Law and any other applicable Laws:

- (1) subdivision of land or partitioning of land;
- (2) stratification or other division of legal interests in Ts’uubaa-asatx lands or structures into strata units, sub-leases or shares;
- (3) development of land;
- (4) installation of roads, intersections, sewer, water, and other infrastructure;
- (5) construction, alteration, enlargement, addition, demolition or removal of industrial, commercial or residential structures, including the installation, demolition, or removal of swimming pools and decks;
- (6) Harvest of trees or disturbance of soil; and
- (7) deposit or removal of more than 6 m³ of soil, gravel, or other materials.



- 10** Without limiting the generality of Section 9, it is prohibited to carrying out any of the activities set out in Section 9 without a Development Permit.
- 11** Despite Sections 9 and 10, the following do not require any approvals under this Law, but must not be undertaken except in compliance with all applicable Laws:
- (1) construction of any non-residential structure the footprint of which is less than 200 square feet;
 - (2) construction or finishing of trails, driveways, or internal roads for single family residential sites on which the internal road or driveway is completely within a single parcel of land;
 - (3) landscaping, and minor yard work which does not require excavation deeper than 1.5 m or the removal or deposit of more than 6 m³ of soil, gravel, or other material; and
 - (4) installation of trailers and temporary structures provided such trailers and temporary structures have no hook-ups or connections to services.

Harvesting of Trees

- 12** It is prohibited to harvest trees on Ts'uubaa-asatx lands except in strict conformity with the requirements of this Law and any other applicable Laws.
- 13** Without limiting the generality of Section 12, it is prohibited to carrying out the harvesting of trees on Ts'uubaa-asatx lands without a Tree Harvest Permit.

PART 4 - APPLICATIONS AND APPROVALS

- 14** For the purposes of administration of this Law, projects will be classified as minor projects or major projects.
- 15** Minor projects are defined as:
- (1) temporary land use by utilities or other contractors which involves any removal of trees, shrubs, or disturbance of soil;
 - (2) construction of residential garages or out buildings the footprint of which is greater than 200 square feet;
 - (3) installation of trailers and temporary structures which are connected to services; or
 - (4) the construction or demolition of a single family home by Ts'uubaa-asatx on Ts'uubaa-asatx lands, or by a Ts'uubaa-asatx member on land held by that member under allotment.
- 16** No minor projects may take place or have activity within 30 metres of a water body.
- 17** No project requiring community approval will be considered a minor project.
- 18** Minor project applications will be in the form of a minor project permit application as per the Development Permitting Guide.



- 19** All projects that are not minor projects are major projects and applications for major projects will be in the form of a Development Permit application as per the Development Permitting Guide.
- 20** Permit fees are prescribed in Schedule A of this Law.
- 21** Every applicant applying for an approval to carry out a project, development, activity or procedure set out in Section 9 or 10 shall pay the prescribed fees and submit an application to the Operations Manager in the prescribed form that meets the applicable requirements set out in the following:
- (1) Ts'uubaa-asatx Subdivision, Development, and Servicing Permitting Guide;
 - (2) Ts'uubaa-asatx Development Permit application;
 - (3) Ts'uubaa-asatx Development Permit checklist; and
 - (4) any directions from certified professionals.
- 22** Not with standing Section 21, Ts'uubaa-asatx may wave fees for minor projects.
- 23** Applications shall be reviewed and processed in stages, generally in the following order:
- (1) application, conceptual design and issuance of Approval in Principle;
 - (2) final design approval and issuance of Development Permit;
 - (3) inspection for substantial completion; and
 - (4) inspection at completion.
- 24** Applicants shall pay the prescribed fee, post any required bonds, and submit the prescribed application form for each relevant stage set out in Section 23.

Land Use and Zoning

- 25** If a project requires a change in zoning or zone guidance as defined by Ts'uubaa-asatx Law, the applicant will provide the prescribed information as per the Ts'uubaa-asatx Development Permitting Guide.

Review by Departments

- 26** As soon as practicable after receiving the prescribed fees and a complete application under this Part, the Land Manager shall:
- (1) circulate the application and all relevant information and documentation to internal Ts'uubaa-asatx departments for comment; and
 - (2) for application for sub-divisions, multi-family structures, or significant increases in density, refer the application for comment to all adjacent Interest or allotment holders on Ts'uubaa-asatx lands.



27 The Operations Manager shall review the application and shall provide recommendations to Council about:

- (1) whether the application should be approved or not; and
- (2) any suggested modification, terms or conditions that should be set by Council.

Principles and Factors in Reviewing Applications

28 For each application, the Committee shall consider the following general principles and factors:

- (1) clear and legal access to the land for the intended purpose;
- (2) the promotion of health, safety, convenience and welfare of Ts'uubaa-asatx members and of residents and occupants and other persons who have a lawful interest in Ts'uubaa-asatx lands;
- (3) well planned and orderly development of Ts'uubaa-asatx lands and the preservation of amenities and special features of Ts'uubaa-asatx lands;
- (4) the proposed development or land and resource use will not pose a threat of irreparable environmental, cultural or resource damage, and will contain an element that can contribute to the restoration of the natural and/or cultural health of the land;
- (5) adherence to all Ts'uubaa-asatx land use, environmental management, and heritage protection processes and policies;
- (6) compliance with this Subdivision, Development, and Servicing Law, other applicable Ts'uubaa-asatx Law, and with relevant federal and provincial Laws;
- (7) evaluation on the following merits:
 - (a) is it good land use?
 - (b) does it balance impacts and benefits?
 - (c) does it support sustainability?
 - (d) are the economic benefits maximized?
- (8) the character of the proposed activity or project in relation to the character of the zone, neighbourhood, and the buildings already erected;
- (9) the development of Ts'uubaa-asatx lands in a manner that contribute to the economic, environmental, cultural and community health of Ts'uubaa-asatx and its Members and the occupants of Ts'uubaa-asatx land.
- (10) consideration of:
 - (a) viewscales, aesthetics and visual qualities;
 - (b) ensuring adequate parking, access, and emergency access; and



- (c) the conservation of property values.
- (11) that the proposed project will provide more positive than negative social impacts for Ts'uubaa-asatx people. Developers will include economic participation by the Nation through business opportunities, such as partnerships and joint ventures, and provide employment-related training and capacity building for Ts'uubaa-asatx and Ts'uubaa-asatx people;
- (12) potential impacts on adjacent uses, owners and occupants;
- (13) provision of land and/or funds to Ts'uubaa-asatx for the development of community amenities;
- (14) developments considered positively by Ts'uubaa-asatx will identify and reserve parks, green space, common areas, open spaces, trails, landscaping, fences, recreation features, and any other public amenities;
- (15) promotion of the principle of sustainable development for Ts'uubaa-asatx lands, ensuring that development takes place in a manner that preserves and protects ecologically significant areas;
- (16) promotion of the principle of sustainable development for Ts'uubaa-asatx lands, ensuring that development takes place in a manner that preserves and protects culturally significant areas;
- (17) compatibility with Ts'uubaa-asatx culture;
- (18) any information provided and any approvals already granted by Council, including any terms or conditions, in relation to the same project or the same parcels of Ts'uubaa-asatx lands; and
- (19) any other factors which may have an impact on the community or Ts'uubaa-asatx lands.

Examples of Recommendations

- 29** In making recommendations to Council, the Operations Manager may make any relevant recommendations including:
- (1) any recommendations relating to the general factors set out in Section 28;
 - (2) whether there should be bonds posted or irrevocable letters of credit and, if so, in what percentage or what amount;
 - (3) dedication of up to 5% of the area of the land for parks, green space or community use;
 - (4) preferred lot reconfigurations to ensure viable subdivisions;
 - (5) construction of intersections, access and emergency access routes;
 - (6) construction of parking spaces;



- (7) construction of curbs and sidewalks;
- (8) purchase and installation of street lights;
- (9) completion of required service agreements;
- (10) provision of updated plans, reports or studies, including as-built drawings after the completion of the project;
- (11) requirements for staging or sequencing of the project including requirements for interim reports;
- (12) set-backs or buffers including set-backs or buffers from property lines and heritage or environmental features;
- (13) noise and dust prevention or mitigation measures; and
- (14) any other relevant terms or conditions.

Operations Manager May Request Further Information

- 30** At any point in the review process, the Operations Manager may request further information, plans, reports, or other relevant material from the applicant which the applicant shall provide.

Forward to Council

- 31** The Operations Manager shall as soon as practicable after having received the comments under Section 26 or having received the additional information requested under Section 30, forward the application to Council along with:
 - (1) all relevant documents, maps, plans, reports and other information;
 - (2) any comments received from adjacent Interest or Allotment holders or members; and
 - (3) any comments or recommendations from the Operations Manager and other Ts'uubaa-asatx managers or departments.

Council Decisions

- 32** As soon as practicable after receiving the application and information set out in Section 31, Council shall decide whether or not to approve the application and, without limiting the generality of Council's authority, Council may:
 - (1) reject the application; or
 - (2) approve the application with any reasonable terms or conditions, including, but not limited to terms or conditions relating to the items set out in Sections 28 and 29.
- 33** The Operations Manager will communicate any additional terms or conditions set by Council to the applicant. If the applicant rejects the additional terms or



conditions outright, the application is rejected. The applicant may respond with alternate terms or an amended application.

Community Approval

- 34** If the project as described requires community input or approval as per the Land Code, the Operations Manager will convene a meeting of members to seek their input or approval as may be required.
- 35** Community meetings will be convened in accordance with Section 17 of the Land Code and related procedures.
- 36** Community input received will be considered by Council and addressed in final conditions as Council sees fit.
- 37** In the case of required approval, if the community rejects the project, the Land Manager will inform the applicant that the application is rejected.

Project Implementation

- 38** If an application is accepted by Council, and approved by the community if required, the Operations Manager will communicate acceptance of the application to the applicant. With the applicant the Operations Manager will initiate a project-based process to administer the project as per the approved application and the development guide.

PART 5 - OFFENCES, PENALTIES AND ENFORCEMENT

Penalties

- 39** A person who contravenes this Law or an order made by a Court pursuant to this Law is guilty of an offence and liable on summary conviction to a fine of not more than \$10,000 or to imprisonment for a term of not more than three months, or to both.

Enforcement and Stop Work Orders

- 40** In addition to any other applicable fine, penalty or remedy, Council, the Operations Manager, a Ts'uubaa-asatx Enforcement Officer, or a designated official may:
 - (1) Issue a Stop Work Order to order any Person who has not received full and proper authorization under this Law to cease carrying out any activity, use or construction listed under PART 3 - 9 or PART 3 - 10 or any related activity or use;
 - (2) Order any structures, works or installations carried out in violation of this Law to be removed within 30 days, failing which Council may order them to be removed at the expense of the Allotment holder or the Person who constructed or installed the structures, works or installations without proper authorization.
- 41** Enforcement of this Subdivision, Development, and Servicing Law will be as per applicable Ts'uubaa-asatx Law.



PART 6 - AMENDMENTS

Amendments to this Law

- 42** An amendment or repeal of this Subdivision, Development, and Servicing Law must only be made by Council, as recommended by the Operations Manager in accordance with the Land Code.

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PART 7 - SCHEDULE A

Ts'uubaa-asatx lands Fee Schedule for Applications

Note: These fees are for application and processing only. There is no commitment implied or given on behalf of Ts'uubaa-asatx to accept or approve any of the proposed projects, uses, or activities.

Additional fees for research or study may apply.

Application Type	Basic Fee	Incremental Fee
Timber Harvest Permit	\$25	
Minor Project Permit <ul style="list-style-type: none"> • Temporary land use • Single residence construction 	\$250 \$500	\$50 \$250
Subdivision or Multiple Lot or Unit Application <ul style="list-style-type: none"> • Basic subdivision or multiple lot application fee 	\$1,200	Plus \$55 per lot created by subdivision
Strata or Multiple Unit (apartments or townhouses) Application <ul style="list-style-type: none"> • Basic strata or multiple unit application fee 	\$800	Plus \$50 per unit
Development Permit Application <ul style="list-style-type: none"> • Single family, semi-detached and duplex <ul style="list-style-type: none"> ○ Construction up to \$5,000 value or simple ancillary building, deck, swimming pool, etc. ○ Construction over \$5,000 • Multi-family, townhouse, commercial, industrial, institutional <ul style="list-style-type: none"> ○ Value of engineering works up to \$500,000 ○ Value of engineering works in excess of \$500,000 	\$60 \$120 \$100 \$100	Plus 0.6% of total value of construction Plus value times 1.5% Plus value times 0.5% up to a maximum of \$15,000







Ts'uubaa-asatx Subdivision, Development, and Servicing Permitting Guide

**Version 1.0
June 30th, 2020**

Prepared by Land Forest People Consulting Ltd.



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Ts'uubaa-asatx and Land Forest People wish to acknowledge Sq'ewá:lxw First Nation whose work this document is based upon. As Nations we stand together, and upon one another's shoulders, to advance our communities.



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1.0 INTRODUCTION

This *Ts'uubaa-asatx Subdivision, Development, and Servicing Permitting Guide* is enabled by the *Ts'uubaa-asatx Land Code* and the *Ts'uubaa-asatx Subdivision, Development, and Permitting Law*.

The purpose of this guide is to set out land development procedures on Ts'uubaa-asatx lands for developers, contractors, holders of allotted land, members, residents, and other persons with interests in Ts'uubaa-asatx lands.

This guide is intended to assist applicants efficiently obtain a Development Permit.

1.1 DEFINITION OF DEVELOPMENT

As per the *Ts'uubaa-asatx Subdivision, Development, and Permitting Law* Section 9, development is defined by the following prohibitions;

- Subdivision or partitioning of land;
- Stratification or other division of legal interests in lands or structures into strata units, sub-leases or shares;
- Development of land;
- Installation of roads, intersections, sewer, water, and other infrastructure;
- Construction, alteration, enlargement, addition, demolition or removal of industrial, commercial or residential structures, including the installation, demolition, or removal of swimming pools and decks;
- The harvest of trees or the disturbance of soil; and
- Deposit or removal of more than 6 m³ of soil, gravel or other materials.

1.2 PURPOSE OF DEVELOPMENT PERMITTING

The purpose of the development permitting process is to protect Ts'uubaa-asatx values while encouraging economic development and addressing the need for quality affordable housing.

The procedures set out here are enabled by the *Ts'uubaa-asatx Land Code* and reflect the various laws and policies of Ts'uubaa-asatx with which all developers must be familiar:

- *Ts'uubaa-asatx Land Code*;
- *Ts'uubaa-asatx 5-Year Economic Development Strategic Plan*;
- Ts'uubaa-asatx laws, especially:
 - *Subdivision, Development, and Servicing Law (2020)*.

All development proposals will be considered with respect to the objectives stated in Ts'uubaa-asatx strategic planning documents.

Any development on Ts'uubaa-asatx lands will be administered by Ts'uubaa-asatx through a development permitting process described in the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law* and in this guide.



1.3 NO PERMIT REQUIRED

Exceptions for Ts'uubaa-asatx interest holders to the requirement for a development permit are as follows:

- Construction of any non-residential structure the footprint of which is less than 200 square feet;
- Construction or finishing of trails, driveways, or internal roads for single family residential sites on which the internal road or driveway is completely within a single parcel of land;
- Landscaping, and minor yard work which does not require excavation deeper than 1.5 m or the removal or deposit of more than 6 m³ of soil, gravel, or other material; and
- Installation of trailers and temporary structures provided such trailers and temporary structures have no hook-ups or connections to services.

1.4 TREE HARVEST PERMIT

Any harvest of trees is prohibited on Ts'uubaa-asatx lands without a Tree Harvest Permit.

Harvest of trees is defined as the cutting of whole trees or the removal of parts of trees such as bark, roots, or foliage. This reflects the value of the trees to the community including the importance of non-timber tree products for traditional uses.

For any major or minor project development requiring the harvest of trees, the applicant will request a Tree Harvest Permit.

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2.0 MINOR PROJECTS

Minor projects are exempt from the regular land use and development permit application process but must receive a Development Permit through the Ts'uubaa-asatx minor projects process.

All utilities, developers, contractors, CP holders, members, residents, or Ts'uubaa-asatx are subject to this minor project permit process.

Minor projects include:

- Temporary use by utilities or other contractors which involves any removal of trees, shrubs, or disturbance of soil;
- Construction of residential garages or out buildings the footprint of which is greater than 200 square feet;
- Installation of trailers and temporary structures which are connected to services; or
- The construction or demolition of one single family home by Ts'uubaa-asatx on Ts'uubaa-asatx Land or by a Ts'uubaa-asatx member on their land held under allotment.

No minor projects may take place or have activity within 30 metres of a water body.

The minor project permitting process ensures that cultural and natural values are protected while recognizing that small and low impact activities do not require the same detailed process as larger and higher impact projects.

Permits provide the utility company or other entities with the assurance that they have permission to conduct works on Ts'uubaa-asatx lands and provide Ts'uubaa-asatx with the assurance that works are conducted in accordance with our values, policies, and legislation.

The applicant will complete the Minor Project Permit Application found in Section 17.1 of this guide. The form provides for:

- The identification of the project and payment of the appropriate fee;
- Documentation of the need for a permit for temporary use if appropriate;
- Identification and signatures of all allotment holders and other interest holders documenting their approval of the project;
- Description of the project;
- An environmental scan for assurance of the protection of Ts'uubaa-asatx environmental and other values;
- The review of environmental history to protect the applicant or future visitors or residents of the location; and
- Statement of application, consent, and representations for signature.



3.0 APPLICATIONS

Ts'uubaa-asatx has an obligation to manage Ts'uubaa-asatx lands in a responsible and responsive manner. Ts'uubaa-asatx must ensure that all works that have an impact on natural resources and cultural resources are managed for the protection of those resources. The Ts'uubaa-asatx permitting process meets these requirements and lessens the liabilities and risks to the Nation.

All persons with an interest in Ts'uubaa-asatx lands may make application for development or changes to land use in support of developments.

Ts'uubaa-asatx provides developers with the necessary forms in Section 17 of this guide and information with regard to fees in Section 18.

3.1 DEVELOPMENT PERMITS

Except as per Section 0 of this guide, all land, infrastructure, or building development, and disturbance of soil on Ts'uubaa-asatx land shall be undertaken in compliance with the Ts'uubaa-asatx development permit process.

Minor projects and the appropriate process for those projects are defined in Section 2.0 of this guide.

All other projects are designated major projects and a fully completed *Development Permit Application* and the associated checklist are required.

The permit process will ensure that appropriate studies such as engineering design and environmental assessment are undertaken as required. It ensures that the cultural heritage, environmental protection, and community amenities interests of Ts'uubaa-asatx are met. Depending on the recommendations in these studies, the proponent could be required to conduct further research into issues such as drainage, traffic, landscaping, mitigation of deleterious environmental effects, cultural resource protection, etc.

A development permit sets out the process by which approval will be given to develop on Ts'uubaa-asatx lands. It is like a contract between the developer and Ts'uubaa-asatx on what can be done on the land if certain guidelines and provisions are met. The permit process provides a standard way of assessing all developments. The process ensures that Ts'uubaa-asatx staff have reviewed the development with due diligence and protects Ts'uubaa-asatx from any liabilities. The process provides the developer with basic guidelines to developing on Ts'uubaa-asatx lands. It allows Ts'uubaa-asatx and the developer to negotiate and resolve any outstanding issues with the development.

Developers will be required to demonstrate that:

- They have reviewed the documents listed in Section 1.2 of the development guide;
- They have fully completed the required forms;
- They have clear and legal access to the land for the intended purpose;
- The project supports the promotion of health, safety, convenience and wellbeing of Ts'uubaa-asatx members and of residents and occupants and other persons who have a lawful interest in Ts'uubaa-asatx lands;
- The project supports the well planned and orderly development of Ts'uubaa-asatx lands and the preservation of amenities and special features of Ts'uubaa-asatx lands;
- The proposed development or land and resource use will not pose a threat of irreparable environmental, cultural or resource damage, and will contain an element that can contribute to the restoration of the natural and/or cultural health of the land;



- The project is in adherence to all Ts'uubaa-asatx land use, environmental management and heritage protection processes; and
- The project is in compliance with the Ts'uubaa-asatx Laws particularly the *Subdivision, Development, and Servicing Law*, and with relevant federal and provincial laws.

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4.0 ENGINEERING DESIGNS AND PLANS

Ts'uubaa-asatx requires that a Conceptual Design be deemed satisfactory by Ts'uubaa-asatx Council and receive an Approval in Principle before any development may proceed. A Final Design must be deemed satisfactory by Ts'uubaa-asatx Council before the Ts'uubaa-asatx Development Permit is issued.

Information items to be provided at the Conceptual/Approval-in-Principle design stage are indicated by [Conceptual], and those to be provided at the Final Design/ Development Permit stage are indicated by [Final].

The applicant is advised that the requirements below are general in nature and are meant to be a guide for submission only. It is possible that some listed requirements may be waived and other new requirements may become applicable as more information on the development is submitted. If the applicant or their consultant or agent regards any of the listed items to be not applicable, they may request a waiver and provide sufficient justifications to support their request.

The applicant is further advised that a Ts'uubaa-asatx Development Permit must be obtained before any improvement or construction work on Ts'uubaa-asatx Lands may begin, irrespective of whether or not a lease is applicable or has been executed. Any work constructed before obtaining the Ts'uubaa-asatx Development Permit is potentially illegal and is done at the applicant's or developer's own risk. If the applicant cannot produce satisfactory evidence to prove that any construction pre-Development Permit meets all Ts'uubaa-asatx laws and standards as defined in the ISC (INAC) Codes Standards and Guidelines, such work has to be removed and replaced, all at the applicant's own cost.

Throughout this guide requirements are numbered for reference.

1. Professional Seal and Signature [Conceptual and Final]. All submission reports, designs, drawings, calculations, specifications and technical documents shall bear the seal and signature of a Registered Professional (Professional Engineer or Registered Architect) qualified for the work.
2. Indigenous Services Canada (ISC or INAC) Standards [Conceptual and Final]. State on the design drawings that all work is designed to meet or exceed the INAC Standards as defined in the INAC Codes Standards and Guidelines. A copy of the INAC Codes-Standards and Guidelines is contained in the INAC General Information Package for Leasing, or may be obtained from INAC upon request. If work is proposed to be designed to standards other than the INAC Standards, provide certifications of equivalence from a Registered Professional and obtain preapproval from Ts'uubaa-asatx by providing justifications and a copy of the relevant section of the standard used.
3. General Plans [Conceptual and Final]. Provide:
 - (a) A Location Plan showing the geographical area of the proposed development and surrounding roads, highways and topographic features;
 - (b) A Layout Plan showing the Lease Area and legal description of the lands to be developed and the boundaries of Ts'uubaa-asatx lands and an outline of the footprint proposed development; and
 - (c) A detailed Site Plan showing all existing and proposed works, buildings, streets, lanes, highways, intersections, driveways, parking and loading areas, sidewalks, street lighting, utilities and utility easements, streams and other topographic features. The site plan will address native vegetation removal, replanting, and tree protection.
4. Off-Site Work [Conceptual and Final]. If work relating to the development is required to be constructed outside of the Lease Area or will encroach into private or allotted properties, obtain rights-



of-way or other legal permissions to accommodate the work. Show such rights-of-way or other permissions on design drawings.

5. Building Plans [Conceptual and Final]. Provide conceptual plan and elevations of proposed buildings [Conceptual] and detailed design drawings of architectural, structural, mechanical, plumbing, fire protection and electrical works [Final].

5. Schedule [Conceptual]. Provide a proposed schedule of construction and an estimated start and completion date.

7. Professional Certifications [Final]. Provide copy of relevant signed and sealed BC Building Code Schedules A, B-1 and B-2, or equivalent letters of assurance, on architectural, structural, mechanical, plumbing, fire suppression systems, electrical and geotechnical works for the proposed buildings.

8. Total Estimated Cost of Works and Services [Conceptual]. Provide total estimated cost of works and services excluding off-site works and services.

4.1 HAZRDOUS AREAS

9. Geotechnical Assessment [Conceptual]. Ts'uubaa-asatx may require an evaluation of safety and geotechnical reports prepared by a qualified professional (professional engineer or geoscientist to verify the viability of the development on site. Include the existing and proposed grades and their relations to the elevations on adjoining properties, and details of any necessary excavations.

10. 200 Year Flood Level [Conceptual]. Ts'uubaa-asatx may require an evaluation of overland flooding or high water table risk. State on the conceptual design drawing that the building habitable floor slab elevation is not less than 0.6 m above a 1:200 year flood level defined using climate change parameters. Within high water table areas, construction will require additional efforts in design, engineering, and site preparation.



5.0 LAND FILLING AND SOIL CONSERVATION

Land filling and the deposition of waste materials are not permitted on Ts'uubaa-asatx lands. However deposition of clean soil or fill is allowed with appropriate and approved permits from the land management department.

OBJECTIVES:

- To define procedures for managing the deposition of land fill and the conservation of soil on Ts'uubaa-asatx lands;
- To comply with all applicable Federal and Provincial legislation, policies, and best management practices; and
- By controlling the quality of land fill used, allow for the use of fill on Ts'uubaa-asatx lands while avoiding environmental and health impacts.

GOALS:

Goal	Indicator	Target
Only clean fill with no pollutants used on Ts'uubaa-asatx land.	Instances of fill containing environmental pollutants not meeting acceptable standards	Zero.

STRATEGIES:

- Prohibit the movement of contaminated soil onto Ts'uubaa-asatx lands.
- Prohibit the export of clean soil from Ts'uubaa-asatx lands.
- Regulate the movement of soil and other land fill on and off of Ts'uubaa-asatx lands through permitting.
- Consider development of a removal of trespassers law to assist in soil conservation by specifically identifying the deposition or removal of soil or other materials as a prohibited purpose.
- Establish standards and requirements for testing for contaminants of any soil being moved within or onto Ts'uubaa-asatx lands.
- Require environmental assessment before permitting including impacts on air and surface and subsurface water.
- Undertake monitoring of land filling operations to meet planning commitments, applicable environmental regulations, and Ts'uubaa-asatx laws.

11. All developers will conform to Ts'uubaa-asatx EOP No. 1 - Landfilling and Soil Conservation.



5.1 EOP NO. 1 - LAND FILLING AND SOIL CONSERVATION

Environmental Operating Procedure No. 1	EOP Revision: 01
Landfilling and Soil Conservation	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 1 of 2

SCOPE

The procedures outlined in this EOP address all land fill activities and movement of soil that has the potential to negatively impact the local environment on Ts'uubaa-asatx lands.

MATERIALS

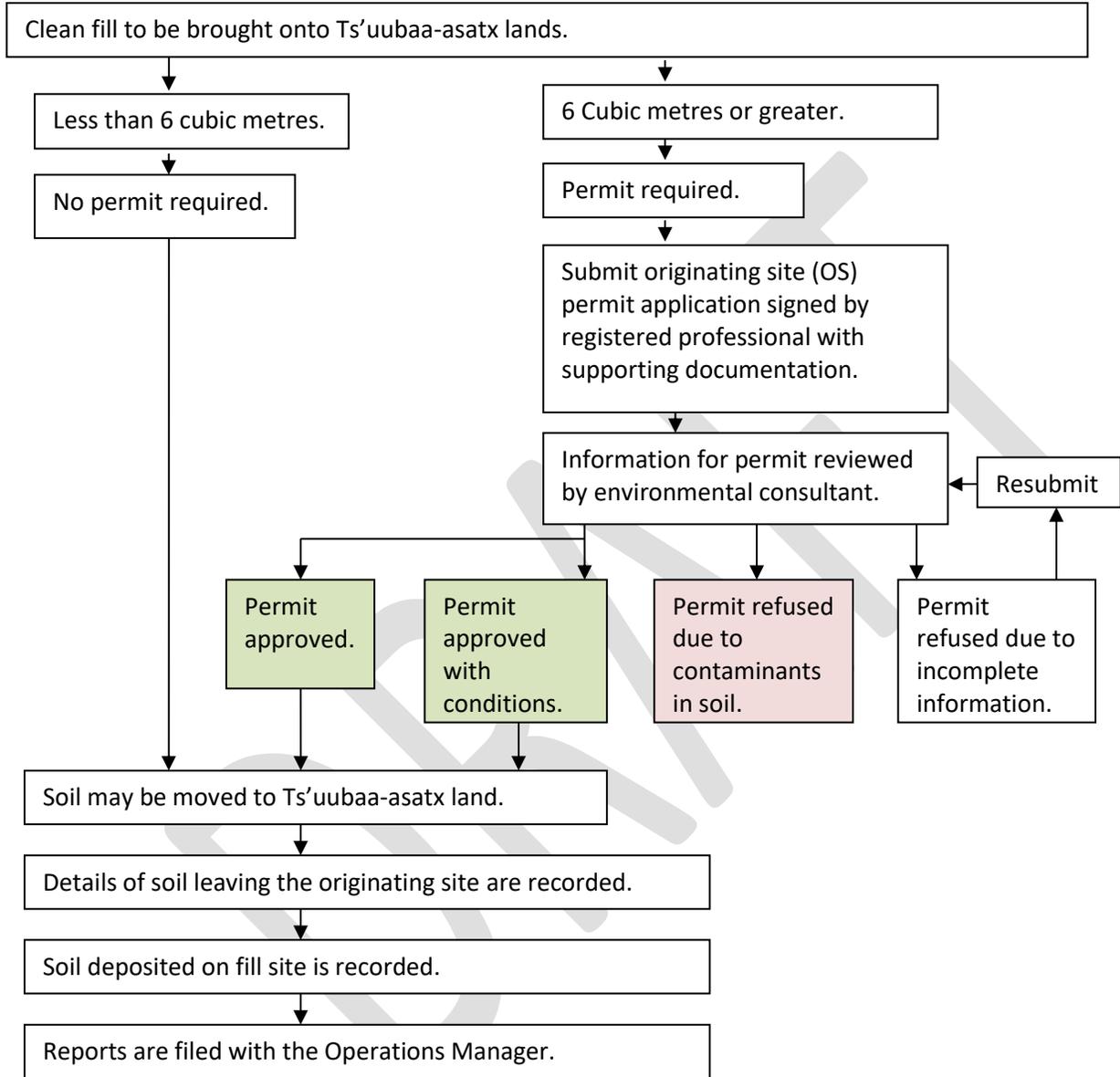
This EOP addresses all materials from within or without Ts'uubaa-asatx land deposited on Ts'uubaa-asatx land including aggregates and soil. No demolition waste, products of excavation, stumps from land clearing, or waste of any kind, is permitted to be deposited on Ts'uubaa-asatx lands unless authorized.

BEST PRACTICES

- Prior to depositing soil or other land fill or moving soil of a volume equal to or greater than 6 m³ within the bounds of Ts'uubaa-asatx lands a permit must be obtained from the Ts'uubaa-asatx Lands Department. This permit will require documentation of the source material, assurance of it being free of contaminants and an analysis of environmental impacts at the site of deposition.
- Top soil, as a valuable resource for our community, is not to be exported from Ts'uubaa-asatx land.
- Permitted movement of soil on Ts'uubaa-asatx lands will be subject to inspection and monitoring.



Environmental Operating Procedure No. 1	EOP Revision: 01
Landfilling and Soil Conservation	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 2 of 2



6.0 OUTDOOR AIR QUALITY

Ts'uubaa-asatx shares our air with our neighbours. We cannot independently assure good air quality, but we can work with our neighbours and we can do our part.

The main local source of poor air quality is particulates in the form of wood smoke.

Particulates are tiny dust particles that come in many shapes and sizes and from both natural and man-made sources. Particulates are often described as follows:

- Total suspended particulate – ranging from large to small dust particles;
- PM10 – particulate matter 10 micrometers or less in diameter e.g. road dust; and
- PM2.5 - particulate matter 2.5 micrometers or less in diameter e.g. smoke.

OBJECTIVES:

- Minimize negative health impacts within our community due to outdoor airborne pollutants including smoke and dust.

GOALS:

Goal	Indicator	Target
Safe and breathable air in our community.	Local incidents of unacceptable air quality.	Zero.

STRATEGIES:

- To identify local sources and locations of air quality issues.
- To provide mechanisms to reduce or control dust and smoke in the community while protecting human health and the environment.
- Provide appropriate disposal options for all materials in order to discourage the burning of any material other than clean wood in woodstoves.
- Consider enacting an outdoor fires law in order to specifically prohibit open burning within our community for the purpose of waste disposal.
- Prohibit open burning of timber, brush, or other clean wood unless under permit. Require commercial or industrial operators to provide a containment and burn control plan with any application to burn.
- Ensure that developments do not negatively impact local air quality, all industrial, commercial, or residential developments that are constructed on Ts'uubaa-asatx lands will be subject to controls on air emissions. This will necessitate appropriate design and management.
- Require the preparation of a containment plan and burn control plan for industrial burning.
- Exempt ceremonial or traditional fires from open burning regulations.
- Establish community and public communication and education programs to raise awareness of risks to human health from poor air quality and the actions required to eliminate the risk.

12. All developers will conform to Ts'uubaa-asatx EOP No. 2 - Air Quality.

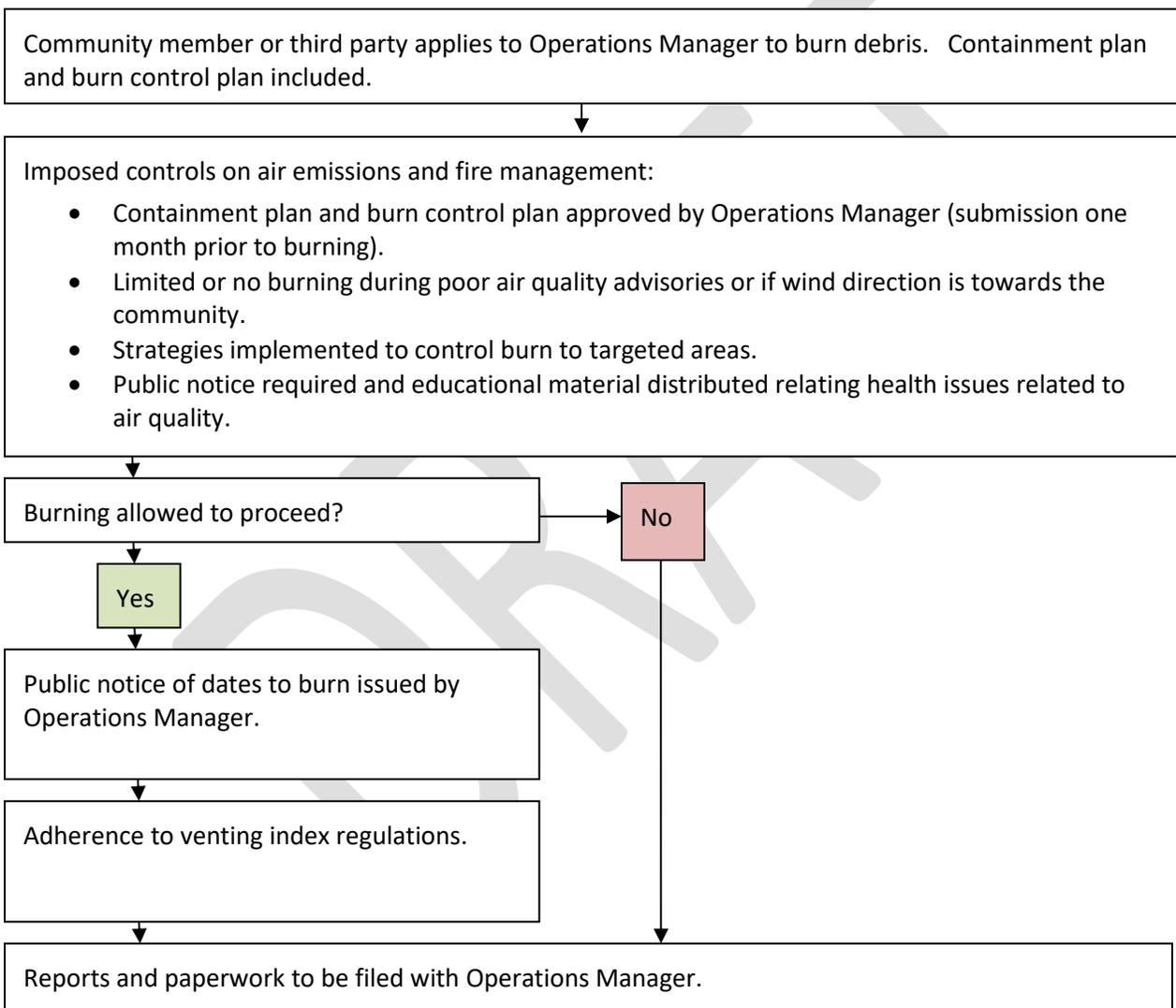


6.1 EOP NO. 2 - AIR QUALITY

Environmental Operating Procedure No. 2	EOP Revision: 01
Air Quality	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 1 of 3

BACKYARD AND INDUSTRIAL DEBRIS BURNING

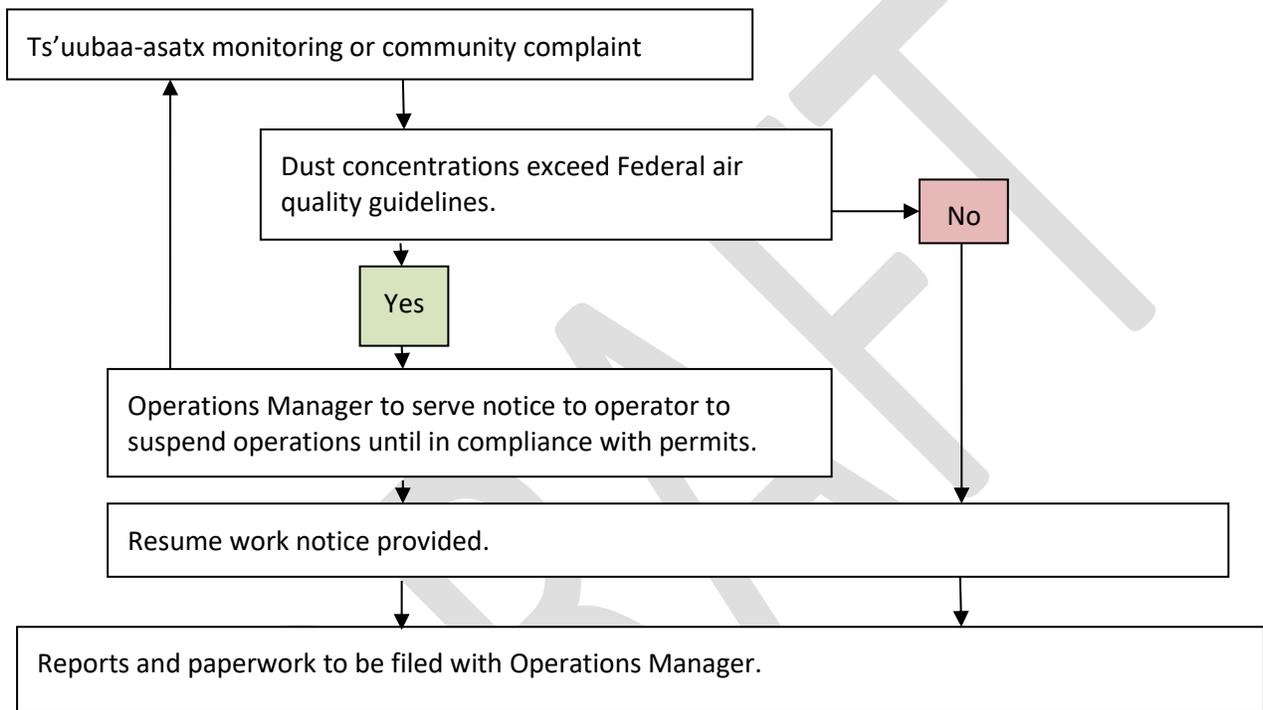
The EOP recognizes the need to eliminate or limit the practice of backyard and debris burning on Ts'uubaa-asatx lands which can be a significant source of air pollution. High concentrations of fine dusts and chemicals are produced when garbage and other non-clean wood products are burned.



Environmental Operating Procedure No. 2	EOP Revision: 01
Air Quality	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 2 of 3

AIRBORNE DUST

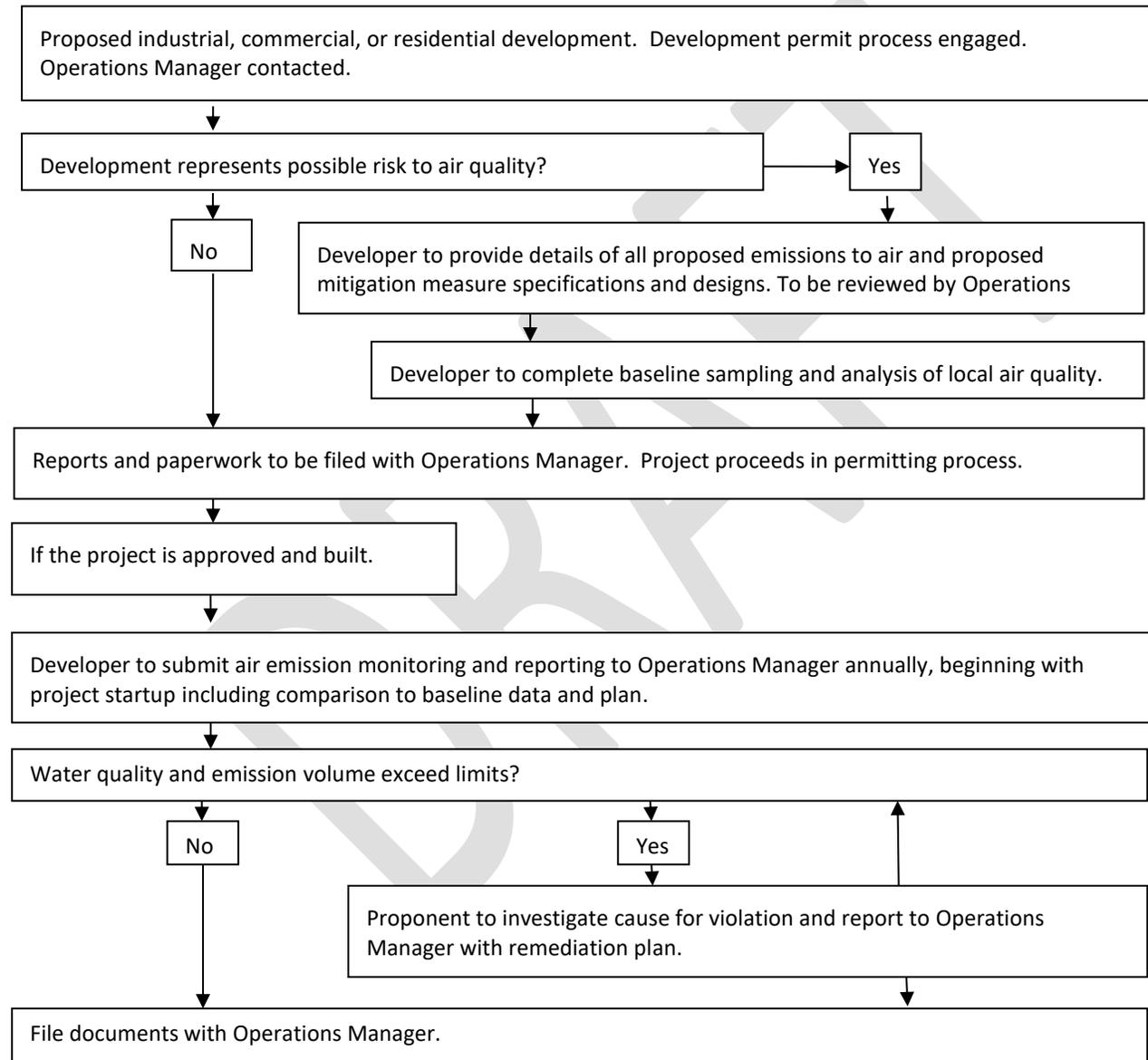
This EOP addresses the control and prevention of high concentrations of dust in the air.



Environmental Operating Procedure No. 2	EOP Revision: 01
Air Quality	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 3 of 3

CONSTRUCTION AND LAND DEVELOPMENTS

To ensure that future developments do not negatively impact local air quality, all industrial, commercial, or residential developments that are constructed on Ts'uubaa-asatx lands will be subject to controls on air emissions. This will necessitate appropriate design and management. The following EOP outlines procedures to ensure efficient control and environmental protection.



7.0 WATER MANAGEMENT

Water moves through Ts'uubaa-asatx lands as surface run-off and ground water.

Wastewater comes in several forms: storm water; sewage; and other water runoff referred to as non-point source water that travels across the landscape above and below ground. Wastewater can be a serious threat to our watercourses and subsurface water. While moving, runoff water will pick up dirt, residue, and other contaminants in its path, depositing them into the waterways.

Ts'uubaa-asatx lands are serviced by Lake Cowichan town drinking water and sewer systems.

Potential threats to water quality within Ts'uubaa-asatx lands are:

- Storm water run-off;
- Fuel spills and upstream spills;
- Existing and future industrial and residential developments; and
- Non-point sources such as agricultural run-off.

OBJECTIVES:

- To protect ground and surface water on Ts'uubaa-asatx lands;
- To identify possible sources of contaminants putting ground or surface water at risk; and
- To provide for response to spills or leaks that might threaten ground and/or surface water.

GOALS:

Goal	Indicator	Target
Clean and safe water for all.	Incidents of contamination of ground water or Cowichan Lake originating on Ts'uubaa-asatx lands.	Zero.

STRATEGIES:

- Create and update regularly an information system in order to protect surface and ground water including all environmental issues and risks. This would include an inventory of known contaminated sites (both remediated or not), storm water drainage systems, flood control infrastructure, non-point pollution sources, areas of potential environmental concern, and water courses and well locations.
- Require all industry or development projects to document conformance with Ts'uubaa-asatx water protection policies.
- Protect streams, water bodies, and riparian areas.
- Establish community and public communication and education programs to raise awareness of clean water issues.
- All developments will use town water and sewer.

13. All developers will conform to Ts'uubaa-asatx EOPs:

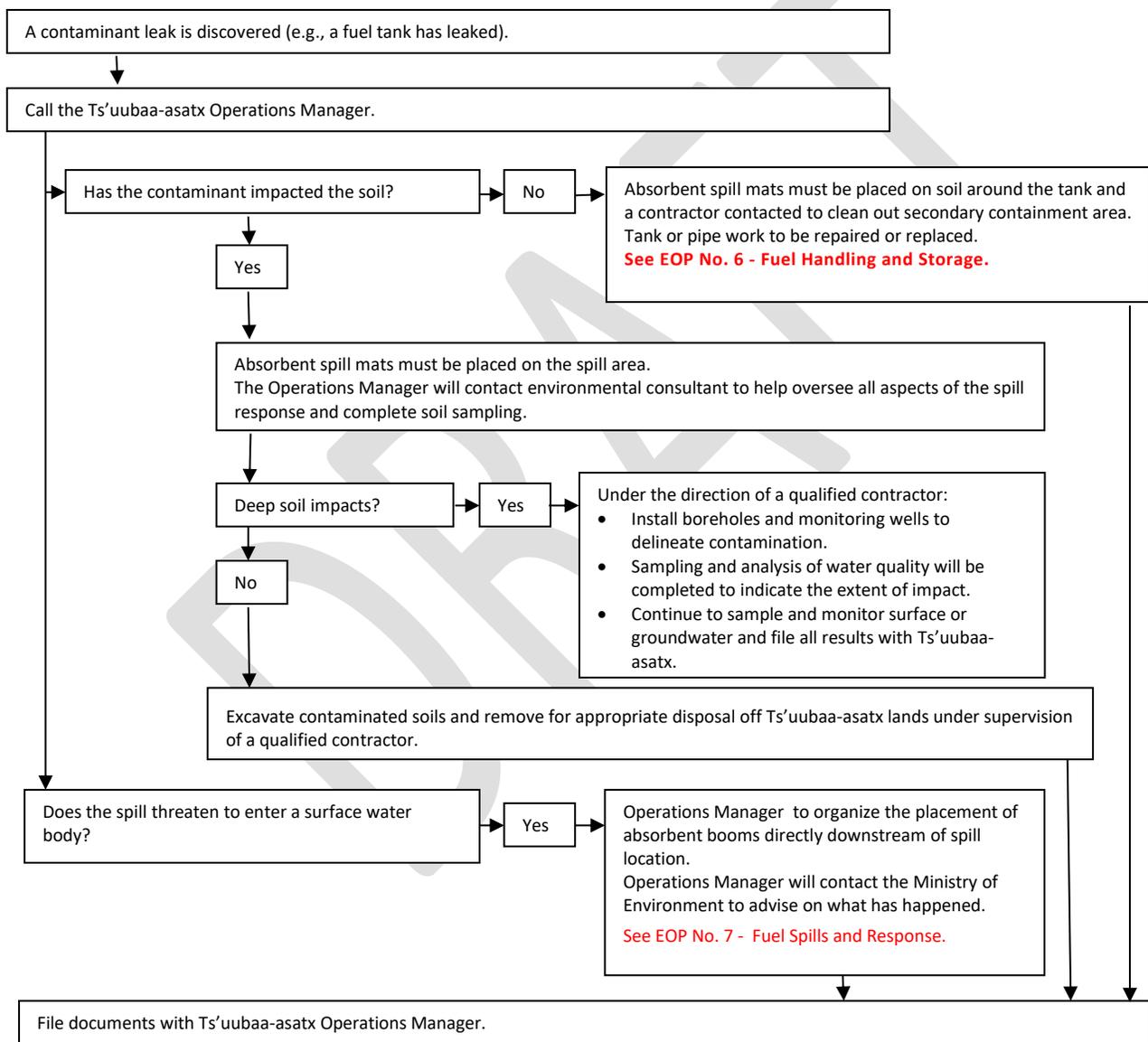
- EOP No. 3 - Leaks Threatening Water.



7.1 EOP NO. 3 - LEAKS THREATENING WATER

Environmental Operating Procedure No. 3	EOP Revision: 01
Leaks Threatening Water	Revision Date: June 30th, 2020
Responsibility: Causal Agency	EOP Page 1 of 2

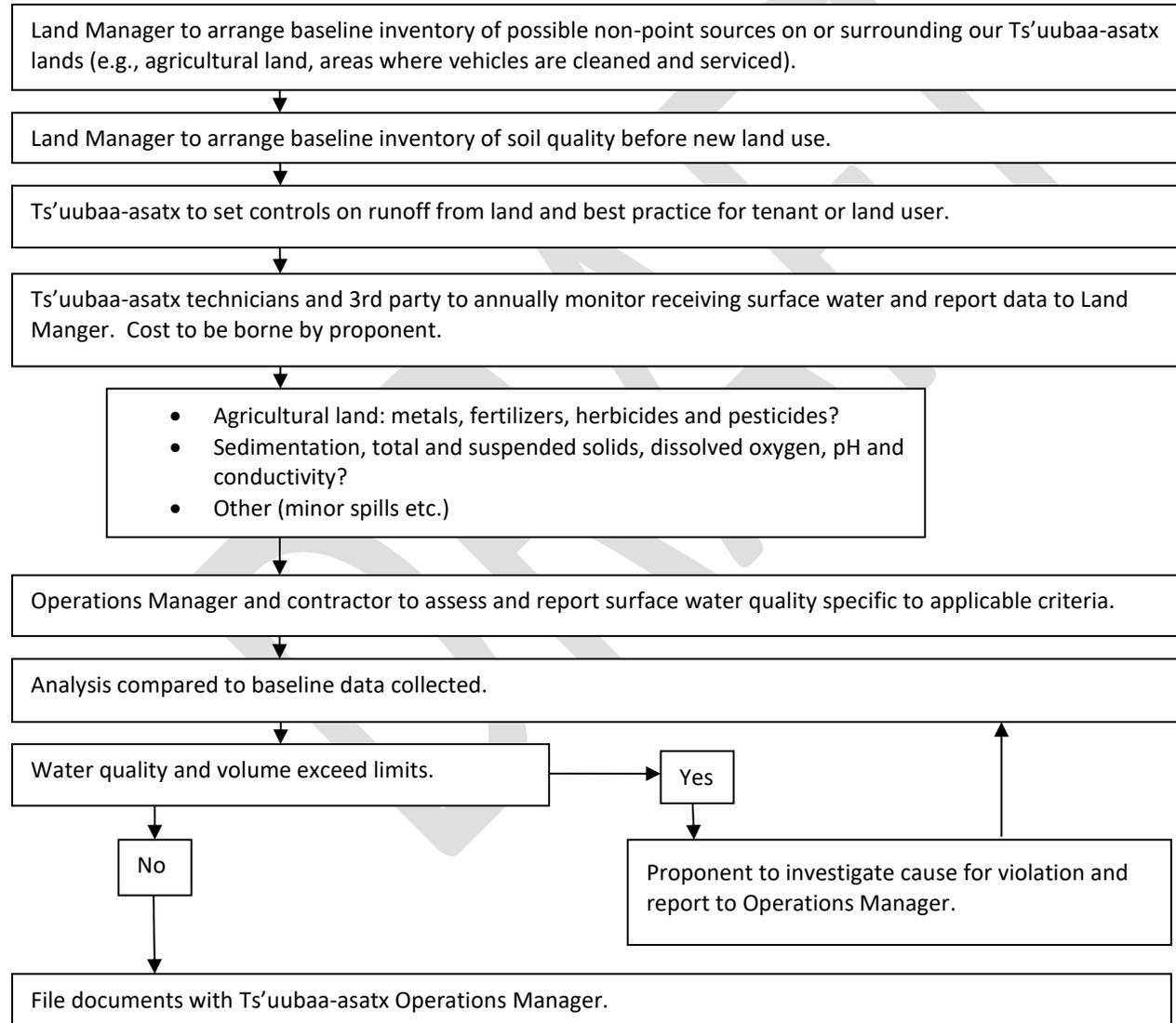
Release of contaminants from leaks, spills and other accidents can have a major impact on surface water quality in open ditches, streams, creeks, and rivers. Impacts on groundwater can affect drinking water in the local aquifer and wells and may result in the water being unfit for consumption. This EOP outlines a number of procedures to ensure that surface and groundwater are as protected as possible from accidental spills and leaks during current activities, and from all future development on Ts'uubaa-asatx.



Environmental Operating Procedure No. 3	EOP Revision: 01
Water and Wastewater Management	Revision Date: June 30th, 2020
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NON-POINT SOURCES

A non-point water source is one that has no obvious or visible location where the waste water enters a local surface water body (river or creek) or directly into the ground. The non-point runoff comes from rain and other water washing over land surface and picking up any contaminants that may exist on the land surface. To implement a system for ensuring that non-point sources on or around Ts'uubaa-asatx lands are managed, the following EOP outlines procedures to ensure efficient control and environmental protection.



7.2 STORM WATER MANAGEMENT

14. All developers will conform to Ts'uubaa-asatx EOPs:

- EOP No. 4 - Storm Water Management

15. Storm water Management Plan [Conceptual]. Provide a storm water management plan showing how the post-development Minor (1:2 Year) and Major (1:200 Year) flows are to be managed. Show grading of lot and in-conduit, in-ditch, and overland flow paths.

16. Storm water Disposal by Drywell [Conceptual]. If storm water runoff is proposed to be disposed of by drywells, verify by calculations that the drywells have the capacity to dispose of a Minor (1:2 year) storm flow.

17. Storm water Disposal to Surface Water Body [Conceptual]. If any storm water runoff is proposed to be discharged into an adjacent surface water body, provide details of sediment control devices and confirm permission with Department of Fisheries and Oceans and Environment Canada.

18. Storm water Disposal to Roadside Ditch [Conceptual]. If any storm water runoff is proposed to be discharged into an adjacent roadside ditch, confirm permission with the owner of the roadside ditch.

19. Detailed Drainage Design Drawings [Final]. Provide detailed design drawings for all proposed drainage works servicing the development. In particular, show horizontal and vertical profiles of storm sewers and ditches, offsets of storm sewer from reference objects, material specifications, sewer slopes, invert elevations, manhole rim elevations, trench details, and details of manholes, cleanouts, oil and debris separators, drywells, silt traps and detention ponds.

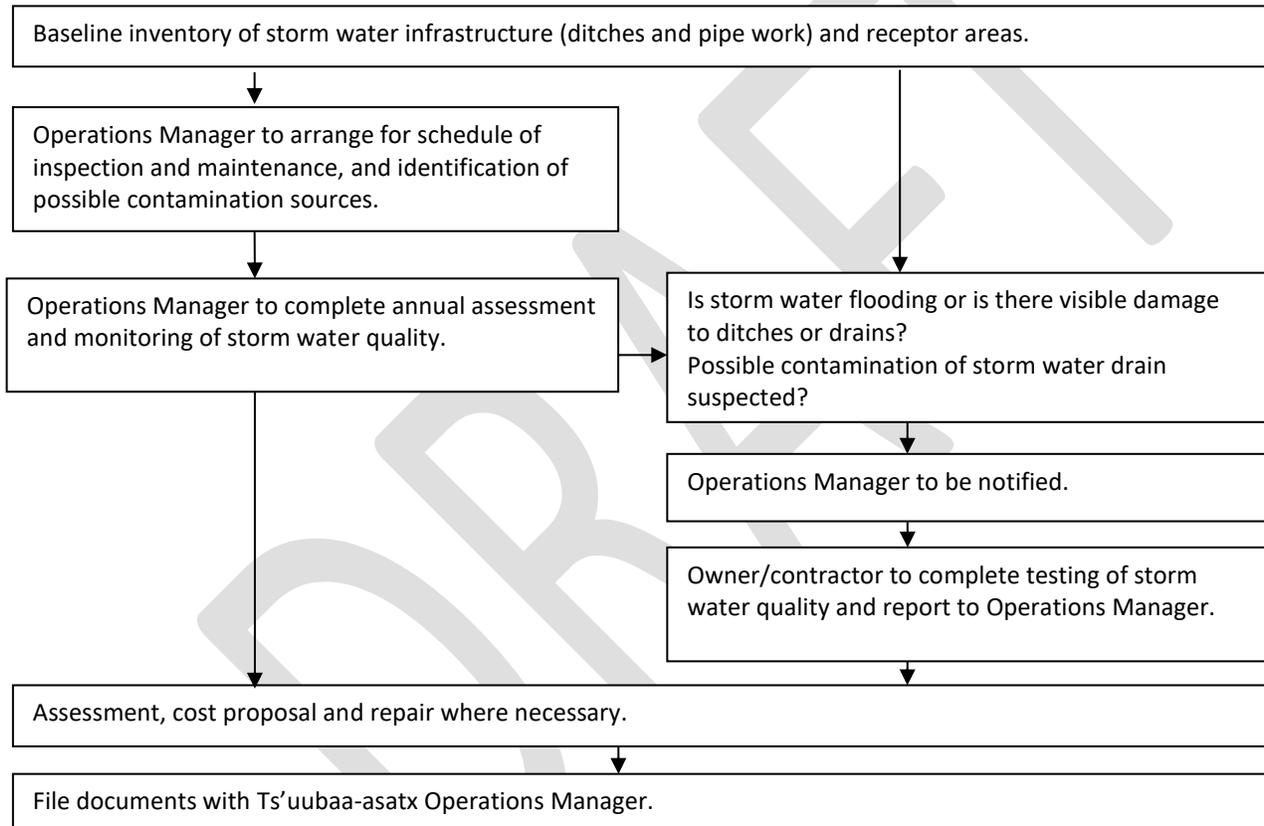


7.3 EOP NO. 4 - STORM WATER MANAGEMENT

Environmental Operating Procedure No. 4	EOP Revision: 01
Storm Water Management	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 1 of 2

STORM WATER

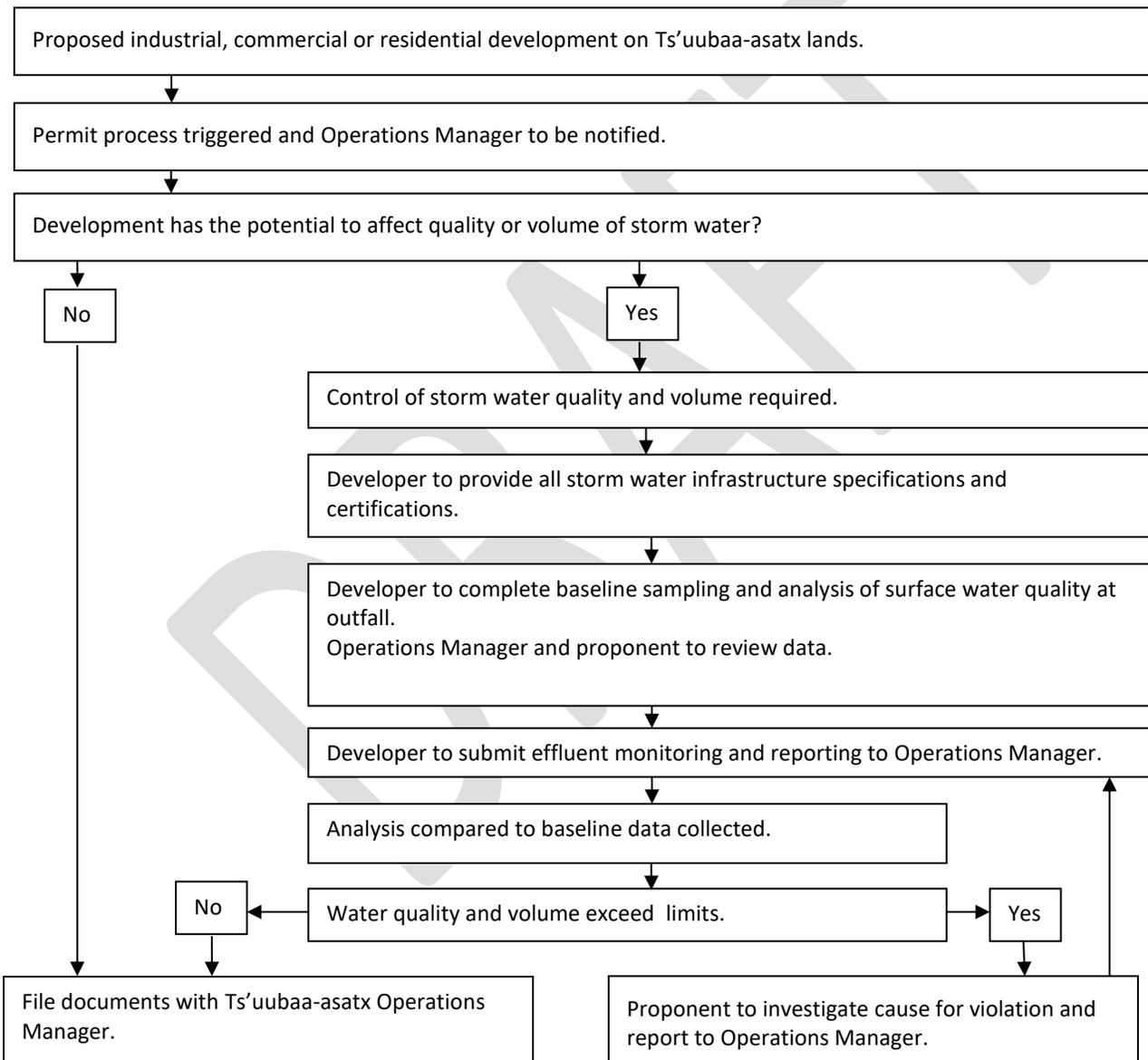
Storm water is produced from rainfall and snow melt on the ground surface. The resulting water drains to the installed drainage ditches or storm sewer system and ultimately into the natural environment. To ensure that the storm water system is in proper working order, and that water from the drainage system does not have a negative impact on the receiving creek or river, this EOP has outlined a number of procedures to be implemented.



Environmental Operating Procedure No. 4	EOP Revision: 01
Storm Water Management	Revision Date: June 30th, 2020
Responsibility: Operations Manager	EOP Page 2 of 2

CONSTRUCTION AND INDUSTRIAL/RESIDENTIAL DEVELOPMENTS

Any industrial, commercial or residential developments that may be constructed on Ts'uubaa-asatx lands will require controls on storm water quality and volume. To implement a system for ensuring that future developments do not negatively impact local surface water bodies on Ts'uubaa-asatx lands they will require appropriate design and management. The following EOP outlines procedures to ensure efficient control and environmental protection.



7.4 DRINKING WATER SERVICE DESIGN

20. Conceptual Water Design [Conceptual]. Indicate domestic and fire flow requirements, and the proposed water source to meet these demands. Indicate the minimum fire flow available to the development and the minimum pressure available under Maximum Day Plus Fire Flow conditions.
21. Conceptual Water Design Drawings [Conceptual]. Provide conceptual design drawings to show the existing and the proposed water works to service the development.
22. Water Supply from Existing System [Conceptual]. Water supply is to be obtained from the existing municipal water distribution system. Verify by network analysis calculations or other means that the existing water distribution system has the capacity to deliver the required domestic and fire flow to the development.
23. Hydrant Locations [Conceptual]. Indicate sufficient hydrants on the conceptual design drawings such that no current or future proposed building is more than 75 m from a hydrant.
24. Watermain Looping [Conceptual]. Loop watermains whenever possible to provide redundancy and improve fire flow.
25. Water Service Agreement [Conceptual and Final]. Provide letter of intent or draft servicing agreement [Conceptual] and signed servicing agreement [Final] with the owner of the existing water system for providing water service to the development.
26. Decommissioning Plan for Abandoning Existing Well [Conceptual]. Provide a decommissioning plan if any existing well is to be abandoned.
27. Detailed Water Design Drawings [Final]. Provide detailed design drawings for all proposed water works and treatment facilities to service the development. In particular, show details of connection point to an off-site distribution system, horizontal and vertical profiles of watermains, offsets of watermain from reference objects, horizontal and vertical separation with a sewer, material specifications, trench details, water meters, and details of appurtenances such as valves, air valves, chambers, hydrants, thrust blocks and bearing areas.
28. Disinfection of New Watermain [Final]. Indicate on design drawing method and procedure for disinfecting a new watermain. Indicate on design drawing method of disposal of chlorinated water after completing watermain disinfection such that aquatic life will not be adversely impacted.
29. Service Connection Details, Standards and Identification [Final]. Show on design drawings water service connection details and specify service connections to meet the Canadian Plumbing Code. Specify on design drawings blue marker stakes for identification of any future water service connections.

7.5 SANITARY SERVICE DESIGN

30. Conceptual Sanitary Design Drawings [Conceptual]. Provide conceptual design drawings to show the existing and the proposed sanitary facilities to service the development.
31. Sanitary Service from Existing System [Conceptual]. Verify, through network analysis calculations or other means, that the existing sewer system has the spare capacity to service the development.
32. Sanitary Service Agreement [Conceptual and Final]. Provide a letter of intent or draft servicing agreement [Conceptual] and signed servicing agreement [Final] with the owner of the existing water system for providing sanitary service to the development.
33. Oil Separator [Conceptual]. Provide oil separator for discharge to either the sanitary or the storm system from restaurant, gas station, machine shop, and anywhere oil can be discharged or spilled.



34. Decommissioning Plan for Abandoning Existing Septic Facilities [Conceptual]. Provide a decommissioning plan if any existing septic facilities are to be abandoned.
35. Detailed Sanitary Design Drawings [Final]. Provide detailed design calculations and drawings for all proposed sanitary works to service the development. In particular, show horizontal and vertical profiles of the sewers and forcemains, offsets of sewer and forcemain from reference objects, material specifications, sewer slopes, invert elevations, manhole rim elevations, sewer trench details, forcemain thrust block bearing areas, and details of manholes, cleanouts, oil separators, air valves and chambers.
36. Effluent Permit Limits [Final]. Verify that the Effluent Quality Parameters of discharge to a disposal or reclaimed water use facility do not exceed the Waste Management Act Municipal Sewage Regulation limits for the particular facility.
37. Sewage Treatment Plant [Final]. Provide detailed design and specifications for sewage treatment plant and emergency storage basin.
38. Service Connection Details, Standards and Identification [Final]. Show on design drawings sewer service connection details. Provide inspection chamber. Specify service connection to meet the Canadian Plumbing Code. Specify on design drawings red marker stakes for identification of any future sewer service connections.

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8.0 ROADS, ACCESS, PARKING

39. Parking [Conceptual]. Provide the estimated number of parking spaces required for the development and the plans to accommodate them.
40. Traffic Volume [Conceptual]. Provide the estimated volume of traffic in trips per day that will be generated by the development.
41. Conceptual Road Design Drawings [Conceptual]. Provide conceptual design drawings to show the existing and the proposed access and road facilities to service the development, including entry and exit routes and access by fire and emergency vehicles.
42. Cul-de-Sac Length [Conceptual]. Limit length of any cul-de-sac to 150m maximum in consideration of emergency access and deployment of firefighting equipment. See also EOP No.5 - FireSmart Design.
43. Utilities in Adjacent or Public Roads [Conceptual]. If utilities servicing the development are to be laid crossing or within the fronting road allowance, confirm permission with the owner of the fronting road (adjacent allotment holder, Ts'uubaa-asatx, or the provincial government).
44. Bridge Across Creek [Conceptual]. Confirm permission from Department of Fisheries and Oceans for access bridge across river or creek.
45. Road Access Across Highway, Pipeline, or Railroad [Conceptual]. Confirm permission and construction requirements with appropriate body.
46. Road Access through Ts'uubaa-asatx Environmental Protection zone [Conceptual]. Work with Ts'uubaa-asatx for appropriate construction requirements.
47. Access Permit [Conceptual and Final]. Provide letter of intent [Conceptual] and access permit, easement or right-of-way [Final] from the owner of the fronting road (adjacent allotment holder, Ts'uubaa-asatx, or the provincial government) for allowing access to the development.
48. Detailed Parking Design [Final]. Provide detailed design calculations and drawings for all proposed parking areas and spaces.
49. Detailed Road Design Drawings [Final]. Provide detailed design calculations and drawings for all proposed road and access to service the development.
50. Road Details [Final]. Show design speed, horizontal and vertical road profile, vertical curve data, cross sections, intersection details and pavement structure on design drawings.
51. Signage [Conceptual and Final]. Show the proposed [Conceptual] and actual [Final] location, size, height, colour, lighting and orientation of all signs.



9.0 FIRE PROTECTION

Ts'uubaa-asatx takes a multiple program approach to the safety and security of our community. For each potential hazard we assess our vulnerability and risks. With our risks defined, we plan for preparedness, response, and recovery, and work to reduce or mitigate our risks.

OBJECTIVES:

- In the face of risk associated with wildfire and structural fire, to protect the lives, safety, and health of Ts'uubaa-asatx members, residents, and guests and minimize damage to property.

GOALS:

Goal	Indicator	Target
High level of community safety.	Loss of life or injury.	Zero.

STRATEGIES:

- Within the context of the *Ts'uubaa-asatx All-hazards Emergency Management Plan*, maintain a high level of preparedness within the community.
- Maintain a strong working relationship and maintain in place the agreement with the Town of Lake Cowichan to provide fire response services.
- Ensure that all development and construction on Ts'uubaa-asatx lands conforms to best practices and Ts'uubaa-asatx requirements.

The following are requirements with regard to fire protection for all subdivision, development, and servicing projects.

52. Fire Protection Service Agreement [Conceptual and Final]. Provide letter of intent [Conceptual] and service agreement [Final] with either Ts'uubaa-asatx or the Town of Lake Cowichan for providing fire protection service to the development.

53. Fire preparedness. All structures must have alarms for smoke, heat, and carbon monoxide installed using best practices. All structures must demonstrate FireSmart building design and landscaping. All subdivision, development, and servicing projects will conform to Ts'uubaa-asatx EOP No. 5 FireSmart Design.

9.1 FIRESMART DEVELOPMENT AND CONSTRUCTION

The FireSmart Canada program is designed to empower the public and increase community resilience to wildfire across Canada. Ts'uubaa-asatx is a Recognized FireSmart Community. We are committed to reducing the risks associated with living within a forest ecosystem in which fire is a natural and necessary element.

Ts'uubaa-asatx policy with regard to FireSmart development and construction makes it clear to members, partners, developers, and contractors what is expected of them in their development work on Ts'uubaa-asatx lands.

54. All subdivision, development, and servicing projects will conform to Ts'uubaa-asatx EOP No. 5 FireSmart Design



9.2 EOP NO. 5 - FIRESMART DESIGN

Environmental Operating Procedure No. 5	EOP Revision: 01
FireSmart Design	Revision Date: June 30th, 2020
Responsibility: Developers	EOP Page 1 of 2

SCOPE

This EOP articulates FireSmart best practices which are mandatory in all subdivision, development and construction projects on Ts'uubaa-asatx lands.

BEST PRACTICES - SUBDIVISION DESIGN

- Buildings to be set back 10m from the crest of any hill that represents a possible wildfire hazard.
- Drive-through access or turn-arounds large enough to accommodate fire response vehicles.
- Road widths adequate to accommodate fire response vehicles free of obstruction by parked vehicles.
- Emergency vehicle access to and around all buildings.
- When planning new developments, underground power line systems should be considered. Where such a system is not feasible, poles of non-combustible materials should be used and/or overhead utility lines should have a clearance of at least 3m from vegetation.

BEST PRACTICES - BUILDING CONSTRUCTION

During construction of houses and other buildings, all waste construction materials including brush and land clearing debris needs to be cleaned up on a regular basis to minimize the potential risk. No combustible materials should be left at the completion of construction.

Prior to construction of any wood frame buildings, there must be fire hydrants within operating range.

Upon completion all buildings will have a clear and visible street number, either lit or reflective.

Roofing is the most vulnerable surface to wildfire. With regard to roofing:

- Roof designs will be simple with minimal opportunities for debris accumulation.
- Roofs will be constructed of high resistance (Class A as defined in the BC Building Code) materials such as clay tile, concrete tile, metal, or asphalt shingles. Wood shingles or shakes are not permitted.
- All joints and junctions must be flashed with non-combustible material.
- All vents must be screened and composed of non-combustible material.
- Incorporate boxed-in or soffit eaves.
- Chimneys must have spark arresters.



Environmental Operating Procedure No. 5	EOP Revision: 01
FireSmart Design	Revision Date: June 30th, 2020
Responsibility: Developers	EOP Page 2 of 2

Siding is the second-most vulnerable surface.

- Any material used for exterior wall finishes shall be fire resistant such as stucco, metal siding, brick, cement shingles or boards, concrete block, poured concrete, logs or heavy timbers and rock as defined in the BC Building Code. Wood and vinyl siding is not permitted.
- All vents must be screened and composed of non-combustible material.
- Tightly fitted and fire rated exterior doors and garage doors and multi-pane tempered glass windows are required.
- Gutters and down-spouts must be of non-combustible material and fitted with metal mesh guards.

With regard to decks and porches:

- Recommended are solid surface, non-combustible material decks and rails.
- Deck surfaces should be fully enclosed with non-combustible sheathing on the underside.
- If using combustible materials, non-combustible flashing is to be used at all places where the deck meets the wall.
- If using slotted deck surfaces, access from below is required.

With regard to fencing:

- Fences of flammable material should not connect to the buildings. Instead use non-combustible gates or fence segments within 1.5 metres of the building.

With regard to out-buildings:

- All out-buildings which do not meet the above building construction design features must be 10m from the home or building.
- Firewood sheds are to be supplied and situated at least 10m from the building.
- Large propane tanks are preferred to be at least 10m from the building.

LANDSCAPING

Landscaping surrounding buildings will adhere to the following:

- FireSmart Zone 1a - A non-combustible surface shall extend to a 1.5 metre horizontal distance around the principal building, dwelling, accessory buildings and any attachments such as decks.
 - Non-combustible materials such as gravel, brick, or concrete are examples of materials that can be used around the home in this zone.
- FireSmart Zone 1b - Extending out from the non-combustible zone to a total horizontal distance of 10 metres, this zone shall include fire-resistant plants and materials.
 - All plantings shall follow the current FireSmart BC Guide to Landscaping.
 - Precludes coniferous trees and any trees overhanging the principal building.
- FireSmart Zone 2 - Include an additional 30m horizontal distance zone in which deciduous trees and plants are preferred but in which coniferous trees may exist at greater than 3m crown spacing and with branches pruned to above 2m from the ground.



10.0 SAFE FUEL HANDLING AND STORAGE

Improper fuel handling can result in serious injury or death caused by fire, explosion, or asphyxiation. Fuel released into the environment can contaminate soil and groundwater resulting in costly cleanups and serious environmental damage. Contaminated groundwater supplies may sicken people and animals who unknowingly drink the polluted water. Additionally, gasoline vapours are harmful to human health even at low concentrations and are potentially dangerous at high concentrations.

This section addresses the reduction and mitigation of risk associated with fuel handling and storage to soil and ground water on Ts'uubaa-asatx lands.

OBJECTIVES:

- To identify and predict risks, and prevent, minimize, and mitigate environmental impacts from improper storage and handling of fuel;
- To develop procedures that ensure the proper transport, handling and storage of gasoline, diesel, and kerosene fuels;
- To develop procedures that ensure prompt and effective response to fuel spills and leaks on Ts'uubaa-asatx lands;
- To develop and promote procedures to ensure that children do not have access to stored fuels; and
- To provide community members and businesses operating within Ts'uubaa-asatx lands with the information necessary to carry out safe fuel handling, storage, and disposal.

GOALS:

Goal	Indicator	Target
Eliminate fuel leaks and spills on Ts'uubaa-asatx lands.	Incidents of human exposure and soil contamination from spilled or leaked fuel over 10 litres.	Zero.
Full compliance with storage and handling practices.	Incidents of non-conforming fuel storage and fuel handling systems.	Zero.

STRATEGIES:

- Provide effective procedures and reporting mechanisms for the handling and storage of fuels.
- Dictate fuel storage, transportation, and dispensing specifications and procedures for the inspection of storage tanks.
- Create and maintain procedures for the prompt and effective response to fuel spills and leaks on Ts'uubaa-asatx lands.
- Create and maintain an environmental management information system to record pertinent information on fuel storage. This would include an inventory of fuel storage tanks and monthly inspection logs. The inventory would include environmental issues and risks by mapping fuel storage locations including above ground tanks, underground tanks, propane tanks, and distribution systems.
- Undertake a regular and ongoing inspection system that ensures that all existing and new fuel storage tanks meet federal codes for design and containment and to prevent spills and leaks.



- Maintain logs of monthly inspections of above-ground tanks, the impervious surface around them, and the secondary containment structures.
- Initiate processes to ensure that all new and existing fuel storage tanks on Ts'uubaa-asatx lands meet federal codes for design and containment, are in good condition and have appropriate spill mitigation measures in place.
- Require operators to maintain a spill preparation and response plan with material safety data sheets (MSDS) for each fuel type stored and handled.
- Ensure the disposal of waste fuel in the proper manner and at an approved location.
- Have an ongoing public communication program that will provide community members with technical information and assistance on the safe handling and storage of fuels.

55. All developers will conform to Ts'uubaa-asatx EOPs:

- EOP No. 6 - Fuel Handling and Storage
- EOP No. 7 - Fuel Spills and Response

DRAFT



10.1 EOP NO. 6 - FUEL HANDLING AND STORAGE

Environmental Operating Procedure No. 6	EOP Revision: 01
Fuel Handling and Storage	Revision Date: June 30th, 2020
Responsibility: All persons or handling agency	EOP Page 1 of 4

SCOPE

- The procedures outlined in this EOP address:
 - Prevention and mitigation of environmental impacts from spills and leaks from above ground storage tanks, underground storage tanks (no longer permitted), truck box (tidy) tanks, and small fuel cans;
 - Transportation and dispensing of fuel; and
 - Environmental procedures for fuel tank inspections.

MATERIALS

- Gasoline, jet fuel, diesel fuel, heating oil;
- Propane and natural gas; and
- Kerosene, white gas, camping fuel, and butane.

BEST PRACTICES

- Containers shall be appropriate for the type of fuel, meet standards of Underwriters Lab of Canada (ULC) or Canadian Standards Association (CSA), be filled to a safe level, and capped;
- Tanks shall be well maintained and free of rust, severe dents, and leaks;
- Caution and due diligence shall be used to prevent spills, check weekly for spills and leaks;
- Tanks shall be clearly labeled with contents and hazards;
- Material safety data sheets (MSDS) for all products shall be available to all involved in storage, handling, and dispensing;
- Storage buildings must be vented and have one 20-BC fire extinguisher or two 10-BC fire extinguishers, properly maintained and tagged;
- Dispensing sites shall be posted as no smoking and have one extinguisher available for use;
- Fuel tanks shall be located a minimum of 30.5 m (100 ft) away from groundwater wells or surface water;
- Containers shall be stored at least three metres away from any building or in a building designed for storage;
- Drums and containers shall be stored upright and dispensed upright using an approved pump;
- All small containers <230L (50 gallons), (jerry cans, pails, and drums) that are stored at or near homes must be kept a minimum of 25m from roadways and pedestrians and out of direct sunlight. They are to be protected from potential impact and in a ventilated shed under lock and key;
- No fuel shall escape during normal transport and handling; and
- A spill kit, appropriate to the type of fuel and volume contained, shall be kept easily accessible.



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Fuel Handling and Storage	Revision Date: June 30th, 2020
Responsibility: Fuel handling agency	EOP Page 2 of 4

FUEL STORAGE TANK GENERAL REQUIREMENTS

- Applicable to above ground and underground storage tanks and truck box fuel tanks.
- Corrosion proof and appropriately designed single or double walled steel or fiberglass tanks;
- Secondary containment (110% capacity of storage tank) is required for above ground tanks so as to capture leaks and spills from the tank;
- A dispenser sump must be in place to collect leaks and drips from fuelling nozzles;
- Overfill protection device required to avoid overfilling of tanks and subsequent leakage of fuel;
- Weekly checks must be completed on tanks to ensure that product has not been lost; and
- Emergency spill kit available and close to the tank location.

Truck Box Fuel Tanks

- Shall be kept a minimum of 12 m from buildings and be labeled with product name and a “Flammable – Keep Fire and Flame Away” warning;
- If a fuel tank is being stored in an enclosed truck box, labels shall be posed in a visible place on the exterior of the vehicle and one 20-BC fire extinguisher must be kept in the enclosed unit;
- A protective mat or sheet of plywood shall be placed under the tank to protect it from wear and damage;
- If the tank is larger than 230 L (50 gallons), a secondary containment for the truck box is required, as well as a spill cleanup kit;
- Proper connection between the tank and truck box is needed to prevent static charges during dispensing;
- Secure nozzles in the back of pickups with some means of drip containment; and
- Tanks shall have a pressure cap relief that meets manufacturer specifications.

Fuel Trucks and Large Fuel Containers

- Shall be kept a minimum of 12 m from buildings and be labeled with product name and a “Flammable – keep Fire and Flame Away” warning;
- Shall be kept a minimum of 12 m from ground wells and surface water;
- Tanks shall have separate fill and vent openings;
- One 20-BC fire extinguisher or two 10-BC fire extinguishers, properly maintained and tagged and kept with the tank;
- All above ground storage tanks must be installed on firm foundations designed to minimize uneven settling and corrosion, and to prevent the design stress of the tank from being exceeded; and
- No gravity-feed systems will be used.



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TRANSPORTATION

- Fuel trucks and trailers used to transport fuel tanks on public roads meet basic motor vehicle requirements, such as being in good operating condition including brakes and lights, and not exceeding maximum load limitations;
- Fuel trucks must meet commercial vehicle inspection standards;
- Containers that hold more than 30 L (6.5 gallons) of fuel must abide by transportation of dangerous goods (TDG) requirements;
- If the combined fuel load is more than 2,000 L (440 gallons) a shipping document must be filled out for the cargo, the driver of the vehicle must have proof of transportation of dangerous goods (TDG) training, and the load must have a TDG placard;
- Depending on the type of fuel being transported, a B.C. Ministry of Environment manifest may be required;
- Fuel drums must be stacked end on end and separated by dunnage and transported in vehicles with sides or sideboards;
- All loads shall be securely tied down or contained to prevent them from tipping or falling out of the vehicle;
- Stationary tanks and tanks on trailers shall be mounted to a skid or securely mounted in a cradle on a fire-resistant foundation; and
- All vehicles transporting fuel must have and maintain a spill response kit, response procedures, and a spill response plan.

DISPENSING

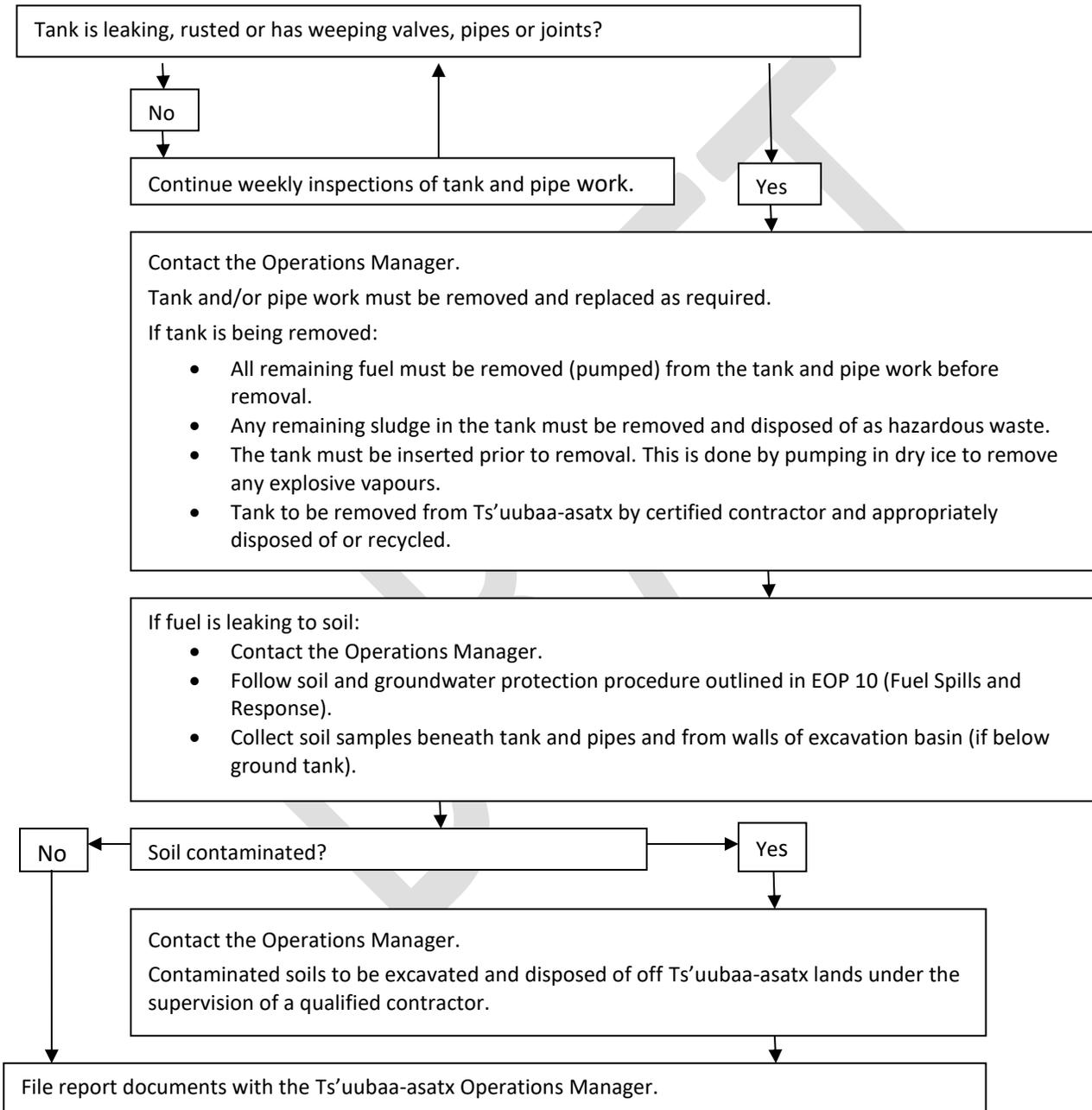
- Ensure dispensing procedures are clearly written and posted for all operators to see;
- Signs indicating that ignition must be turned off and smoking is not permitted while refueling vehicle must be visible to every operator approaching the dispenser;
- Always use a pump, preferably an electric one, when dispensing from a drum;
- Hoses and nozzles used for dispensing shall be in good repair and conform to regulation;
- Always use a nozzle which requires continuous application of manual pressure, or an automatic shut-off nozzle;
- Continually supervise filling operations to avoid overfilling;
- Always store and secure the fuel hose above the pump to prevent siphoning;
- Keep drums upright and avoid dispensing from a horizontal drum; and
- Do not fuel or service equipment within the riparian management area of a stream or wetland or within 30m of a lakeshore unless equipment is handheld or operation is required for firefighting or to move broken down equipment.



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Fuel Handling and Storage	Revision Date: June 30th, 2020
Responsibility: Fuel handling agency	EOP Page 4 of 4

ENVIRONMENTAL PROCEDURES FOR FUEL TANK INSPECTIONS

Tanks must be manually dipped and inspected on a weekly basis, by the owner, to determine the volume of fuel in the tank and detect any leaks or damage to the tank or pipes.



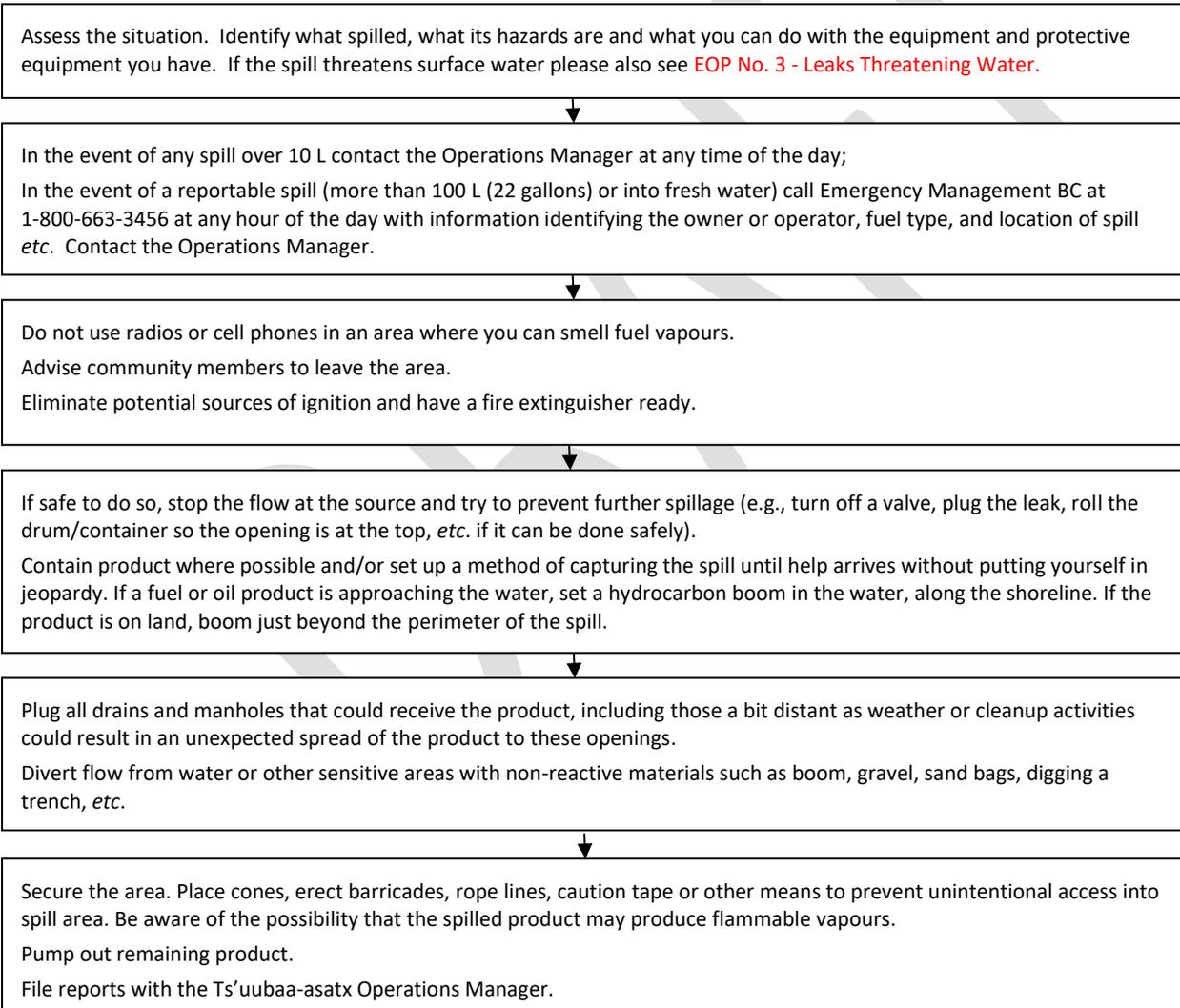
10.2 EOP NO. 7 - FUEL SPILLS AND RESPONSE

Environmental Operating Procedure No. 7	EOP Revision: 01
Fuel Spills and Response	Revision Date: June 30th, 2020
Responsibility: Causal Agent	EOP Page 1 of 2

FUEL SPILL PREPARATION

- Anyone handling fuel is responsible for the effective cleanup of any spills or leaks.
- Anyone transporting, handling, or storing fuel of volumes more than 100L (or 22 gallons) will:
 - Prepare a spill prevention and response plan; and
 - Once designed and implemented the spill prevention and response plan shall be posted and people be trained in how to use it.

IN THE CASE OF A SPILL



Environmental Operating Procedure No. 7	EOP Revision: 01
Fuel Spills and Response	Revision Date: June 30th, 2020
Responsibility: Causal Agent	EOP Page 2 of 2

SPILL CLEAN UP

- Ensure that spills are recovered and all contaminated soil is removed under the direction of a qualified contractor.
- The B.C. Ministry of Environment has compiled a comprehensive document entitled *BC Inland Oil Spill Response Plan (2007)* which outlines the cleanup procedures for a major inland spill (this report can be found in the EMP references on the enclosed CD).
- When containment and control have been achieved, hire a professional to clean up the spill by removing absorbents, contaminated soil, contaminated water or other contaminated materials.
- Also clean any facilities or equipment that has been contaminated by the spill, and dispose of in an approved manner any contaminated materials.
- The specific procedures and methods for cleaning up spills shall be established on a case-by-case basis. A qualified environmental consultant should be consulted when determining appropriate cleanup procedures. Please also see EOP No. 3 - Leaks Threatening Water.
- Any used spill abatement and clean-up materials must be immediately replaced to ensure that sufficient inventory is maintained at all times.
- In addition to reporting a “reportable” spill to EMBC, the spills shall also be assessed by the Operations Manager for cause and likely environmental impact. The investigation should be completed within two weeks of the spill and shall also include prevention options, and an assessment of whether or not the existing procedures need to be changed.
- A full report on the investigation shall be delivered to the Operations Manager.

Under the *Emergency Management Act*, the following individuals may be considered responsible for cleaning up a contaminated site or an adjacent site, with some exemptions: the current owner or operator of the site; the previous owner(s) or operator(s) of the site; and the producer or transporter of a substance that caused the contamination.



11.0 INDUSTRIAL WASTE

All development and construction activities on Ts'uubaa-asatx land must conform to solid waste management policies and environmental operating procedures (EOPs).

This section addresses all industrial waste, including land clearing and construction and deconstruction waste. Such waste is handled outside of the community waste system and is the responsibility of the business, project proponent, or contractor.

All project and development proponents, through the permitting process, must submit a waste management plan as part of their application. The requirements for the development of a waste management plan will be specified in correspondence with the proponent.

OBJECTIVES:

- No industrial or project waste products left within Ts'uubaa-asatx lands; and
- Minimal environmental impact of industrial and commercial activity.

GOALS:

Goal	Indicator	Target
Capture all waste into approved processes.	Hazardous or solid waste disposed of improperly.	Zero.
Eliminate environmental impacts from commercial operations.	Incidences of industrial pollution.	Zero.

STRATEGIES:

- All industrial waste including land clearing and construction and deconstruction waste will be disposed of appropriately including the transport from Ts'uubaa-asatx lands of all materials with the exception of timber and clean wood. All such waste is handled outside of the community waste system and is the responsibility of the project proponent or contractor.
- No burning or burying of garbage will take place.
- All demolition will maximize deconstruction and salvage.
- All land clearing will maximize wood salvage and consider the transplanting of plant materials where feasible.
- All project and development proponents, through the resource referral process, must submit a waste management plan as part of their application. The requirements for the development of a waste management plan will be specified in correspondence with the proponent.

56. All developers must adhere to EOP No. 8 Industrial Waste.



11.1 EOP NO. 8 - INDUSTRIAL WASTE

Environmental Operating Procedure No. 8	EOP Revision: 01
Industrial Waste	Revision Date: June 30 th , 2020
Responsibility: Industry and commercial	EOP Page 1 of 2

SCOPE

This EOP applies to all hazardous, solid, and liquid wastes produced by commercial or industrial operations on Ts'uubaa-asatx lands.

MATERIALS

- The full solid waste stream including recyclable products;
- Hazardous wastes of all kinds;
- Sewage or other toxic or non-toxic liquids; and
- Smoke, dust, or other air emissions.

BEST PRACTICES

All industrial and commercial operators on Ts'uubaa-asatx lands must develop a waste management plan. A waste management plan is a document that outlines the activities and methods of waste management from generation to final disposal. It is the responsibility of the proponent to sufficiently detail all components of waste management planning within their waste management plan, and that these activities are completed according to industry best-practices. It is the responsibility of the proponent to be aware of and follow other Ts'uubaa-asatx environmental operating procedures, such as for hazardous wastes and fuel handling.

Development, demolition, land clearing, and construction waste must be disposed of properly outside of Ts'uubaa-asatx lands. Any contracts or agreements for demolition, land clearing or construction services shall include requirements for compliance to this environmental operating procedure. It is the responsibility of the proponent to be aware of, and comply with, all applicable legislative requirements within their jurisdiction of activities.

Waste management is an activity that is practiced by most proponents regardless of the project.

Common waste management activities include:

- Reduction and substitution;
- Waste collection, handling, separation, and storage;
- Recycling and reuse;
- Waste transfer and transport;
- Waste disposal; and
- Remediation.



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Industrial Waste	Revision Date: June 30th, 2020
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Source reduction is the elimination or decrease, to the extent practical, of the volume or toxicity of waste generated by using alternative materials or processes. This may be the most effective, proactive, and potentially cost-reducing method of waste management as it reduces the amount of waste that has to be managed. Reuse is the use of a product more than once for the same or different purpose, either on-site or off-site. Recycling or recovery is the process by which materials otherwise destined for treatment or disposal are collected, processed, and/or remanufactured into the same or different product either on-site or off-site.

WASTE MANAGEMENT PLAN

A waste management plan will contain the following information:

- Company name, site name and site location;
- Effective date and expiration date of the plan;
- Environmental policy of the proponent and how it relates to waste management;
- Purpose and scope of the plan including detailed waste management goals and objectives;
- Description of the project;
- Proposed location for all waste management activities, on a map to an appropriate scale with GPS coordinates;
- If applicable description of site physical, surface and subsurface characteristics, site water management, and geotechnical characteristics;
- The identification of waste types and description of its characteristics;
- Estimation of the volume or weight to be produced;
- Potential environmental effects;
- Description of the activities involved in the management from generation to disposal;
- A rationale for the method(s) that will be employed to manage each waste type;
- Infrastructure required for waste management; and
- Waste management as it relates to project closure and reclamation.

WOOD WASTE

Wood waste shall be disposed of properly. The following general guidelines for managing wood waste on Ts'uubaa-asatx lands shall be followed.

Waste, including wood waste, should not be burned. Other options for clean wood waste include:

- Chipping the wood and composting with other organic matter such as yard waste;
- Produce fire wood for sale;
- Disposal at a regulated facility; or
- Wood waste that has been treated with creosote, paint, or stain, should be treated as residual waste and disposed of appropriately.



12.0 ENVIRONMENTAL ASSESSMENT

Environmental assessment is also known as impact assessment.

Environmental assessment is a decision making process designed to reduce environmental impacts resulting from human activities. Environmental assessments are carried out to help answer questions such as:

- Does the proposed project plan include the best suited practices?
- Is there a risk that the project will have an adverse environmental impact?
- Will nearby communities be impacted, and if so how?
- Can potential impacts be avoided?
- Are potential impacts significant, even with mitigation?
- Are the predicted effects or risks so high that the project should not go ahead?

Ts'uubaa-asatx is in a position, through the *First Nations Land Management Act* and the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law* to custom design best practices for environmental assessment. Ts'uubaa-asatx best practices must meet or exceed federal and provincial provisions but can draw from both as best suits our needs.

Environmental assessments are to be used to evaluate proposed projects that have a potential for impact on Ts'uubaa-asatx lands and resources. All projects that fit the definition of development as per Section 1.1 of this guide will be assessed. Exceptions that do not require a permit and do not require environmental assessment can be found in Section 1.3 of this Guide.

Assessments will meet or exceed federal and provincial regulatory frameworks and technical expectations so that an informed decision can be made on the overall impact of the project. The results of these assessments will lead to a decision on whether to proceed with the project, proceed with the project as long as certain environmental protection measures are complied with, or to oppose the project.

Any proposed development must promote the principle of sustainable development for Ts'uubaa-asatx lands, ensuring that development takes place in a manner that minimizes negative environmental and health impacts resulting from human activities.

The regulatory environment for environmental assessment is complex with Federal and Provincial processes in place and opportunities for joint processes. The regulatory environment is also currently in flux.

FEDERAL IMPACT ASSESSMENT

The Canada Impact Assessment Act (IAA) ensures that the environmental effects of designated physical activities are reviewed before action is taken in order to avoid significant adverse environmental effects within federal jurisdiction. Under the IAA, assessments consider sustainability, the positive and negative environmental, health, social, and economic impacts of designated projects, and gender based analysis plus. The assessment takes into account Indigenous rights, knowledge, and culture.



PROVINCIAL ENVIRONMENTAL ASSESSMENT

The B.C. *Environmental Assessment Act* (BCEAA) establishes the Environmental Assessment Office and permits regulation to define reviewable projects.

B.C.'s Environmental Assessment Act (BCEAA) process provides a mechanism for reviewing major projects to assess their potential impacts. B.C.'s environmental assessment process is important to ensure that major projects meet the goals of environmental, economic and social sustainability. The assessment process is also needed to ensure that the issues and concerns of the public, First Nations, interested stakeholders and government agencies are considered.

The Province does not have jurisdiction on Ts'uubaa-asatx lands; however, the provincial assessment process may be implemented in place of federal impact assessment as discussed above or portions of it may be adopted and implemented by Ts'uubaa-asatx.

12.1 TS'UUBAA-ASATX ENVIRONMENTAL ASSESSMENT

Ts'uubaa-asatx has designed a flexible system of environmental assessment or screening that serves to protect the full range of Ts'uubaa-asatx interests. It is recognized that the area of environmental assessment is complex and requirements will vary with each proposed development, however the full suite of Ts'uubaa-asatx environmental assessment requirements for Ts'uubaa-asatx lands are outlined below:

- Full and detailed project history and description through the lifetime of the project;
- Project alternatives;
- Scoping document for assessment of need for impact assessment;
- Joint definition of assessment process and preparation of impact assessment terms-of-reference;
- Full consideration of Aboriginal title, rights, and Ts'uubaa-asatx members' values;
- Environmental description;
- Perceived environmental impacts;
- Perceived social impacts;
- Cumulative effects assessment;
- All costs of the assessment process are born by the allotment holder, proponent, or outside government;
- Provisions for environmental monitoring; and
- Provision, including financial, for mitigation and project closure and remediation.

Environmental assessments must evaluate impacts on all elements of the environment including the biological, chemical, physical, social, heritage, cultural, spiritual, economic, and health environments and address cumulative impacts.

OBJECTIVES:

- To reduce environmental impacts resulting from human activities;
- To support the goals of environmental resource protection and sustainable development;
- To integrate environmental and cultural resource values into economic decisions with regard to land and resource development and economic development;
- To integrate environmental and cultural resources protection and economic decisions at the earliest stages of planning an activity;



- To predict environmental, social, economic, and cultural consequences of a proposed activity, and to assess plans to mitigate any adverse impacts resulting from the proposed activity; and
- To provide for the involvement of Nation members in the review of the proposed activities.

GOALS:

Goal	Indicator	Target
Projects respect Ts'uubaa-asatx environmental values.	Number of projects proceeding in an unacceptable manner.	Zero.

STRATEGIES:

- No subdivision or development project will proceed on Ts'uubaa-asatx lands without approval through the permitting process as required in our laws and policies.
- Apply protocols and requirements for environmental assessment contained in the Ts'uubaa-asatx *Subdivision, Development and Servicing Law* and this guide.
- Any new industrial, commercial, or residential developments on Ts'uubaa-asatx lands, including those initiated by Ts'uubaa-asatx, must be assessed to determine if an impact assessment is required to ensure appropriate consideration is taken to protect the natural environment.
- As an alternative to a full assessment, have in place an environmental screening option to review minor projects, or projects which lack complexity, for which risk of impacts is low.
- For the purpose of easing the burden and navigation of the assessment process, have in place an internal process for projects being advanced by members or Ts'uubaa-asatx, including use of the environmental screening option in the place of an environmental assessment.
- Develop internal capacity to effectively administer and environmental assessment.
- Create a robust natural resource and cultural resource information system to support referral processing, environmental assessment, and economic development. The environmental inventory would include natural habitats, environmentally sensitive areas, and rare and endangered species and ecosystems.
- Establish community and public communication and education programs to raise awareness of the importance of our natural and cultural resources, the methods employed to protect them, and the process in place to direct wise and sustainable use of them.

57. All projects must comply to Ts'uubaa-asatx EOP No. 9 - Environmental Assessment.



12.2 EOP NO. 9 - ENVIRONMENTAL ASSESSMENT

Environmental Operating Procedure No. 9	EOP Revision: 01
Environmental Assessment	Revision Date: June 30 th , 2020
Responsibility: Operations Manager	EOP Page 1 of 2

PURPOSE/OBJECTIVES

- To identify, predict, prevent, mitigate, and minimize environmental impacts from all activities on Ts'uubaa-asatx lands.
- To ensure that all environmental impact assessments reflect the needs of Ts'uu-baa-asatx people.
- All developments must be planned with consideration to the environment, cultural heritage, and human health impacts.

SCOPE

All land and resource development proposals, projects, or other activities on Ts'uubaa-asatx lands that are deemed to have a potential impact on Ts'uubaa-asatx lands and resources must undergo an environmental assessment.

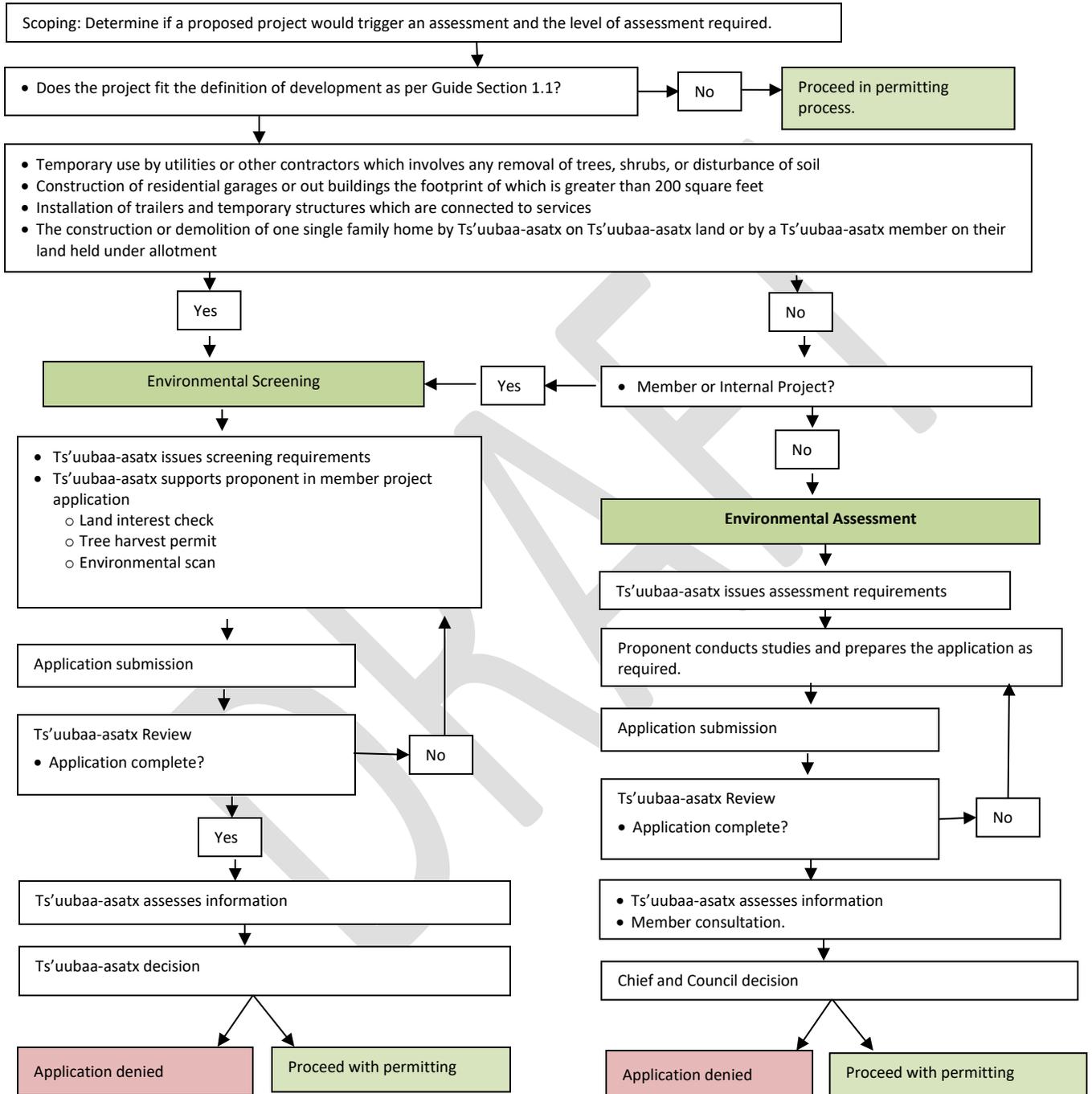
BEST PRACTICES

- Proponents must provide a description of their proposed project describing how the proponent will identify, predict, prevent, mitigate, and minimize environmental impacts.
- Processes will meet or exceed federal and provincial environmental provisions.
- Environmental impacts include impacts on land, water, air, health, the economy, and cultural and spiritual resources.
- Describe in detail, the environmental effects from construction, operation, modification, decommissioning, abandonment, malfunction, and cumulative effects. Proposed mitigation measures, including follow-up activities and their expected outcomes once implemented, are clearly identified.
- Projects to proceed only under permit and subject to requirements defined by Ts'uubaa-asatx.



Environmental Operating Procedure No. 9	EOP Revision: 01
Environmental Assessment	Revision Date: March 31st, 2020
Responsibility: Operations Manager	EOP Page 2 of 2

ENVIRONMENTAL ASSESSMENT PROCESS



The following sub-sections address general considerations for the completion of environmental assessments on Ts'uubaa-asatx land. Specific complex projects may require additional investigations beyond those outlined here.

INTRODUCTION

58. Provide a full and detailed history and description of the project including construction, operation, decommissioning, and other activities expected during the life of the project. State project alternatives.

59. Provide project proponent contact information including organization, name, mailing address, telephone number, and email address.

60. Describe the scope of work for the planned EA. Document site assessments completed to date. Identify further investigations which are required to address situations where environmental effects are unknown or to determine appropriate mitigation activities.

61. Activities planned during the design stage must be assessed (e.g. geotechnical, surveys, etc.). Identify activities causing significant environmental impacts on VECs and outline mitigation measures that will be implemented.

MAPS, PLANS, AND NOMENCLATURE

62. Provide scaled plans showing the geographical location of the project with latitude and longitude, the location(s) of the project within the context of the Ts'uubaa-asatx lands, and an overall site plan for the project. Include environmentally significant features (e.g. water bodies, forests, significant elevation changes, species ranges, known habitats, etc.).

63. Where appropriate and readily available, include First Nations nomenclature for place names, flora, fauna, etc. Copies of topographic maps and aerial photos/mosaics must be provided where available.

ENVIRONMENTAL SETTING

64. Provide a detailed description of the existing environment in the project area including landscape, water bodies, archeology, natural resources, and environmental uses (e.g. wildlife habitat, natural resource harvesting, residential properties, etc.). Indicate the areas affected by the project.

65. Outline known environmentally significant historical uses in the area of the project. Develop and/or update the list of valued environmental components (VECs) in the project area. Socio-economic conditions must be described if potentially impacted by environmental changes caused by the proposed project.

66. A determination must be made as to the likely presence of wildlife, birds, aquatic life, flora and/or habitat at risk in the project area. This determination must be made using relevant data base lists, range maps, local knowledge (where available), and other existing information on species known to occur in the project area. Where the range of a species at risk overlaps with the proposed project area, existing information sources must be checked and documented to determine whether actual or potential habitat or residences for these species are present.

67. Example information sources include: the Conservation Data Centre (CDC) for rare element occurrence records, Committee on the Status of Endangered Wildlife in Canada (COSEWIC), the Species at Risk Public Registry for recovery strategies, action plans, and management strategies, and the Provincial Species and Ecosystem Explorer.

68. For all projects where potential interactions with species at risk have been identified, field surveys, consistent with published recovery plan strategies, will be required to determine whether individuals of species at risk, critical habitat, recovery habitat, or residences occur in the project study area.

69. Indicate known and suspected environmental effects of the project on listed VECs.



70. Identify any cumulative effects that are anticipated on the basis of initially available information. Include effects likely to result from the project in combination with other pre-existing developments and/or in combination with developments that will be carried out as a direct result of this project.

71. Summarize the results and recommendations of studies carried out as part of the EA (e.g. geotechnical studies, water quality investigations, SARA wildlife & habitat surveys, archaeological investigations, survey results, fisheries studies, etc.).

PROJECT ACTIVITIES

72. Provide a detailed description of all potential project activities throughout the project life cycle including construction, operation, modification, decommissioning, abandonment, malfunction, and potential accidents. Where environmentally responsible solutions have been incorporated into project development (e.g. energy efficient buildings, water conservation, alternative energy) describe expected environmental benefits.

ENVIRONMENTAL EFFECTS

73. Verify significant environmental effects on VECs caused by project activities and quantify where possible.

74. Examples include but are not limited to: destruction of vegetation and habitat by construction equipment, damage to sites with cultural or archaeological significance, siltation of surface waters, sedimentation of lake bottoms and river beds, soil contamination through improper storage and disposal of waste products, emissions causing air quality and climate change impacts, release of chemicals to groundwater through accident or system failure, etc.

75. Verify any cumulative effects that are anticipated. Include effects likely to result from the project in combination with other pre-existing developments and/or in combination with developments that will be carried out as a direct result of this project.

MITIGATION

76. Detail how environmental effects will be mitigated and show how the mitigation measures have been included in the design of the project. Applicable portions of the design and/or operation and maintenance information must be referenced in the EA report document (refer to specific design drawings where applicable) to confirm that mitigation measures have been incorporated.

77. Where a project causes interactions with species at risk, specific mitigation measures must be identified. Mitigation strategies for species at risk are hierarchical with avoidance being preferred (e.g. timing, design/location change), followed by minimization through project modification or implementation under special conditions, and lastly, compensatory mitigation (e.g. replacement of lost habitat).

PERMITS AND APPROVALS

78. Provide information on the status of required environmental permits and approvals necessary to undertake the project (e.g. rights of way, fisheries authorization, navigable waters, sand and gravel, and timber permits).

SUPPORTING

79. When available include correspondence and/or approvals from other government departments (e.g. Health Canada, Fisheries and Oceans, Environment Canada, B.C. Ministry of Environment, BC Ministry Forest Lands and Natural Resource Operations, Archaeology and Registry Services Branch, etc.).



PUBLIC PARTICIPATION

80. Document strategies used to assess project input from the First Nation and Consultation community and/or public. Identify how any concerns were addressed and/or mitigated.

CLOSURE

81. Provide a narrative summary of the environmental effects associated with the proposed project. Make a determination of their significance (not likely significant or significant). For significant impacts, summarize proposed mitigation strategies and how they will reduce environmental effects. Quantify wherever possible. Where follow-up is recommended, discuss planned follow-up activities. Include a table which shows VECs, project activities, environmental effects, mitigation measures, and reference to supporting documents. For VECs where impacts are found to be not likely significant ensure that justification is provided. Provide a recommendation regarding project viability based on environmental considerations.

12.3 ENVIRONMENTAL SCAN

As per this *Ts'uubaa-asatx Subdivision, Development, and Servicing Permitting Guide* and Ts'uubaa-asatx Environmental Operating Procedure (EOP) No. 9, qualifying projects may require an environmental scan rather than a full environmental assessment.

It is the responsibility of the Proponent to ensure that the proposed activity or project complies with all applicable Ts'uubaa-asatx, federal, and provincial legislation and regulations as required.

82. Complete the Ts'uubaa-asatx Minor Project Permit Application (see Section 17.1) including the environmental scan section.

83. Provide a full and detailed description of the project including construction, operation, decommissioning, and other activities expected during the life of the project. State possible project alternatives.

84. Provide project proponent contact information including organization, name, mailing address, telephone number, and email address.

85. Provide scaled plans showing the geographical location of the project within the context of the Ts'uubaa-asatx lands, and an overall site plan for the project. Include environmentally significant features (e.g. water bodies, forests, significant elevation changes, species ranges, known habitats, etc.).

86. A determination must be made as to the likely presence of wildlife, birds, aquatic life, flora and/or habitat at risk in the project area. This determination must be made using relevant data base lists, range maps, local knowledge (where available), and other existing information on species known to occur in the project area. Where the range of a species at risk overlaps with the proposed project area, existing information sources must be checked and documented to determine whether actual or potential habitat or residences for these species are present.

87. Example information sources include: the Conservation Data Centre (CDC) for rare element occurrence records, Committee on the Status of Endangered Wildlife in Canada (COSEWIC), the Species at Risk Public Registry for recovery strategies, action plans, and management strategies, and the Provincial Species and Ecosystem Explorer.



88. For all projects where potential interactions with species at risk have been identified, field surveys, consistent with published recovery plan strategies, will be required to determine whether individuals of species at risk, critical habitat, recovery habitat, or residences occur in the project study area.

89. Verify significant environmental effects caused by project activities and quantify where possible. Examples include but are not limited to: destruction of vegetation and habitat by construction equipment, damage to sites with cultural or archaeological significance, siltation of surface waters, sedimentation of lake bottoms and river beds, soil contamination through improper storage and disposal of waste products, emissions causing air quality and climate change impacts, release of chemicals to groundwater through accident or system failure, etc.

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13.0 CULTURAL STEWARDSHIP

Any proposed development must promote the principle of sustainable development for our lands, ensuring that development takes place in a manner that preserves and protects culturally significant areas.

90. Any new industrial, commercial, or large scale residential developments on Ts'uubaa-asatx lands, including those initiated by Ts'uubaa-asatx, must be assessed to determine if cultural resources may be jeopardized and what if any mitigation or accommodation may be required.

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14.0 WILDLIFE AND HABITAT

Any new industrial, commercial, or large scale residential developments on Ts'uubaa-asatx lands, including those initiated by Ts'uubaa-asatx, must be assessed to determine if natural resources may be jeopardized and what if any mitigation or accommodation may be required.

This section addresses policies and procedures for the protection of wildlife and habitat resources on Ts'uubaa-asatx lands.

INVASIVE SPECIES

Invasive species have been defined as animals, plants, or other organisms introduced by man into places out of their natural range of distribution, where they become established and disperse, generating a negative impact on the local ecosystem and species. Invasive plants are a significant cause of biodiversity loss and change to ecosystem function. They carry potential negative impacts to the economy, environment, and society.

Any risk of importing or facilitating the invasion of unwanted species will be addressed in any development proposal.

SPECIES AT RISK

The list of species in danger of disappearing in Canada is growing. Loss of species endangers ecological function. Ts'uubaa-asatx, and all developers operating on Ts'uubaa-asatx lands, will comply with Federal species at risk legislation. Any species identified by the Species at Risk Act as extirpated, endangered, or threatened cannot:

1. Be killed, harmed or traded (including parts); or
2. Have their "residence" damaged or destroyed.

91. Developers will follow pertinent guidance in the Ts'uubaa-asatx Environmental Operating Procedure (EOP) No. 9 Environmental Assessment.



15.0 AMENITIES AND COMMUNITY BENEFITS

All works and developments on Ts'uubaa-asatx lands must provide net benefits to the community. The purpose of the development permitting process is to protect Ts'uubaa-asatx values while encouraging economic development and addressing the need for quality affordable housing. All development proposals will be considered with respect to the objectives stated in Ts'uubaa-asatx strategic planning documents.

Developers must demonstrate that the proposed project will provide more positive than negative social impacts for Ts'uubaa-asatx people. Developers will include economic participation by the Nation through business opportunities, such as partnerships and joint ventures, and provide employment-related training and capacity building for Ts'uubaa-asatx and our people.

Developers must identify potential impacts on adjacent uses, interest holders, and occupants.

Consideration will be given for the provision land and/or funds to Ts'uubaa-asatx for the development of community amenities.

Developments considered positively by Ts'uubaa-asatx will identify and reserve or provide parks, green space, common areas, open spaces, trails, landscaping, fences, recreation features, and any other public amenities.

In the case of negative social and environmental impacts that cannot be directly mitigated, cash and in-kind support of unrelated Ts'uubaa-asatx initiatives may be considered.

The application package will include a community benefits summary.

GREEN SPACE AND AMENITIES

92. Green space [Conceptual and Final]. Show the proposed [Conceptual] and actual [Final] location and treatment of parks, green space, common areas, open spaces, trails, landscaping, fences, recreation features and any other public amenities.



16.0 COMPLETION DOCUMENTATION

93. Utility Service Agreements [Conceptual and Final]. Provide letter of intent [Conceptual] and service agreement [Final] with utility companies for electricity, telephone, gas and solid waste disposal services. Waste disposal services must conform to Ts'uubaa-asatx environmental operating procedures.
94. Health Canada Permits for Individual Homes [Final]. Provide written commitment from the Professional Engineer or Registered Architect to provide Health Canada permits for in-ground sewage disposal for individual homes [Final]. Actual permits are to be provided as part of the completion documentation. All designs must conform to Ts'uubaa-asatx environmental operating procedures.
95. Restaurant Permit [Final]. Provide written commitment from the Proponent to provide a copy of Ministry of Health Permit to Operate A Food Service Establishment if kitchen or restaurant service is proposed [Final]. Actual permit is to be provided as part of the completion documentation.
96. Registration of Rights of Way, Permits and Easements [Final]. Provide written commitment from the Professional Engineer or Registered Architect to provide copies of all registered rights of way plans, permits and easements [Final]. Actual plans and proof of registration must be provided as part of the completion documentation.
97. Registration of Fuel Storage Tanks [Final]. Provide written commitment from the Professional Engineer or Registered Architect to provide a copy of the registration of all underground storage tanks and exterior aboveground storage tanks larger than 4000 litres [Final]. Actual registration documents are to be provided as part of the completion documentation. All designs must conform to Ts'uubaa-asatx environmental operating procedures.
98. Construction Supervision [Final]. Provide written commitment from the Professional Engineer to provide all necessary construction supervision, inspection, site testing and record keeping during construction of the site work [Final].
99. O&M Manuals [Final]. Provide written commitment from the Professional Engineer or Registered Architect to provide Operation & Maintenance Manuals for the electrical and mechanical systems upon completion [Final]. Actual Operation & Maintenance Manuals are to be provided as part of the completion documentation.
100. As-Built Drawings [Final]. Provide written commitment from the Professional Engineer or Registered Architect to provide accurate as-built drawings upon completion [Final]. Actual as-built drawings are to be provided as part of the completion documentation for all buildings, structures, roads, and works.
101. Completion Report [Final]. Provide written commitment from the Professional Engineer or Registered Architect to provide a completion report detailing work progress, inspection records, testing results, and problems.



17.0 FORMS AND GUIDELINES

This section contains:

- Minor Project Permit Application form;
- Land Use and Development Permit Application form;
- Land Use and Development Permit Checklist; and
- Interest Holders' Undertaking form.

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17.1 MINOR PROJECT PERMIT APPLICATION

This application form is to be used by all utilities, developers, contractors, CP holders, members, residents, or Ts'uubaa-asatx in order to support application for a Minor Project Permit as required by Ts'uubaa-asatx law.

Application Information

File Number:	Application Type: Mark all Applicable Boxes <input type="checkbox"/> Residential Construction <input type="checkbox"/> Outbuilding Construction <input type="checkbox"/> Trailer or Temporary Structure <input type="checkbox"/> Temporary Use Permit <input type="checkbox"/> Other
Application Number:	
Date of Application:	
Application Fee:	
Receipt Number:	
Date Fee Received:	
Bond Posted (residential construction only)	\$ _____

Permit for Temporary Use

Reason for proposed temporary use permit (attach additional pages if necessary).



MINOR PROJECT PERMIT APPLICATION – Page 2

Allotment Holder Information

All applications must be signed by both the allotment holder/legal interest holder and, if there is one, the corporate agent or developer applicant.

By signing below I/We hereby authorize the corporation, agent or developer listed below to apply on our behalf. I/We agree to provide all information required for this application and to abide by all relevant Ts'uubaa-asatx, Federal, provincial and municipal laws in relation to the application and the project.

Allotment Holders

Name	Address	Phone
Signature		Email
Name	Address	Phone
Signature		Email
Name	Address	Phone
Signature		Email
Name	Address	Phone
Signature		Email

Description of Project

Type	Building Area (Square Feet)	
Height	No. of Story's	Parcel(s) Size
General Nature of Development (Attach additional pages if necessary)		



Environmental Scan

Surface and Ground Water. Please describe impacts and mitigation if your project will:

- Have potential impacts on surface water quality, quantity or flow.
- Have potential impacts on ground water quality, quantity or movement.
- Potentially cause sedimentation or erosion on or off site.
- Potentially allow a polluting substance to enter a water body.
- Potentially impact surface or ground water from accidental spills or releases.

Note: no minor project may take place within 30 metres of a water body.

Land Use. Please describe impacts and mitigation if your project:

- Is not compliant with Ts'uubaa-asatx land use planning.
- Affects unique or sensitive or threatened features of the land.
- Has potential to impact adjacent properties.
- Involves the harvest of trees or clearing of trees, shrubs, or ground vegetation.

Note that harvest of trees requires a tree harvest permit. Please contact the Operations Manager for more information.

Rare and Endangered Species or Migratory Birds. Potential impact on species listed under the Species at Risk Act (SARA) or their habitat, or on migratory birds or their habitat must be identified and mitigation of those impacts discussed. Risk can generally be reduced by undertaking activities outside of wildlife breeding season, avoiding wetland areas. The applicant is encouraged to discuss this topic with the Operations Manager.



MINOR PROJECT PERMIT APPLICATION – Page 4

Emissions. Please describe impacts and mitigation if your project will:

- Potentially impact air quality from emissions (e.g. nitrogen dioxide, sulphur dioxide, suspended particulates, other pollutants, etc.).
- Potentially impact air quality from the emission of dust or odours.
- Potentially impact human health by the emission of smoke.
- Potentially emit noise of an intensity or level as to disturb neighbours or wildlife.

Culture and Heritage, Socio Economic. Please describe impacts and mitigation if your project will:

- Cause community and/or public concerns related to health and safety (including concerns regarding increased traffic).
- Have an impact on local businesses, institutions or public facilities.
- Have an impact on physical or cultural heritage resources including areas of historical, archaeological, paleontological or architectural significance within or outside your site.

Environmental History. Is there, or to your knowledge has there ever been at the location:

- Contamination or spills of any petroleum, solvents, or other polluting substances, or migration to the location of any of those substances from other properties?
- Deposition of fill from a contaminated site, asphalt, roofing materials, or dredged sediments?
- Dumping or landfilling of garbage, demolition debris, barrels or drums, or industrial wastes?
- Underground or aboveground fuel or chemical tanks?
- PCB-containing electrical transformers, waste asbestos containing materials, or paints, solvents or pest control products stored in significant volumes?



MINOR PROJECT PERMIT APPLICATION – Page 5

Environmental. Please describe impacts and mitigation if your project will:

- Result in the creation of waste material requiring disposal (e.g. oil products for machinery, treated wood, lead paint, PCBs, asbestos, petroleum or gasoline containers, resins, toxins, pesticides, fertilizer, caustic agents, etc).
- Involve the installation of a fuel tank over 2500L.
- Require the importation of soil or material, such as sand, gravel, or rocks.

All activities will be in compliance with the Ts'uubaa-asatx *Subdivision, Development, and Servicing Law*.

I/We hereby apply for the above approvals and agree to provide all information required for this application and to abide by all relevant Ts'uubaa-asatx, federal, provincial and municipal laws in relation to the application and the project.

I/We further agree to allow any authorized Ts'uubaa-asatx representative or their delegate to enquire into my/our credit history, corporate standing and all other aspects of my/our business relevant to this application.

I accept responsibility for delays in processing caused by incorrect or insufficient submissions. Contact the Ts'uubaa-asatx office, if you have any further questions.

I represent to the Ts'uubaa-asatx, knowing that the Ts'uubaa-asatx relies on this representation and warranty, that the property covered by this application, to the best of my knowledge having done due and diligent inquiry, is not contaminated or polluted in any way that would make it unlawful, unsafe, or unsuited for the purpose for which it is intended to be used.

I assume all risks incidental to or that may arise as a result of this application and agree to save harmless and indemnify the Ts'uubaa-asatx and its officials, agents, servants, and representatives from and against all claims, actions, costs, expenses and demands with respect to death, injury, loss, or damage to persons or property arising out of or in connection with this application. I agree to conform to all applicable laws. I understand that no warranty is implied for the approval of this application and that this waiver and indemnity is binding on me, my heirs, executors, and assigns.

I have read and agree with the above paragraphs.

Signature of Applicant/Agent

Date

Signature of CP-Holder/Interest Holder

Date



MINOR PROJECT PERMIT APPLICATION – Page 6

Office Use Only		
Application is:	<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete (provide comments below).
Comments		
Date:	Name of Staff Member:	
	Signature:	

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17.2 DEVELOPMENT PERMIT APPLICATION

Ts'uubaa-asatx

DEVELOPMENT PERMIT APPLICATION

This application form is to be used by all utilities, developers, contractors, CP holders, members, residents, or Ts'uubaa-asatx in order to support the undertaking of any land or resource development, any building project, temporary use of land, or to conduct any works involving the disturbance, importation or exportation of soil on Ts'uubaa-asatx lands or the cutting of trees.

Application Information

File Number:	Application Type: Mark all Applicable Boxes <input type="checkbox"/> Commercial Development <input type="checkbox"/> Construction <input type="checkbox"/> Development Permit <input type="checkbox"/> Excavation <input type="checkbox"/> Industrial Development <input type="checkbox"/> Institutional Development <input type="checkbox"/> Infrastructure, Sewer, Water <input type="checkbox"/> Land Use Amendment <input type="checkbox"/> Recreational Development <input type="checkbox"/> Residential Development <input type="checkbox"/> Rezoning <input type="checkbox"/> Roads, Intersections <input type="checkbox"/> Other
Application Number:	
Date of Application:	
Application Fee:	
Receipt Number:	
Date Fee Received:	
Bond Posted (120% of Construction Costs for on-site works) (Not applicable to rezoning or land use amendment applications)	\$ _____
Details of Bond:	



DEVELOPMENT PERMIT APPLICATION – Page 2

Developer/Agent Information

<p>Developer (Agent)</p> <p>Corporate Name:</p> <p>Incorporation Number:</p> <p>British Columbia/Canada:</p> <p>GST/HST Number:</p> <p>Address of Record:</p> <p>Telephone:</p> <p>Cell phone:</p> <p>Fax:</p> <p>Email:</p> <p>Name of Authorized Representative:</p> <p>Address:</p> <p>Telephone:</p>	<p>Names of Directors:</p> <p>Have any of the directors gone bankrupt or been a director for a corporation that has gone bankrupt in the past five years?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>If yes, provide the name of the director and the details.</p> <p><input type="checkbox"/> Copy of Directors Resolution authorizing representative or an affidavit of execution or proof of authority to use the corporate seal attached to the application?</p> <p><input type="checkbox"/> Copy of a Corporation Search from the past seven days demonstrating that the corporation is in good standing.</p>
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Allotment Holder Information

All applications must be signed by both the allotment holder/legal interest holder and, if there is one, the corporate agent or developer applicant.

By signing below I/We hereby authorize the corporation, agent or developer listed below to apply on our behalf. I/We agree to provide all information required for this application and to abide by all relevant Ts'uubaa-asatx, Federal, provincial and municipal laws in relation to the application and the project.



DEVELOPMENT PERMIT APPLICATION – Page 3

Allotment Holders

Name	Address	Phone
Signature		Email
Name	Address	Phone
Signature		Email
Name	Address	Phone
Signature		Email
Name	Address	Phone
Signature		Email

Legal Description

Lot	Plan	I.R.
Street Address		
Existing Land Use		
Proposed Land Use		
Lease Registration #	Sublease Registration #	



DEVELOPMENT PERMIT APPLICATION – Page 4

Zoning or Land Use Amendment

Reason for zoning or amendment and proposed land use (attach additional pages if necessary)

Application for Development

Type	No of Units	Building Area (Square Feet)
Height	No. of Story's	Parcel(s) Size
General Nature of Development (Attach additional pages if necessary)		

Checklist

I have provided all of the information and documents set out in the attached Rezoning, Land Use Amendment and Temporary Use Permit Application Checklist.
<input type="checkbox"/> Yes <input type="checkbox"/> No
If no, please provide an explanation:

Note: If the applicant is not the registered holder of the property concerned, then the land owner/interest holder's signature is required on this application.



DEVELOPMENT PERMIT APPLICATION – Page 5

I/We hereby apply for the above approvals and agree to provide all information required for this application and to abide by all relevant Ts'uubaa-asatx, federal, provincial and municipal laws in relation to the application and the project.

I/We further agree to allow any authorized Ts'uubaa-asatx representative or their delegate to enquire into my/our credit history, corporate standing and all other aspects of my/our business relevant to this application.

I accept responsibility for delays in processing caused by incorrect or insufficient submissions. Contact the Ts'uubaa-asatx office, if you have any further questions.

I represent to the Ts'uubaa-asatx, knowing that the Ts'uubaa-asatx relies on this representation and warranty, that the property covered by this application, to the best of my knowledge having done due and diligent inquiry, is not contaminated or polluted in any way that would make it unlawful, unsafe, or unsuited for the purpose for which it is intended to be used.

I assume all risks incidental to or that may arise as a result of this application and agree to save harmless and indemnify the Ts'uubaa-asatx and its officials, agents, servants, and representatives from and against all claims, actions, costs, expenses and demands with respect to death, injury, loss, or damage to persons or property arising out of or in connection with this application. I agree to conform to all applicable laws. I understand that no warranty is implied for the approval of this application and that this waiver and indemnity is binding on me, my heirs, executors, and assigns.

I have read and agree with the above paragraphs.

Signature of Applicant/Agent

Date

Signature of Allotment/Interest Holder

Date

Office Use Only		
Application is:	<input type="checkbox"/> Complete	<input type="checkbox"/> Incomplete (provide comments below).
Comments		
Date:	Name of Staff Member:	
	Signature:	



17.3 DEVELOPMENT PERMIT CHECKLIST

All of the following must be provided as applicable:

General

- Application: A completed application and payment of all prescribed fees.

Community Benefits

- Community Benefit Summary

The benefits summary will document alignment with Section 15.0 of the Development Permit Guide. In addition to increases to the property tax base, please provide a summary of all proposed benefits to the Ts'uubaa-asatx community. This could include donations or dedications of land or facilities for park, recreation or housing or a donation of cash in lieu, green space, trails, sidewalks, street lights, training or development opportunities for members, etc.

Engineering

- General engineering requirements for land development on Ts'uubaa-asatx lands

The applicant will provide sufficient plans, documents, and professional seals and signatures as set out in Section 6 of this Development Guide to enable Ts'uubaa-asatx Council to assess access, servicing, and other issues relating to the proposed zoning or land use amendment.

Waste Management

- Waste Management Plan

The applicant will provide evidence of compliance with waste management requirements set out in Section 11.0 of the development permit guide. This will include production and subsequent implementation of a waste management plan.



DEVELOPMENT PERMIT CHECKLIST – Page 2

Environment

- Environmental assessment
- Environmental scan

The applicant will provide copies of all required environmental assessments and reports as set out in Section 12.0 of the development permitting guide.

Cultural Stewardship

- Culture and heritage requirements for land development on Ts'uubaa-asatx lands

Completion of cultural stewardship requirements as set out in Section 13.0 of the development permitting guide.

Wildlife and Habitat

- Wildlife and habitat requirements for land development on Ts'uubaa-asatx lands including species at risk and invasive species.

Completion of wildlife and habitat requirements as set out in Section 14.0 of the development permitting guide..

Financial and Insurance

The following are required:

- Appraisal

For new subdivisions, multi-family, commercial or industrial developments, an appraisal of the current market value of the land;

- A copy of a credit check from within the past 7 days or authorization for Ts'uubaa-asatx to carry out a credit check
- A signed statement that the developer or applicant is solvent, is not bankrupt, and knows of no reason why they would have insufficient funds to complete the development or activity;

Proof of insurance including:

- Comprehensive Public Liability Insurance and Property Damage Insurance providing coverage of at least \$5,000,000 inclusive against liability for bodily injury or death and/or damage to property on an all risks occurrence basis;
- Motor Vehicle Insurance for public liability and property damage providing coverage of at least \$5,000,000 inclusive on owned, non-owned, or hired vehicles;
- Completed operations coverage on all-risk occurrence basis of at least \$5,000,000 inclusive against liability for bodily injury, death and/or damage to property of others arising out of the existence of any condition in the works when complete or any installation or repair operations during the period of 12 calendar months next ensuing after the issuance of a certificate of substantial completion by Ts'uubaa-asatx;



DEVELOPMENT PERMIT CHECKLIST – Page 3

- Confirmation in all of the above policies of insurance (except motor vehicle insurance) that Ts'uubaa-asatx is a named insured, and in all policies of insurance that they contain a provision that the insurance shall apply as though a separate policy has been issued to each named insured;
- Confirmation in all of the above policies that each contractor engaged in the works shall be named as an additional insured in respect of the performance of the works, and each such policy shall provide that no expiry, cancellation, or materials change in the policy shall become effective until after thirty days' notice of such cancellation or change shall have been given to Ts'uubaa-asatx by registered mail; and
- Signed confirmation that the applicant will maintain all of the above policies until the development and works have received final acceptance.

Bonds

The following are required:

- Posting of a performance bond or irrevocable letter of credit from a bank in a form acceptable to Ts'uubaa-asatx in the amount of \$_____ (120% of the estimated cost) to ensure the completion of the development and installation of infrastructure and improvements (this bond or letter of credit is in addition to any bonds or letters of credit required by the City for off-site works); and
- Posting of a maintenance bond or irrevocable letter of credit from a bank in a form acceptable to Ts'uubaa-asatx in the amount of \$_____ (10% of the estimated cost) for a period of one year following to ensure maintenance of the works and services and to correct any deficiencies discovered during the first year of operations.

Legal Documents

The following documents are required:

- First Nations Lands Registry search that is less than 30 days old;
- A copy of all draft or final executed leases, sub-leases, assignments, etc.;
- A copy of all draft or final encumbrances, rights-of-way, easements, permits;
- A copy of the Canada Land Survey Report plan;
- A copy of all existing and proposed subdivisions, easements, rights-of-way, and draft surveys;
- A signed and witnessed agreement to indemnify Ts'uubaa-asatx against any loss or damage in relation to the subdivision, development or activity; and
- Confirmation of right of entry for Ts'uubaa-asatx and all authorized officials to inspect the site and any structures or infrastructure.

All information must be sent to:

Aaron Hamilton, Operations Manager
Ts'uubaa-asatx
313B Deer Road
PO Box 159
Lake Cowichan, BC
V0R 2G0
Phone: 250-749-3301



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17.4 INTEREST HOLDERS' UNDERTAKING

This undertaking is to be submitted prior to issuance of a Development Permit.

Attention Ts'uubaa-asatx

RE: Address _____

Development Permit No. _____

In consideration of Ts'uubaa-asatx accepting and processing the above application for a development permit, and as required by the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law* in force from time to time, the following representations, warranties, and indemnities are given to the Ts'uubaa-asatx.

1. That I am:

- The holder of an allotment for the above property; or
- Authorized by the allotment holder of the property described above to make this application (Agent for Interest Holder).

2. That I have authorized:

Name _____

Address _____

to make application for the above permit on my behalf.

3. That I will comply with, or cause those whom I employ to comply with, the B.C. Building Code and all laws of Ts'uubaa-asatx and other statutes and regulation in force in Ts'uubaa-asatx relating to the development, work, undertaking or permission in respect of which this application is made.

4. That I understand and acknowledge that I am fully responsible for carrying out the work or having the work carried out, in accordance with the requirements of the B.C. Building Code, the *Subdivision, Development, and Servicing Law* in force from time to time, and all other Laws of Ts'uubaa-asatx.

5. That I understand and acknowledge that neither the issuance of a permit under this Law, the review of plans and supporting documents, nor inspections made by Ts'uubaa-asatx shall in any way constitute a representation, warranty, or statement that the B.C. Building Code, the *Subdivision, Development, and Servicing Law* in force from time to time, or any other law of Ts'uubaa-asatx has been complied with.

6. That I confirm that I have relied only on the said registered professionals for the adequacy of the plans and supporting documents submitted with this application.



INTEREST HOLDERS' UNDERTAKING – Page 2

7. Ts'uubaa-asatx has relied and is relying exclusively on the Letter of Assurance of "Professional Design and Commitment for Field Review" prepared by:

Architectural
Structural
Mechanical
Plumbing
Fire Suppression Systems
Electrical
Geotechnical – Temporary
Geotechnical – Permanent
Other (Specify)

in reviewing the plans and supporting documents submitted with this application for a building permit.

8. That I understand that where, used herein the words "work" or "work or undertaking in respect of which this application is made" includes all electrical, plumbing, mechanical, gas and other works necessary to complete the contemplated construction.

9. That I am authorized to give these representations, warranties, assurance and indemnities to the Ts'uubaa-asatx.

10 That I confirm that I have been advised that I should seek independent legal advice from a lawyer in respect of signing this schedule.



INTEREST HOLDERS' UNDERTAKING – Page 3

Interest Holders' Information

Agent For

Name

Name

Signature

Signature

Address

Address

If Interest Holder is a company, affix corporate seal in space below.

The Corporate Seal of:

Witness Information

Was hereunto affixed in the presence of:

Name

Signature

Signature

Name of Officer

Address

Title of Officer

Occupation

Signature of Officer

Name of Officer

Title of Officer

(Affix Seal Here)



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18.0 FEE SCHEDULE

Ts'uubaa-asatx Lands Fee Schedule for Applications

Note: These fees are for application and processing only. There is no commitment implied or given on behalf of Ts'uubaa-asatx to accept or approve any of the proposed projects, uses, or activities.

Additional fees for research or study may apply.

Application Type	Basic Fee	Incremental Fee
Tree Harvest Permit	\$25	
Minor Project Permit <ul style="list-style-type: none"> • Temporary land use • Single residence construction 	\$250 \$500	\$50 \$250
Subdivision or Multiple Lot or Unit Application <ul style="list-style-type: none"> • Basic subdivision or multiple lot application fee 	\$1,200	Plus \$55 per lot created by subdivision
Strata or Multiple Unit (apartments or townhouses) Application <ul style="list-style-type: none"> • Basic strata or multiple unit application fee 	\$800	Plus \$50 per unit
Development Permit Application <ul style="list-style-type: none"> • Single family, semi-detached and duplex <ul style="list-style-type: none"> ○ Construction up to \$5,000 value or simple ancillary building, deck, swimming pool, etc. ○ Construction over \$5,000 • Multi-family, townhouse, commercial, industrial, institutional <ul style="list-style-type: none"> ○ Value of engineering works up to \$500,000 ○ Value of engineering works in excess of \$500,000 	\$60 \$120 \$100 \$100	Plus 0.6% of total value of construction Plus value times 1.5% Plus value times 0.5% up to a maximum of \$15,000



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Policy and Procedures	
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Policy Name: Subdivision, Development, and Servicing
Policy Number:
Date Approved by Council:
Effective Date:

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Policy

It is the policy of Ts'uubaa-asatx to provide a clear and transparent process for the subdivision, development, and servicing of Ts'uubaa-asatx lands.

Ts'uubaa-asatx has an inherent right to self-government including the enactment and enforcement of laws. Ts'uubaa-asatx Chief and Council, hereafter referred to as Council, exercise those rights by way of the Ts'uubaa-asatx *Land Code* and the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law*.

Purpose

The purpose of the *Subdivision, Development, and Servicing Law* is to enable land development which meets community goals, protects Ts'uubaa-asatx values, and supports socio-economic objectives.

The purpose of this policy is to support the administration of land development procedures on Ts'uubaa-asatx lands.

Scope

This policy is for the implementation and administration of the *Subdivision, Development, and Servicing Law*.

This policy applies to the Council, committees of Council, employees, and authorized agents of Ts'uubaa-asatx.

This policy applies to members of Ts'uubaa-asatx, allotment holders, residents, and other persons with interests in Ts'uubaa-asatx land, including developers and contractors.

Responsibilities

All persons affected by this policy are required to understand and comply with the policy and procedures appropriate to their responsibilities and interactions.

Council

Council is responsible for the final approval and adoption of this policy and subsequent revisions, or for rescinding this policy as it may see fit.

Council will pass a Band Council Resolution in support of every successful major project application.

Operations Manager

The Operations Manager is responsible for preparation and update of this policy and will recommend to Council any revisions. The Operations Manager is responsible for fair and transparent application of this policy.



Development Permits Required

This policy sets out the process by which approval will be given for development on Ts'uubaa-asatx lands. Ultimate approval comes in the form of a Development Permit.

A Development Permit is required by any person, member or non-member, individual or corporation, before undertaking any development on Ts'uubaa-asatx lands.

A Development Permit is a contract between the developer and Ts'uubaa-asatx as to what can be done on the land if certain guidelines and provisions are met. The permit application process provides a standard way of assessing all developments. The process ensures that Ts'uubaa-asatx staff have reviewed the development with due diligence and protect Ts'uubaa-asatx from any liabilities. The process provides the developer with basic guidelines to developing on Ts'uubaa-asatx lands. It allows Ts'uubaa-asatx and the developer to negotiate and resolve any outstanding issues with the development.

Development is defined as:

- Subdivision or partitioning of land;
- Stratification or other division of legal interests in lands or structures into strata units, sub-leases or shares;
- Development of land;
- Installation of roads, intersections, sewer, water, and other infrastructure;
- Construction, alteration, enlargement, addition, demolition or removal of industrial, commercial or residential structures, including the installation, demolition, or removal of swimming pools and decks;
- Harvest of trees or disturbance of soil; and
- Deposit or removal of more than 6 m³ of soil, gravel or other materials.

Exceptions to the requirement for a Development Permit are as follows:

- Construction of any non-residential structure the footprint of which is less than 200 square feet;
- Construction or finishing of trails, driveways, or internal roads for single family residential sites on which the internal road or driveway is completely within a single parcel of land;
- Landscaping, and minor yard work which does not require excavation deeper than 1.5 m or the removal or deposit of more than 6 m³ of soil, gravel, or other material; and
- Installation of trailers and temporary structures provided such trailers and temporary structures have no hook-ups or connections to services.

The Operations Manager will keep a register and filing system for all project applications. All correspondence and related information will be held in a file identified by the application number.

The Operations Manager will ascertain if a Development Permit is required for any development:

- Proposed by any person for Ts'uubaa-asatx land; or
- Brought to the attention of Ts'uubaa-asatx Chief and Council or Ts'uubaa-asatx staff and proposed or proceeding on Ts'uubaa-asatx land.

The Operations Manager will determine if a given project constitutes a minor project or a major project.

The Development Permit approval process may be expanded to include rezoning applications Should Ts'uubaa-asatx develop a land zoning framework for the lands.

The Operations Manager will determine if community input or approval will be required.



Harvesting of Trees

Any harvest of trees is prohibited on Ts'uibaa-asatx lands without a Tree Harvest Permit.

Harvest of trees is defined as the cutting of whole trees or the removal of parts of trees such as bark, roots, or foliage. This reflects the value of the trees to the community including the importance of non-timber tree products for traditional uses.

The need for a permit is also driven by safety and liability concerns.

A template for the Tree Harvest Permit can be found in the templates section of this policy.

Permits are available to Members only unless the permit is associated with a minor or major project.

Harvested materials are for personal use only and are not for direct sale unless they are associated with a minor or major project. Conversion or addition of value to timber or non-timber tree products for resale is acceptable.

For any major or minor development requiring the harvest of trees, the applicant will request a Tree Harvest Permit.

Any member may at any time request a Timber Harvest Permit.

FireSmart Design and Construction

FireSmart Canada leads the development of resources and programs designed to empower the public and increase community resilience to wildfire across Canada. Ts'uibaa-asatx is a Recognized FireSmart Community. We are committed to reducing the risks associated with living within a forest ecosystem in which fire is a natural and necessary element.

Ts'uibaa-asatx takes a multiple program approach to the safety and security of our community. For each potential hazard we assess our vulnerability and risks. With our risks defined, we plan for preparedness, response, and recovery, and work to reduce or mitigate our risks.

We utilize FireSmart principles to guide our preparedness and risk mitigation work with regard to wildfire. Ts'uibaa-asatx is active in the seven FireSmart disciplines of Education, Emergency Planning, Vegetation Management, Legislation, Development, Interagency Cooperation and Cross Training.

This policy focuses on the discipline of FireSmart Development. Ts'uibaa-asatx has entered a time of growth and land development. We are investing in new infrastructure, expanding our commercial and institutional presence on our land, and expanding housing for members and non-members. It is both prudent and our responsibility to reduce and mitigate our collective risk associated with wildfire.

This policy makes it clear to members, partners, developers, and contractors what is expected of them in their development work on Ts'uibaa-asatx lands. The following sections provide guidance. Details can be found in the source documents identified as appendices to this policy.

The Development Permit system is a planning tool that local governments use to manage development, protect the environment, and address health and safety issues. The Ts'uibaa-asatx Development Permit process addresses FireSmart best practices in subdivision design and building construction. Applications for development or building permits are required to include a *FireSmart Development Plan* which will state the intent of the developer or builder to implement to FireSmart principles.

Details of design and construction requirements can be found in EOP No. 5 FireSmart Design to be found in the *Ts'uibaa-asatx Subdivision, Development, and Servicing Permitting Guide* (hereafter referred to as the *Permitting Guide*).

Background information can be found in the following reference documents:



- FireSmart Begins at Home Manual, B.C. FireSmart.
- FireSmart Home Development Guide.
- FireSmart Guide to Landscaping.
- The Home Owners' FireSmart Manual, B.C. Edition.
- Ts'uubaa-asatx FireSmart Community Plan.
- Ts'uubaa-asatx All-hazards Emergency Management Plan

Community Notification or Approval Required

The Ts'uubaa-asatx Land Code prescribes community notification prior to the introduction of:

- Any Law on spousal property;
- Any land use plan;
- A Law respecting a community plan or subdivision plan;
- A Law affecting a Heritage Site or an environmentally sensitive property;
- A Law or process respecting environmental assessment; and/or
- Any other Law or class of Law of which Council deems appropriate to provide public notice.

The Ts'uubaa-asatx Land Code prescribes community approval prior to undertaking, adopting, implementing or approving any of the following:

- A voluntary exchange of Ts'uubaa-asatx Lands;
- Written policies governing the granting of allotments to Members;
- A development on a site designated as a heritage site;
- Any other matter stipulated in this Land Code as requiring approval at a meeting of Members;
- Any other matter that Council deems appropriate to be brought forward at a Meeting of Members for approval; and/or
- Any proposed Law or class of Law that Council deems appropriate to be brought forward at a Meeting of Members for approval.

The Operations Manager will determine if the project as described will require community input or approval.

Minor Project Permit Applications

Minor projects include:

- Temporary land use by utilities or other contractors which involves any removal of trees, shrubs, or disturbance of soil;
- Construction of residential garages or out buildings the footprint of which is greater than 200 square feet;
- Installation of trailers and temporary structures which are connected to services; or
- The construction or demolition of one single family home by Ts'uubaa-asatx First Nation on Ts'uubaa-asatx Land or by a Ts'uubaa-asatx member on their land held under an allotment.

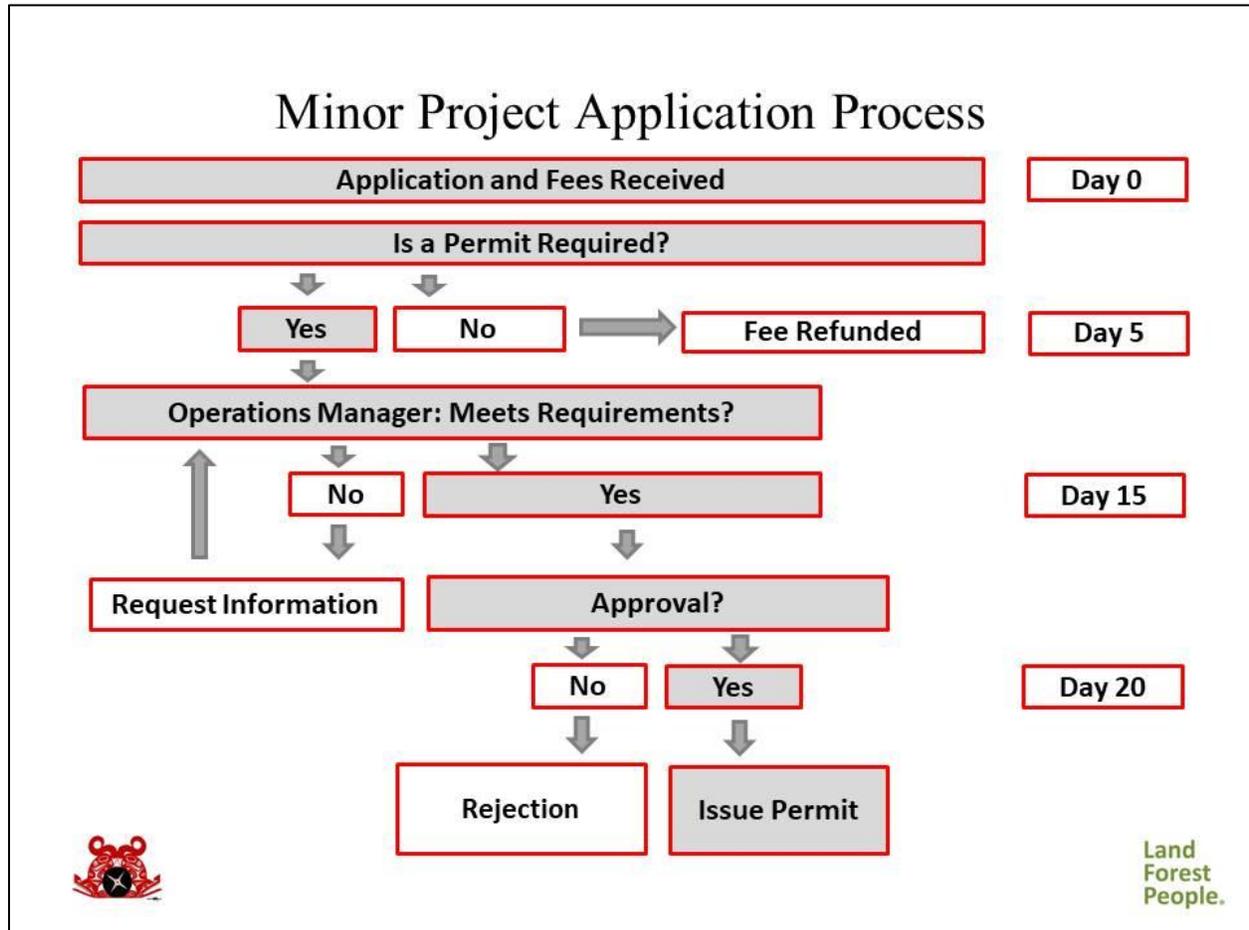
No minor projects may take place or have activity with 30 metres of a water body.

No project requiring community approval will be considered a minor project.



The Operations Manager will encourage applicants to discuss their project previous to submitting an application.

The figure below provides flow chart explanation of the minor project application process.



For any development deemed to be a minor project, the applicant will:

- Submit an application to the Operations Manager using the form provided in the *Permitting Guide* (Section 17.1);
- Pay the prescribed fee as per the *Permitting Guide* (Section 18).

Having received an application, the Operations Manager will:

- Complete the Application Information section of the application and record the application in the project register;
- Confirm that a permit is required for the project as described;
- Confirm that the characteristics of the project are appropriate for designation as a minor project and the fee is the appropriate value;
- Normally within five working days, inform the applicant:
 - That no permit is required and refund the fee; or
 - That the application is rejected and that the project requires a major project application and that the fee will not be refunded but will be applied to any major project fees; or
 - That the application is accepted.

Normally within an additional 10 working days (15 days following receipt of the application) the Operations Manager will determine if the application is fully completed and meets the applicable requirements set out in Section 2.0 of the *Permitting Guide*.

Application Information

- Deposit the required fee.

Permit for Temporary Use

- Confirm need for temporary use, the appropriateness of the request, the nature of the work, and the time frame required.

Interest Holders

- Undertake an interests search on the property and ensure that all interest holders are indicated and have completed and signed the allotment holders section.

Description of Project

- Confirm that the project and the nature of the works is clearly and fully described.

Environmental Scan

- Evaluate the project in terms of each issue listed in the environmental scan.
- Ensure that no works are within 30 metres of a waterbody and that no works will have an adverse effect on ground or surface water.
- Ensure that works are not in contravention of species at risk legislation. This item is difficult to deal with without specific technical knowledge. The approach to evaluation for minor projects will be to consider possible impact as opposed to presence of species. Innocuous activities will have no potential for impact. Also, risk can generally be reduced by undertaking activities outside of wildlife breeding season and avoiding wetland areas. Until such time as a full Ts'uubaa-asatx lands study is completed by Ts'uubaa-asatx, a desktop exercise will be sufficient for minor projects where there is any doubt.
- Evaluate for potential emissions, including dust, odour, and smoke.
- Evaluate for appropriate land use.



- Ensure that works do not jeopardize cultural or archaeological values. Monitoring during excavation can go a long way to avoid impacts with minor projects.
- Evaluate for potential negative impacts on neighbours or public facilities.
- Review of environmental history to protect the applicant or future visitors or residents of the location.
- The applicant is responsible for proper disposal of all waste, proper handling of fuel, and for ensuring that any imported soil is contaminant free.

Signatures

- Ensure proper completion of the signature block.

Decision Making

After evaluation, and normally within 15 days of receiving the application, the Operations Manager may:

- Request additional information;
- Reject the application and provide a written decision rationale; or
- Issue a permit with or without conditions.

Permit

The permit will identify the project, the works to be undertaken, the time-frame within the work is to be undertaken, any conditions that are to apply, and a description of the enforcement process applicable for failure to conform to the permit. The permit will be signed by the applicant and then by Ts'uubaa-asatx. The application form will be considered a part of the permit document.



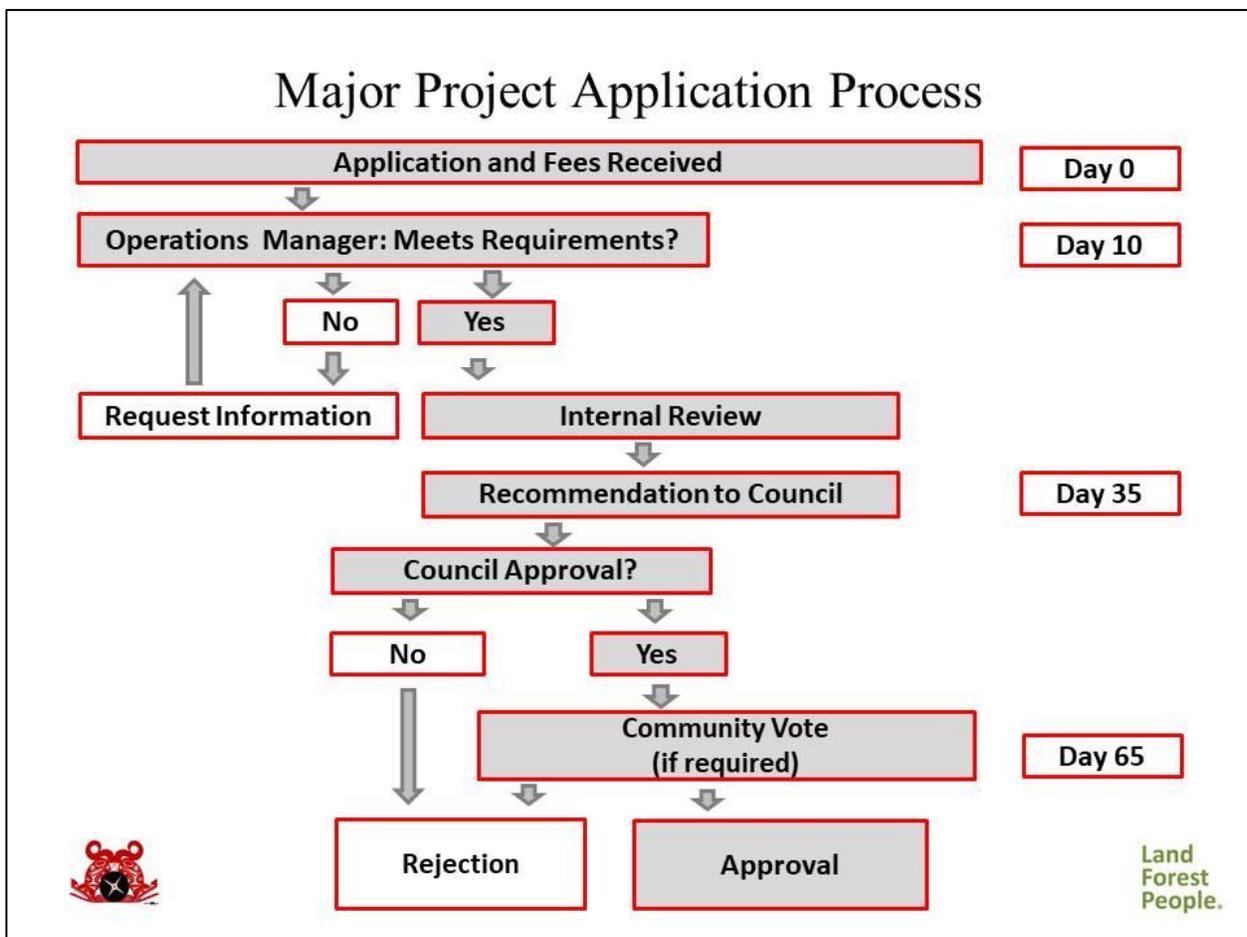
Major Project Applications

All applicants must discuss their project with the Operations Manager previous to submitting an application.

For any development deemed to require a permit, the developer/applicant will:

- Submit an application to the Operations Manager using the form provided in the *Permitting Guide* (Section 17.2);
- Pay the prescribed fees as per the *Permitting Guide* (Section 18).

The figure below provides a flow chart explanation of the major project and rezoning application process.



Having received an application, the Operations Manager will:

- Complete the Application Information section of the application and record the application in the project register;
- Acknowledge receipt of the application and deposit the fees; and
- Communicate to the applicant that community input or approval will or will not be required as the case may be.



Normally within 10 days following receipt of the application the Operations Manager will determine if the application meets the applicable requirements set out in the following:

- Ts'uubaa-asatx Subdivision, Development, and Servicing Permitting Guide;
- Ts'uubaa-asatx Land Use and Development Permit Application form;
- Ts'uubaa-asatx Land Use and Development Checklist;
- The B.C. Building Code; and
- Any directions from certified professionals.

If the application does not meet all requirements, the Operations Manager may request additional information from the applicant. Any new information or amendments to the application will be reviewed by the Operations Manager (repeat Checklist F.)

If the application meets all requirements it is subjected to internal review.

Internal Review

Once a complete application and applicable fees are received, the Operations Manager will:

- Circulate the application and all relevant information and documentation to internal Ts'uubaa-asatx departments for comment; and
- For application for sub-divisions, multi-family structures, or significant increases in density, refer the application to all adjacent allotment holders on Ts'uubaa-asatx lands.

The Committee shall review the application and shall provide recommendations to Council as to:

- Whether the application should be approved or not; and
- Any suggested modification, terms or conditions that should be set by Council.

The Operations Manager will consider the following factors:

Permit Application

- The developer has reviewed the documents listed in Section 1.2 of the *Permitting Guide*;
- Full completion of the required forms;
- Clear and legal access to the land for the intended purpose;
- The promotion of health, safety, convenience and welfare of Ts'uubaa-asatx members and of residents and occupants and other persons who have a lawful interest in Ts'uubaa-asatx lands;
- Well planned and orderly development of Ts'uubaa-asatx lands and the preservation of amenities and special features of Ts'uubaa-asatx lands;
- The proposed development or land and resource use will not pose a threat of irreparable environmental, cultural or resource damage, and will contain an element that can contribute to the restoration of the natural and/or cultural health of the land;
- Adherence to all Ts'uubaa-asatx land use, environmental management, and heritage protection processes;
- Compliance with the Ts'uubaa-asatx Laws particularly the *Subdivision, Development, and Servicing Law*, and with relevant federal and provincial laws.

Land Use

- Evaluation on the following merits:
 - Is it good land use?
 - Does it balance impacts and benefits?
 - Does it support sustainability?



- Are the economic benefits maximized?
- The character of the proposed activity or project in relation to the character of the neighbourhood, and the buildings already erected;
- The development of the neighbourhood in a manner that contribute to the economic, environmental, cultural and community health of Ts'uubaa-asatx and its Members and the occupants of Ts'uubaa-asatx lands;
- Consideration of:
 - Viewscapes, aesthetics and visual qualities;
 - Ensuring adequate parking, access and emergency access; and
 - The conservation of property values.

Community Benefits

- That the proposed project will provide more positive than negative social impacts for Ts'uubaa-asatx people. Developers will include economic participation by Ts'uubaa-asatx or our Members through business opportunities, such as partnerships and joint ventures, and provide employment-related training and capacity building for Ts'uubaa-asatx and our Members;
- Potential impacts on adjacent uses, owners and occupants;
- Provision land and/or funds to Ts'uubaa-asatx for the development of community amenities;
- Developments considered positively by Ts'uubaa-asatx will identify and reserve parks, green space, common areas, open spaces, trails, landscaping, fences, recreation features, and any other public amenities;
- In the case of negative social and environmental impacts that cannot be directly mitigated, cash and in-kind support of unrelated Ts'uubaa-asatx initiatives is welcome.

Engineering

- Compliance with the *Permitting Guide* and environmental operating procedures (EOPs), particularly:
 - Section 4.0 Engineering Designs and Plans;
 - Section 5.0 Land Filling and Conservation and EOP 1;
 - Section 6.0 Outdoor air quality and EOP 2;
 - Section 7.0 Water Management and EOPs 3 and 4;
 - Section 8.0 Roads, Access, and Parking;
 - Section 9.0 Fire Protection and EOP 5;
 - Section 10.0 Safe Fuel Handling and Storage and EOPs 6 and 7;
 - Section 11.0 Industrial Waste and EOP 8;
 - Section 12.0 Environmental Assessment and EOP 9; and
 - Sections 13.0 through 16.0 Cultural Stewardship, Wildlife and Habitat, Amenities and Community Benefits, and Completion Documentation.



Other

- Any information provided and any approvals already granted by Council, including any terms or conditions, in relation to the same project or the same parcels of land; and
- Any other factors which may have an impact on the community or Ts'uubaa-asatx lands.

In making recommendations to Council, the Committee may make any relevant recommendations including:

- Any recommendations relating to the general factors set out above;
- Whether there should be bonds posted or irrevocable letters of credit and, if so, in what percentage or what amount;
- Dedication of up to 5% of the area of the land for parks, green space or community use or a cash donation in lieu;
- Preferred lot reconfigurations to ensure viable subdivisions;
- Construction of intersections, access and emergency access routes;
- Construction of parking spaces;
- Construction of sidewalks;
- Purchase and installation of street lights;
- Completion of required service agreements;
- Provision of updated plans, reports or studies, including as-built drawings after the completion of the project;
- Requirements for staging or sequencing of the project including requirements for interim reports;
- Set-backs or buffers including set-backs or buffers from property lines and heritage or environmental features;
- Noise and dust prevention or mitigation measures; and
- Any other relevant terms or conditions.

After reviewing the recommendations from the Committee and any comments from adjacent allotment holders and from Ts'uubaa-asatx managers and departments, the Operations Manager may request further information, plans, reports, or other relevant material from the applicant which the applicant shall provide.

The Operations Manager shall as soon as practicable after having received all comments from the Committee, departments, CP holders, or within normally 10 working days of having received any additional information requested of the applicant, forward the application to Council along with:

- All relevant documents, maps, plans, reports and other information;
- Recommendations from the Committee;
- Any comments received from adjacent CP holders or members; and
- Any comments or recommendations from other Ts'uubaa-asatx managers or departments.

Council Decision

As soon as practicable after receiving the application and information as above, Council shall decide whether or not to reject the application or approve the application with any reasonable terms or conditions.

If Council identifies additional terms or conditions the Operations Manager will communicate those conditions to the applicant. If they are accepted by the applicant the process will continue.



If the applicant rejects the additional terms or conditions, the application is rejected.

Any alternate proposals or revision of the application by the applicant will at the Operations Manager's discretion restart the process at Checklist F, G, or H.

Community Approval

The Ts'uubaa-asatx Land Code defines the requirement for community approval as follows:

16.1 Council shall convene a Meeting of Members and seek approval by way of a vote of Eligible Voters prior to undertaking, adopting, implementing or approving any of the following:

(a) a voluntary exchange of Ts'uubaa-asatx Lands in accordance with article 29;

(b) written policies governing the granting of Allotments to Members, in accordance with section 21.3;

(c) a development on a site designated as a Heritage Site;

(d) any other matter stipulated in this Land Code as requiring approval at a Meeting of Members,

(e) any other matter that Council deems appropriate to be brought forward at a Meeting of Members for approval; and

(f) any proposed Law or class of Law that Council deems appropriate to be brought forward at a Meeting of Members for approval.

If community input or approval is required, the Lands Committee will convene a meeting of members to seek their input or approval as may be required.

Community meetings will be convened in accordance with Part 4 of the *Ts'uubaa-asatx Land Code* and related procedures.

Community input received will be considered by Council and addressed in final conditions as Council sees fit.

If community approval is required, and the Community rejects the project, the Operations Manager will inform the applicant that the application is rejected and provide a written decision rationale.

If Community approval is received the process will continue.

Project Implementation

If an application is accepted by Council, and approved by the community if required, the Operations Manager will communicate acceptance of the application to the applicant and with the applicant initiate a project based process to administer the project as per the approved application and the *Permitting Guide*.

Management of the project will include administration of the following steps:

- Conceptual design and issuance of Approval in Principle;
- Final design approval and issuance of Development Permit;
- Inspection for substantial completion; and
- Inspection at completion.

Applicants shall pay the prescribed fee, post any required bonds, and submit the prescribed application form for each relevant stage.



Offences, Penalties and Enforcement

A stop work order may be issued to any person undertaking any development who has not received full and proper authorization under the *Ts'uubaa-asatx Subdivision, Development and Servicing Law*. Under the stop work order the activity must cease.

A removal order may be issued for any structures, works or installations carried out in violation of the *Subdivision, Development, and Servicing Law*. Removal is to be within 30 days, failing which Council may order them to be removed at the expense of the Person who constructed or installed the structures, works or installations without proper authorization.

Orders may be issued by Council, the Operations Manager, a Ts'uubaa-asatx Enforcement Officer, or a designated official.

Contravention of the *Subdivision, Development, and Servicing Law* carries a fine of not more than \$10,000 or imprisonment for a term of not more than three months, or both.

Definitions

"Council" means the Chief and Council of Ts'uubaa-asatx First Nation;

"Development" is defined as subdivision or partitioning of land, stratification or other division of legal interests in lands or structures, installation of roads or other infrastructure, construction, alteration, or demolition of commercial or residential structures, the harvest of trees or disturbance of soil, or deposit or removal of more than 6 m³ of soil, gravel or other materials.

"Development Permit" means a permit issued by Ts'uubaa-asatx authorizing activities on Ts'uubaa-asatx lands as per this Law.

"Indian Act" means the *Indian Act*, R.S.C. 1985, c. I-5;

"Land Code" means the *Ts'uubaa-asatx Land Code* and any amendment thereto;

"Laws" means any applicable Ts'uubaa-asatx, federal or provincial laws, as those laws may be amended from time to time.

"Person" includes an entity or corporation;

"Project" means the process and activities required to bring works defined in a permit application from the approval-in-principle stage to completion.

"Ts'uubaa-asatx" means the Ts'uubaa-asatx (formerly Lake Cowichan First Nation), a band within the meaning given to "band" in subsection 2(1) of the *Indian Act*;

"Ts'uubaa-asatx Enforcement Officer" means any person or class of persons designated as an enforcement officer under Ts'uubaa-asatx Law; and

"Ts'uubaa-asatx lands" means the whole of Cowichan Lake Reserve and any future reserve additions.



Templates

The Minor Project Development Permit Application, the Development Permit Application, the Development Permit Checklist, and the Interest Holder's Undertaking are available in Section 17.0 of the *Permitting Guide*.

Provided here are:

- Council Resolution template;
- Approval in Principle form;
- Development Permit form;
- Tree Harvest Permit form;
- Meeting Notice form; and
- Process Checklists.



Council Resolution

The following is an example for use and insertion in the resolution form.

The Chief and Council of Ts'uubaa-asatx in British Columbia, do hereby resolve as follows:

WHEREAS:

Ts'uubaa-asatx has chosen to assume control of its Indian reserve lands pursuant to the *First Nation Lands Management Act*, S.C. 1999, c. 24 by entering into the *Individual Agreement on First Nation Land Management between Ts'uubaa-asatx and Her Majesty the Queen in Right of Canada* and by adopting the *Ts'uubaa-asatx Land Code*;

WHEREAS:

Ts'uubaa-asatx Chief and Council ratified the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law* on the *xxth day of xxxx 20xx*;

WHEREAS:

Ts'uubaa-asatx Chief and Council has received an application dated _____ from _____ for development on Ts'uubaa-asatx lands;

WHEREAS:

The Ts'uubaa-asatx Operations Manager has fully reviewed all relevant information and provided recommendations to Council;

THEREFORE:

The Ts'uubaa-asatx Chief and Council has considered all relevant information and under the authority of the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law* hereby

approve the application and direct the Operations Manager to proceed with the applicant through the permitting process.

-or-

approve the application with the following conditions and direct the Operations Manager to proceed with the applicant through the permitting process.

-or-

reject the application.

This resolution is supported by the undersigned and passed this *xxth, day of XXXX, 20XX*.



Approval in Principle

With respect to the Development Permit application identified as:

Ts'uubaa-asatx File Number	
Application Number	
Date of Application	
Developer or Agent	
Corporate Name	

After consideration of all information available to it, Ts'uubaa-asatx grants this Approval-in-Principal to the applicant for the project described briefly below.

--

Ts'uubaa-asatx has defined the following terms and conditions.

--

The applicant is entitled to proceed to final planning. The applicant is not entitled to begin any construction or physical activity. Upon submission and acceptance of final plans the applicant may be granted a Development Permit.

The applicant is entitled to proceed as per the above terms and conditions and in accordance with the application which is appended. Both are to be considered part of this Approval-in-Principal and endorsed below.

Applicant	Date
Ts'uubaa-asatx Operations Manager	Date
This Approval- in-Principal is valid until, and all works must be completed by this date:	Date

Note: A person who contravenes this Approval-in-Principal is guilty of an offence and liable on summary conviction to a fine of not more than \$10,000 or to imprisonment for a term of not more than three months, or to both.
 Ts'uubaa-asatx may issue a Stop Work Order to order any Person who has not received full and proper authorization under the Subdivision, Development, and Servicing Law to cease carrying out any activity, associated with this Approval-in-Principal.
 Ts'uubaa-asatx may order any structures, works or installations carried out in violation of this Approval-in-Principal or the Subdivision, Development, and Servicing Law to be removed within 30 days.



Development Permit

With respect to the land use and Development Permit application identified as:

Ts'uubaa-asatx File Number	
Application Number	
Date of Application	
Developer or Agent	
Corporate Name	

After consideration of all information available to it, Ts'uubaa-asatx grants this Development Permit to the applicant for the project described briefly below.

--

Ts'uubaa-asatx has defined the following terms and conditions.

--

The applicant is entitled to proceed as per the above terms and conditions and in accordance with the application which is appended. Both are to be considered part of this permit and endorsed below.

Applicant	Date
-----------	------

Ts'uubaa-asatx Operations Manager	Date
-----------------------------------	------

This Development Permit is valid until, and all works must be completed by this date:	Date
---	------

Note: A person who contravenes this Development Permit is guilty of an offence and liable on summary conviction to a fine of not more than \$10,000 or to imprisonment for a term of not more than three months, or to both.
 Ts'uubaa-asatx may issue a Stop Work Order to order any Person who has not received full and proper authorization under the Subdivision, Development, and Servicing Law to cease carrying out any activity, associated with this Development Permit.
 Ts'uubaa-asatx may order any structures, works or installations carried out in violation of this Development Permit or the Subdivision, Development, and Servicing Law to be removed within 30 days.



Tree Harvest Permit

This Tree Harvest Permit is identified as below.

Ts'uubaa-asatx File Number	
Application Number	
Date of Application	
Member/Applicant Name	
Address/Contact Information	

This Permit allows for the harvest of trees by the member or applicant identified above according to the following terms and conditions.

Harvesting of trees will not be undertaken on land held under allotment without the express permission of the allotment holder.

Harvesting of trees will be undertaken using appropriate personal protection equipment. Harvesting will be undertaken by qualified persons or under mentorship. Ts'uubaa-asatx accepts no liability for damage, injury, or death associated with work undertaken under this permit.

All care and caution will be taken to ensure no fuel or oil is allowed to spill into the environment.

If to be used for firewood, only deciduous trees will be harvested.

The harvest of trees under this permit will be restricted to the following area: _____

The harvest of trees under this permit will be restricted to the following species of tree: _____

The maximum volume of harvested material will be: _____

The end use of timber or non-timber products will be: _____

The harvest of trees for cultural purposes will be undertaken by a culturally competent person or under mentorship.

.... 2



The applicant has paid the required fee and is entitled to proceed as per the above terms and endorsed below.

Applicant

Date

Ts'uubaa-asatx Operations Manager

Date

This Tree Harvest Permit is valid until, and all works must be completed by this date:	Date
--	------

Note: A person who contravenes this Tree Harvest Permit is guilty of an offence Under the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law* and is liable on summary conviction to a fine.

Ts'uubaa-asatx may issue a Stop Work Order to order any Person who has not received full and proper authorization to harvest trees on Ts'uubaa-asatx lands.

Ts'uubaa-asatx may order any structures, works or installations carried out in violation of this Development Permit or the Subdivision,



Meeting Notice

Notice of Meeting of Members For Consideration of Granting of a Development Permit *Insert location, date, time*

Ts'uubaa-asatx has an inherent right to self-government including jurisdiction over land. Ts'uubaa-asatx Chief and Council exercise that right by way of the *Ts'uubaa-asatx Land Code* and the *Ts'uubaa-asatx Subdivision, Development, and Servicing Law, 2020*.

Ts'uubaa-asatx First Nation, through resolution of Council on the ____ day of _____ 20xx, has approved the granting of a Development Permit for a project as described below.

Project Description

Describe the proposed project and rationale for approval.

.... 2



Map and Area Report

The following map identifies the location of the project.

The map must clearly indicate the area associated with the project.

Part 4 of the *Ts'uubaa-asatx Land Code* dictate the rules and requirements for member input or approval, including for development projects. In accordance with the *Ts'uubaa-asatx Land Code*, all community members are encouraged to attend a community meeting at the place and time indicated on the first page of this notice.

This meeting is for community input *(or approval –choose one)*.

(If approval: Community approval will be achieved by a simple majority of eligible voters in attendance. The quorum is 10% of eligible voters.)



Checklists

Development Permit Application Process

The following checklists track the administration of Ts'uubaa-asatx policy through the process of processing of minor and major project permit applications.

Applicants are encouraged to discuss their project with the Operations Manager previous to submitting an application. The Operations Manager will provide guidance to the applicant and suggest that an application be made as either a minor project or a major project. A major project may include a need for re-zoning and the rezoning application process is included with the major project process.

Checklist A.

Application

		Working Days
	Application received, including prescribed fees.	Day 0
	The Operations Manager will complete the application information section and record the application in the project register.	
Yes/No	Operations Manager decision: Is a permit required considering the nature of the project? (Yes – Move to Checklist B. No – Complete this checklist.)	
	Applicant is informed that no permit is required and the fee is refunded.	Day 5

Checklist B.

		Working Days
Yes/No	Operations Manager determination: Has the appropriate application has been submitted? (Yes – Move to Checklist C for a minor project and to Checklist F for a major project. No – Complete this checklist.)	
	Applicant is informed that their application is inappropriate for the project. The Operations Manager refunds the fee and directs them to make the correct application (minor project, or major project).	Day 5



Minor Project Process

The following checklists track the administration of Ts'uubaa-asatx policy through the process of a minor project application only.

Checklist C.

Operations Manager's Review

		Working Days
	The Operations Manager will notify the applicant that the application has been received and deposit the fee.	Day 0
	The Operations Manager will review the application and document the evaluation process following criteria:	
	<ul style="list-style-type: none"> A minor project must not be within 30 metres of a water body. 	
	<ul style="list-style-type: none"> Determine if the application is fully completed and meets the applicable requirements set out in Section 2.0 of the <i>Ts'uubaa-asatx Development Permitting Guide</i>. 	
	a) Confirm temporary use if applicable	
	b) Interests search and confirm all interest holders	
	c) Confirm the nature of the works	
	d) Affirm the environmental scan	
	e) Confirm signatures present as required	
Yes/No	The application meets all requirements of the <i>Permitting Guide</i> . (Yes – Move to Checklist D, No – Complete this Checklist.)	
	The Operations Manager will request additional information and when received repeat Checklist C.	Day 10

Checklist D.

Decision

		Working Days
	The Operations Manager will decide whether or not to approve the application and may reject the application or approve the application with any reasonable terms or conditions.	
Yes/No	Operations Manager approves the application with or without conditions. (Yes – Move to Checklist E. No – Complete this Checklist.)	
	The Operations Manager will inform the applicant that the application is rejected.	Day 10

Checklist E.

Acceptance and Permit

		Working Days
	Operations Manager will communicate approval of the application and issue a Development Permit with conditions if any.	Day 5



Major Project Process

The following checklists track the administration of Ts'uubaa-asatx policy through the process of a major project application.

Checklist F.

Operations Manager's Review

		Working Days
	The Operations Manager will confirm receipt of the application and deposit the fee.	Day 0
	The Operations Manager will review the application and document any deficiencies:	
	<ul style="list-style-type: none"> • Ts'uubaa-asatx Development Permit Application form 	
	<ul style="list-style-type: none"> • Ts'uubaa-asatx Development Checklist 	
	<ul style="list-style-type: none"> • Interest Holder's Undertaking 	
	The Operations Manager will prepare recommendations for consideration by the Land Advisory Committee in the following categories as described in the <i>Permitting Guide</i> :	
	<ul style="list-style-type: none"> • Engineering Designs and Plans (Section 4.0 of the Guide) 	
	<ul style="list-style-type: none"> • Land Filling and Conservation (Section 5.0 of the Guide) 	
	<ul style="list-style-type: none"> • Outdoor Air Quality (Section 6.0 of the Guide) 	
	<ul style="list-style-type: none"> • Water Management (Section 7.0 of the Guide) 	
	<ul style="list-style-type: none"> • Roads, Access and Parking (Section 8.0 of the Guide) 	
	<ul style="list-style-type: none"> • Fire Protection (Section 9.0 of the Guide) 	
	<ul style="list-style-type: none"> • Safe Fuel Handling And Storage (Section 10.0 of the Guide) 	
	<ul style="list-style-type: none"> • Industrial Waste (Section 11.0 of the Guide) 	
	<ul style="list-style-type: none"> • Environmental Assessment (Section 12.0 of the Guide) 	
	<ul style="list-style-type: none"> • Cultural Stewardship (Section 13.0 of the Guide) 	
	<ul style="list-style-type: none"> • Wildlife and Habitat (Section 14.0 of the Guide) 	
	<ul style="list-style-type: none"> • Amenities and Community Benefits (Section 15.0 of the Guide) 	
	<ul style="list-style-type: none"> • Completion Documentation (Section 16.0 of the Guide) 	
	<ul style="list-style-type: none"> • The BC Building Code 	
	<ul style="list-style-type: none"> • Any directions from certified professionals 	
Yes/No	The application meets all requirements of the developers guide. (Yes – Move to Checklist G, No – Complete this Checklist.)	
	The Operations Manager will request additional information and when received repeat Checklist F.	Day 15



Checklist G.

Internal Review

		Working Days
	Upon receipt of a complete application, the Operations Manager will acknowledge receipt of the application and inform the applicant if community input or approval is required.	
	The Operations Manager will circulate the application and all relevant information and documentation to internal Ts'uubaa-asatx departments for comment.	Day 0
	For application for sub-divisions, multi-family structures, or significant increases in density, The Operations Manager will refer the application to all adjacent allotment holders on Ts'uubaa-asatx lands.	
	Refer the application to pertinent staff with all relevant information and documentation.	Day 10
	The Operations Manager will review the application and all relevant information and provide recommendations to Council.	
Yes/No	The Operations Manager feels that the application meets all requirements of the <i>Permitting Guide</i> . (Yes – Move to Checklist H. No – Complete this Checklist.)	Day 35
	The Operations Manager will request additional information and when received repeat Checklist G.	Day 40

Checklist H.

Council Decision

		Working Days
	The Operations Manager documents comments and recommendations and forwards the application and all relevant material to Council for consideration.	
	Council shall decide whether or not to approve the application and may reject the application or approve the application with any reasonable terms or conditions.	
Yes/No	Council approves the application (with or without conditions). (Yes – Move to Checklist I. No – Move to Checklist J.)	Day 65

Checklist I.

Terms or Conditions

		Working Days
Yes/No	Council has identified additional terms or conditions? (Yes – Complete this Checklist. No – Move to Checklist K.)	
	Operations Manager will communicate the terms or conditions of acceptance to the applicant.	Day 65
	Upon receipt of acceptance of conditions proceed to Checklist K. If the applicant rejects the conditions proceed to Checklist J. Any alternate proposals or revision of the application by the applicant will at the Operations Manager's discretion restart the process at Checklist F, G, or H.	



Checklist J.

Application Rejected

		Working Days
	The Operations Manager will inform the applicant that the application is rejected and provide a written decision rationale.	Day 70

Checklist K.

Community Approval

		Working Days
Yes/No	Does the project require community approval (e.g. rezoning)? (Yes – Complete this Checklist. No – Move to Checklist L.)	
	If community approval is required Council gives written notice to members of the meeting with at least 21 days of notice using the <i>Meeting Notice</i> template. Posting will be in a public place, by mail to all members, and on the Ts’uubaa-asatx website.	
	The Land Advisory Committee convenes a meeting of members to seek their approval.	Day 95
	Community approval received? (If yes – Move to Checklist L, if no – Move to Checklist J.)	

Checklist L.

Acceptance and Project Implementation

		Working Days
	Operations Manager will communicate acceptance of the application to the applicant.	Day 70*
	Operations Manager will initiate a project based process to administer the project as per the approved application and the <i>Permitting Guide</i> . Management of the project will include administration of the following steps: <ul style="list-style-type: none"> • Conceptual design and issuance of Approval in Principle. • Final design approval and issuance of Development Permit. 	

* - Day 100 if community input or approval are required.







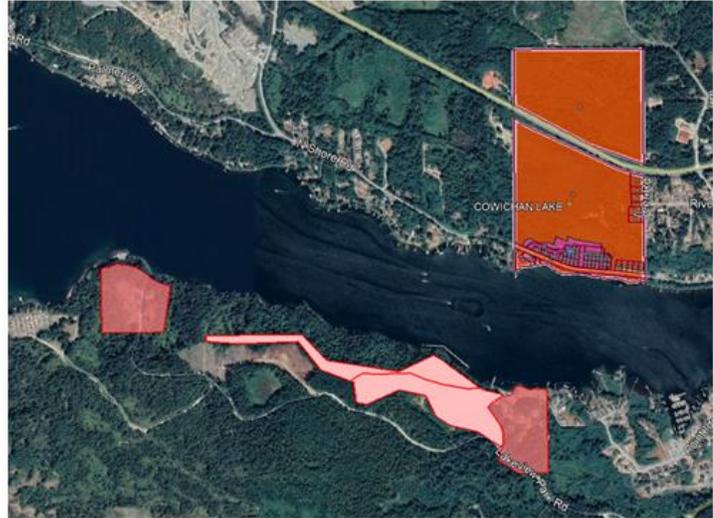
APPENDIX VIII. 2020/2021 PROGRAM

The Ts'uubaa-asatx 2020/2021 program was funded by the Province of British Columbia's Community Resiliency Investment Program (CRIP).

TOWN FIRESMART REFERRAL

With forest fire fuel reduction treatments planned in the vicinity of lands to be transferred to Ts'uu-baa-asatx, Ts'uubaa-asatx provided a letter of support to the Town of Lake Cowichan and the treatments were subsequently completed.

Treatment Areas (pink polygons):



Provincial Crown land parcels to be transferred to Ts'uubaa-asatx (red outline):



COMMUNITY ENGAGEMENT AND EDUCATION

With COVID-19 restrictions continuing, community engagement remains a challenge. Facebook posts remain our primary method of disseminating information. Our posts are reproduced below.

June 7th, 2021:

Ts'uu baa-asatx First Nation

David M Carson
Just now · 🌐

Wildfire season is here. It is a good time to think about the good work we have done to mitigate risk, and turn our minds to the next steps.

TS'UUBAA-ASATX IS A FIRESMART COMMUNITY

Wildfire is a natural and necessary element of the forest ecosystem that surrounds our community. FireSmart is a way of living with wildfire while minimizing the risks. Managing wildfire appropriately requires balancing its natural role with the protection of human life, property, and economic values. Since 2017 Ts'uubaa-asatx has been recognized by FireSmart Canada as a FireSmart Community.

Education
Public awareness and community involvement are central to the FireSmart way. By empowering people we are building a resilient community.

Risk Reduction
Ts'uubaa-asatx has assessed our homes for vulnerability to wildfire and taken action to increase their survivability. For example, we have built firewood sheds and moved to wood piles away from the homes.

Fuel Management
A less-dense forest with little dead woody material and no branches on the first two metres of the trees will slow down an advancing fire, keep it from spreading into the crowns and make it much easier to fight.

Emergency Planning
Ts'uubaa-asatx utilizes an all-hazards emergency management system in order to efficiently and effectively prepare for all manner of potential disaster events, including wildfire. Our activities are guided by our FireSmart Community Plan.

Like Comment



Ts'uu baa-asatx First Nation

Like
 Comment

David M Carson

June 29 · 🌐

⋮

With the temperatures high and the forest dry, it can't hurt to think about what we could do at the last minute to protect our homes if we need to. Check out this poster!

Last-Minute Checklist for Protecting Your Home and Property from Wildfire

Evacuation Tips

Monitor conditions and follow the advice of local authorities. **If ordered to evacuate, do so immediately.**

Review your evacuation plan for your family and pets.

- Visit www.getprepared.gc.ca for helpful tips and evacuation plan templates.

Have your "ready to go kit" (emergency kit) ready and stocked with cash, portable radio, prescription medications, eye glasses, change of clothes, pet food, flashlights and batteries, etc. Make sure your phone numbers, insurance information and other important documents for your go bag are current.

- Visit www.getprepared.gc.ca for a more complete list of emergency supplies.

Before evacuating:

- Turn off air conditioning.
- Turn off your electricity and gas.
- Close all doors, garage doors and windows. If weather seal or doors have gaps, seal with duct tape.

Quickly address outside surroundings

Complete a scan around your home and property and take steps to remove combustibles.

Remove leaves, pine needles and other debris from your roof and gutters.

Mow grass and weeds within 10 metres of the house to 10 centimetres in length, or less.

Clear all dead plants, leaves, and weeds within 10 metres of your home. Maintain a 1.5 metre non-combustible zone around your home and deck by sweeping or raking down to mineral soil, rock or concrete.

Move combustible items, such as toys, patio furniture, cushions, decorative items, firewood, and potted plants, that are on and under your deck and within 10 metres of your home. Move all combustible items into your home or garage.

If you have a propane tank located on your property:

- Propane tanks should be moved to 10 metres away from structures.
- Remove weeds and other debris from area around large stationary propane tanks so there is no combustible material near tank.

If you have a combustible fence that attaches to your home:

- Secure gate in an open position.
- Clear vegetation and debris along both sides of combustible fence lines.

Check around the house

Check vents on roof, foundation and exterior walls to prevent embers from entering your home.

Check your attic and foundation (crawl space) vents to see if they are screened and in good repair. Use duct or metal tape to temporarily cover damaged vents and those with 3 millimetre mesh screening.

If you store cardboard boxes and other easily ignited materials near a vent in your attic or crawl space, move them as far away as possible from vent(s).

- Another option is to place tape over vent(s) at these locations. Be sure to remove tape when you return home.

Cover dryer vents and wall-mounted make-up air openings for furnaces with a plywood cover, metal tape or duct tape.

Non-combustible Zone

You can crosspost this post to more groups.

Select Groups

Seen by 15

Like
 Comment





Ts'u u baa-asatx First Nation



David M Carson

September 27 at 10:10 AM · 🌐



We have rescheduled our emergency program gathering as a zoom meeting. The agenda is attached and the zoom link is <https://us02web.zoom.us/j/85485307409...> Everyone is welcome!

Ts'uubaa-asatx Emergency Program October 5th, 2021

Annual Emergency Management Gathering 9 am until Noon Virtual Gathering

Invited: Community Members, Ts'uubaa-asatx Emergency Management Committee, Ts'uubaa-asatx FireSmart Committee, Ts'uubaa-asatx FireSmart Champions, Steve Vatcher, Margaret Symon, David Carson

Agenda

09:00 Update on Emergency Program Activities - David
All-hazards planning, FireSmart, Web pages

09:30 Upcoming Program Activities - David, Margaret
FireSmart 2021/2023, All-hazards planning

10:00: Interface Fire Emergency Operations Centre Tabletop Exercise
Testing and improving support and response protocols most suitable for Ts'uubaa-asatx

- Activation
- Declaration of state of local emergency
- Community evacuation
- After action reporting

12:00 Adjourn



Land
Forest
People.



EMERGENCY PROGRAM WEBPAGES

In response to the difficulty of bringing community members together during COVID-19, efforts toward education were re-imagined as information dissemination via the Ts'uubaa-asatx website. With no web presence for emergency preparedness, a framework was built to present the community wildfire material. Please see <https://www.lakecowichanfn.ca/emergency-management>.

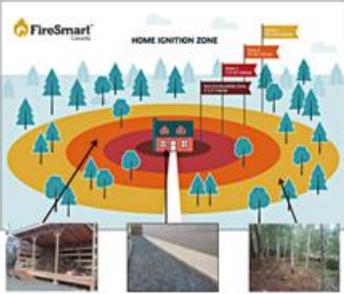
The FireSmart page (in development at the time of writing) presents the information in the following:



TS'UUBAA-ASATX IS A FIRESMART COMMUNITY

Wildfire is a natural and necessary element of the forest ecosystem that surrounds our community. FireSmart is a way of living with wildfire while minimizing the risks. Managing wildfire appropriately requires balancing its natural role with the protection of human life, property, and economic values. Since 2017 Ts'uubaa-asatx has been recognized by FireSmart Canada as a FireSmart Community.





Education

Public awareness and community involvement are central to the FireSmart way. By empowering people we are building a resilient community.

Risk Reduction

Ts'uubaa-asatx has assessed our homes for vulnerability to wildfire and taken action to increase their survivability. For example, we have built firewood sheds and moved to wood piles away from the homes.

Fuel Management

A less-dense forest with little dead woody material and no branches on the first two metres of the trees will slow down an advancing fire, keep it from spreading into the crowns and make it much easier to fight.

Emergency Planning

Ts'uubaa-asatx utilizes an all-hazards emergency management system in order to efficiently and effectively prepare for all manner of potential disaster events, including wildfire. Our activities are guided by our FireSmart Community Plan.



Climate change is real and now. There is no longer a normal pattern of weather, but we do know that weather events will be more extreme and more frequent. Fire is a natural component of the forests surrounding Ts'uubaa-asatx, and in the future its presence and impacts will only be more strongly felt by the community. Excluding fire is not an option, but how can we live with fire without disastrous loss of life, property, and resources?

FireSmart means living with and managing for wildfire. Preparing for the threat of wildfire is a shared responsibility. Community members, community leaders, and all levels of government have a responsibility to lessen the effects of wildfire. Ts'uubaa-asatx is a recognized FireSmart Community and we will continue to reduce risk to the community associated with wildfire. We will continue to foster a strong relationship with the people of the Town of Lake Cowichan.



Destiny and Carlito are your Ts'uubaa-asatx FireSmart Community Champions.

Full details on the history and accomplishments of our FireSmart program can be found at this link to the Ts'uubaa-asatx Community FireSmart Plan.

For more information on the BC FireSmart program including guides for homeowners and landscaping please see the Community Resources page.



The landing page provides basic emergency program information, as well as links to program elements organized by the four pillars of emergency management.

The risk mitigation section focuses on the FireSmart program.

“Risk mitigation starts with strategies to prepare for any threats faced by the community and most importantly implements activities to reduce the negative effects of potential emergencies and disasters. Ts'uubaa-asatx prioritizes risk mitigation with a hazard, risk, and vulnerability assessment. Mitigation work to-date has focussed on utilizing FireSmart principles to reduce the risks associated with wildfire. We have assessed homes for wildfire risk, demonstrated forest fuel reduction, and built firewood sheds away from our homes. Ts'uubaa-asatx is a recognized FireSmart community.”

The Community FireSmart Plan can be downloaded from the Risk Mitigation section.

Ts'uubaa-asatx Emergency Management Program



The Ts'uubaa-asatx Emergency Management Program protects the health and safety of our members and residents and the values and assets found on our land. The program ensures that plans and protocols are in place, that staff and volunteers are adequately trained, and that community awareness is high.

Ts'uubaa-asatx works toward both self-reliance and effective partnerships. Our program is fully compatible with the BC Emergency Management System. We organize our efforts according to the four pillars of emergency management: risk mitigation; preparedness; emergency response; and post incident recovery.

Cowichan Valley Emergency Notification Service

Cowichan Alert informs subscribers of major emergencies or disasters in the Cowichan region that may impact you. Signing up is easy and can be done from your mobile phone, tablet, or computer. There is no fee to sign up. Ts'uubaa-asatx encourages all members and residents to sign up at: <https://alertable.ca/signup/?site=Cowichan>



Ts'uubaa-asatx Emergency Management Program

- Risk Mitigation ▼

- Preparedness ▼

- Emergency Response ▼

- Recovery ▼

[Community Resources](#)

[Emergency Team Resources](#)

[In Case of Emergency](#)

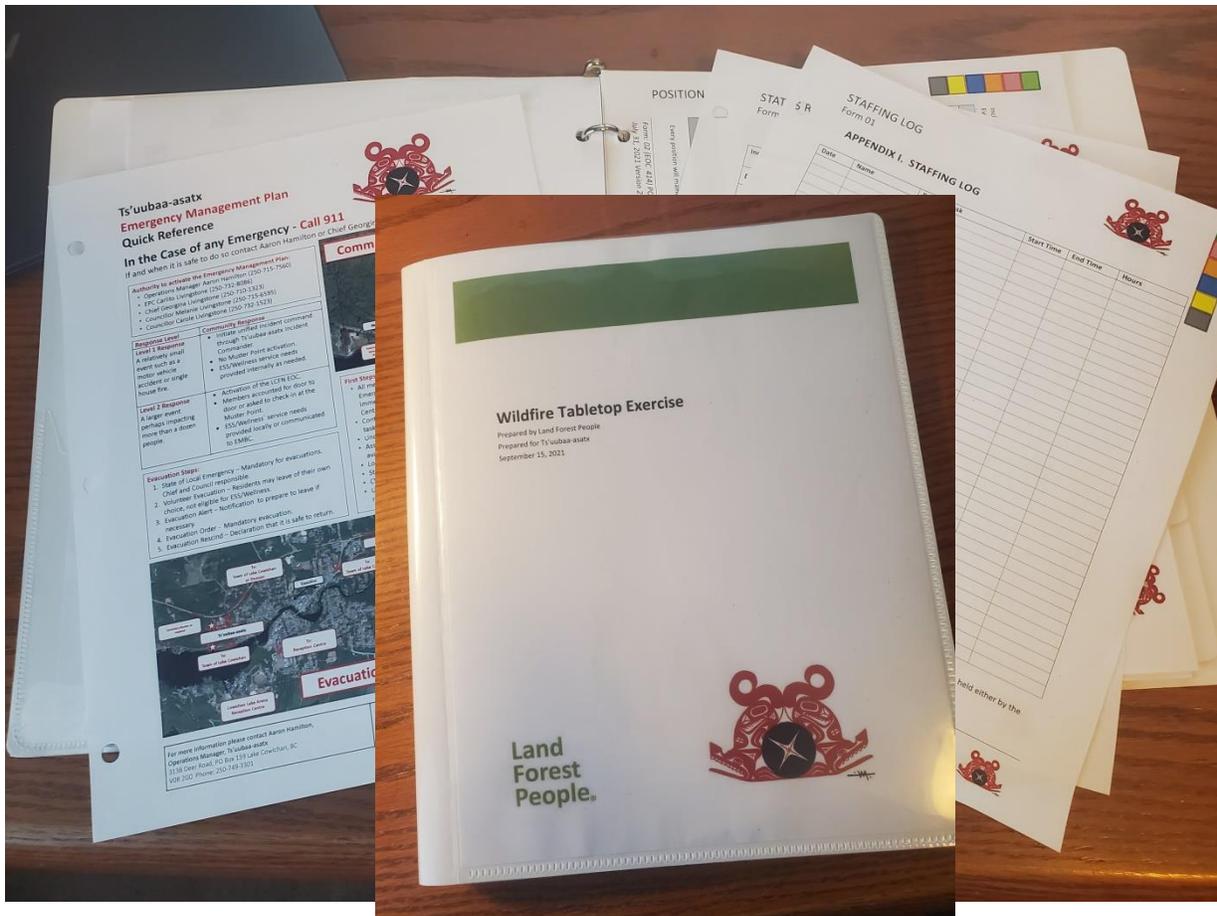


WILDFIRE TABLETOP EXERCISE

Postponed from September 15th, a wildfire tabletop exercise was held on October 5th, 2021 with community leadership, staff, and members present in addition to the facilitator (David Carson) our Local FireSmart Representative (Margaret Symon), and the Town of Lake Cowichan Fire Department Fire Risk Officer (Steve Vatcher).

The exercise was to run through a scenario portraying a potential emergency event that could impact the community. The intention was to learn how to utilize the All-hazards Emergency Management Plan and its accompanying forms, and apply them to a real-world scenario.

The goal of the exercise was to practice and learn, and to improve. It is much better to discover early where challenges may lie in the EOC response than during an event, so this exercise provides an opportunity to learn together and ensure that the EOC team is prepared to use the plan and other materials, but also to ensure that the plan and forms accurately reflect the needs of the community.



Ts'uubaa-asatx Emergency Program October 5th, 2021

Annual Emergency Management Gathering 9 am - Noon By Zoom

Invited: Community Members, Ts'uubaa-asatx Emergency Management Committee, Ts'uubaa-asatx FireSmart Board, FireSmart Champions, Emergency Program Coordinator, Steve Vatcher, Margaret Symon, David Carson

Agenda

09:00: Update on Emergency Program Activities - David

- 20/21 projects report
 - EMAP
 - CRIP
- Web pages

09:30: Upcoming Activities - David, Margaret

- 21/22 projects report
 - EMAP
 - CRIP

10:00: Committee Work

- EMC input on work plan
- FireSmart board input on work plan

10:15: Interface Fire Tabletop Exercise

Testing and improving support and response protocols most suitable for Ts'uubaa-asatx

- Activation
- Declaration of SoLE
- Community evacuation
- After action reporting

Noon: Adjourn

See Take-Away Messages on the next page.

The following is the membership of the Ts'uubaa-asatx Emergency Management Committee.

- Chief Georgina Livingstone;
- Aaron Hamilton, Operations Manager;
- Carlito Livingstone, Emergency Program Coordinator;
- Sherry Livingstone, Community Health Representative;
- Steve Vatcher, LCFD Assistant Fire Chief; and
- Melanie Livingstone, Finance.

The Ts'uubaa-asatx FireSmart Board is composed of the following persons:

- Aaron Hamilton, Ts'uubaa-asatx Operations Manager;
- Chief Georgina Livingstone;
- Carlito Livingstone, Emergency Program Coordinator
- Melanie Livingstone;
- Carol Livingstone; and
- Steve Vatcher, Lake Cowichan Fire Department.



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Ts'uubaa-asatx Emergency Program October 5th, 2021

Take-Away Messages

- There is an indication that non-member residents will be interested in helping with the emergency program. We should plan on including them and sharing the plan with them.
- Margaret, Carson, Aaron will do a walk-about to confirm a plan for the fuel management program in light of land clearing projects
- Margaret, Carson, Aaron will subsequently review the plan with FNESS (Quentin) if he comes for a visit
- Administrative and community capacity is stretched. We will continue our emergency program activities as long as there is capacity to do so. We should be planning for less demand on the community and administration.
- Next table-top exercise should focus on activation at level one response.
- Emphasize cross training and depth of team for relief.
- Carson to look into satellite phone for Ts'uubaa-asatx from FNESS
- Document edits:
 - For the poster and the plan, remove Georgina from EOC activation and replace with Sherry and ensure the two documents are consistent
 - Note the planned roads will change access/egress planning
 - Future land holdings will need to be integrated as they are achieved
 - Add muster points to plan and maps
 - In resources, add lake boat and boat for the Salish Sea
 - Address safety of hunting parties off reserve
 - Evacuation instructions should include reference to provincial ESS registry for self-evacuated



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APPENDIX IX. WILDFIRE TABLETOP EXERCISE 2021



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Wildfire Tabletop Exercise

Prepared by Land Forest People

Prepared for Ts'uubaa-asatx

September 15, 2021

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INTRODUCTION

Welcome to our exercise, we appreciate you taking the time to participate today. The plan for today is to run through a scenario of a potential emergency event that could impact your community. The intention is to learn how to utilize the *All-hazards Emergency Management Plan* and its accompanying forms, and apply them to a “real-world” scenario.

We recognize that Ts’uubaa-asatx is in a time of transition. The process and tools reviewed today are a small practical subset of full emergency management system which has been designed to be scalable to meet the needs of the community in the coming months and years.

The goal of the exercise is to practice and learn, and to improve. It is much better to discover now where challenges may lie in the EOC response than during an event, so this exercise provides an opportunity to learn together and ensure that the EOC team is prepared to use the plan and other materials, but also to ensure that the plan and forms accurately reflect the needs of the community.

Thank you again for your time today. Let’s get started!

INITIAL SCENARIO

It is Wednesday in late August. Your community has been under hot, dry conditions for the past three months, and temperatures have regularly been reaching 25-30 degrees Celsius. Rain gauges are showing the community has received less than half the typical amount of rain for this time of year. Because of drought conditions there are a lot of dry materials in the dense underbrush that could spread fire quickly throughout forested areas as well as to adjacent homes. Arid summer winds are expected over the next several days increasing the fire hazard.

With the sunny and hot conditions there is a higher-than-normal number of vacationers in the area enjoying outdoor activities. Notices posted around community indicate "extreme fire hazard" and a total ban on all open burning and campfires. Even with these precautionary measures in place, the local Fire Department, along with the Forest Service, has been dealing with spot fires caused by careless campers and cigarette butts thrown from car windows. Fortunately, all these fires have been manageable.

Last Sunday evening, lightning strikes were reported in a forested area approximately five kilometers from the community. The Forest Service attempted to identify the location of the lightning strikes but was unable to determine the exact sites. Continued surveillance was conducted but no further actions were taken.

On Monday evening, a local resident noticed light smoke in the vicinity of the lightning strike. The Forest Service was alerted and by Tuesday morning, several hectares were engulfed in flames with current wind conditions driving the fire towards the community.

Initial response activities have had little impact on reducing the size or movement of the fire. The Forest Service advises that if they are not able to contain the fire, it could easily spread to residential areas of the community within 48-72 hours.

It is now 0630 hours and Forest Service has established an Incident Command Post to direct the response efforts and coordinate first response agencies.

MODULE 1: EOC ACTIVATION

Your Emergency Program Coordinator has just received the following call from Fire Dispatch:

A wildfire has developed near your community. Over the past few hours the fire has grown in intensity. It is being fueled by the dry conditions and strong winds. The fire is engulfing everything in its path, and it is rapidly approaching several homes on the outskirts of your community. The incident commander feels that the situation is deteriorating and recommends the activation of the communities EOC to provide site support.

You are considering activating the EOC. Your all-hazards plan lists the persons with the authority to activate. Activation begins with those immediately available and grows as required and based on availability of EOC staff.

The first priority is the immediate safety of all persons. Addressing this may be in the form of ensuring emergency response agencies are engaged (calling 911), distributing urgent information to members, performing a door-to-door contact exercise, or undertaking a tactical evacuation.

The second priority is to bring together the EOC to support response activities.

The EOC Director will have for reference the:

- EOC quick reference poster;
- EOC Activation section of the all-hazards plan;
- Common Duties of all team members;
- EOC Director's duty package;
- Call-out contact list; and
- Homes and persons list.

The EOC Director will:

- Call 911 and take all steps necessary to ensure immediate safety of all persons;
- Consult with the response agency Incident Commander if such is in place;
- Use information immediately available to consider the level of response required;
- Contact EMBC to:
 - Advise them that the EOC is being activated;
 - Obtain any situational awareness information that EMBC may have;
 - Jointly decide on the appropriate level of response; and
 - Obtain a task number.
- Establish the EOC location or format (in-person or virtual);
- Undertake the appropriate call outs to contact response agencies, support agencies, and the EOC team.

Operational periods define the cycle of planning, acting, and reporting. Following the first operational period the EOC team will meet for reporting and preparation of the plan for the next operational period.

REQUIRED MATERIALS

- EOC quick reference poster
- EOC activation section of the all-hazards plan
- Common Duties of all team members
- EOC Director’s Duty Package
- Call-out contact list
- Homes and persons list
- Staffing Log (Form 01)
- Section Status Report (Form 07)
- Position Log (Form 02)
- Management Team Briefing Agenda (Form 06)
- Incident Report (Form 09)
- Situation Report (Form 08)
- Expenditure Authorization (Form 22)
- EOC Staffing Poster (Form 28)

QUESTIONS/TASKS 1

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| <ul style="list-style-type: none"> • Question: What first steps should the EPC take to activate the EOC? Hint: Until relieved the EPC is the EOC Director. | <ul style="list-style-type: none"> • Call 911 and take all steps necessary to ensure immediate safety of all persons • Use information immediately available to consider the level of response required • Contact EMBC to: <ul style="list-style-type: none"> ▪ Advise them that the EOC is being activated; ▪ Obtain any situational awareness information that EMBC may have; ▪ Jointly decide on the appropriate level of response; and ▪ Obtain a task number. • Establish the EOC location or format (in-person or virtual); • Undertake the appropriate call outs to contact response agencies, support agencies, and the EOC team. |
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Wildfire Tabletop Exercise

<ul style="list-style-type: none"> • Task: Create a list of the general duties/activities that should be performed by all arriving EOC personnel. 	<ul style="list-style-type: none"> • Check in with the EOCD and sign in to EOC Staffing Log (Form 01), roles are assigned by the EOCD and posted on Form 28. • Report to assigned supervisor or assume assigned role and obtain section briefing • Review position duty package • Set up workstation and establish a position log (Form 02) • Administration sets up to track time and expenses.
<ul style="list-style-type: none"> • Question: What level of EOC activation would be advisable? What actions/positions might this involve? 	<ul style="list-style-type: none"> • Level 2 activation for larger communities • Level 3 activation for smaller communities • EOC Director, Information Officer, Operations Chief, Planning Chief, Logistics Chief, other relevant staff
<ul style="list-style-type: none"> • Question: When notifying EOC workers of the activation, what types of information should be provided by the caller? 	<ul style="list-style-type: none"> • A brief description of event • Anticipated length of activation • Location of EOC/ any transportation challenges • Anticipated role of individual and name of person or function they report to.
<ul style="list-style-type: none"> • Task: What objectives should be prioritized within the first operational period? 	<ol style="list-style-type: none"> 1. Obtain EMBC Task # 2. Activate the EOC 3. Confirm Site Command 4. Establish Public Information 5. Establish communication between all participating agencies 6. Complete Situation Report 7. Complete Action Plan for Operational Period 8. Use Form 06 EOC Management Team Briefing Agenda, hold first meeting 9. Consider Declaration of State of Local Emergency (SoLE) requires Council resolution & EMBC support <p>Evacuation Order requires SoLE and Order with mapping and sign-off by EOC Director and Chief</p>

MODULE 2: STATE OF LOCAL EMERGENCY

Incident Command is advising that their tactical powers to order evacuation are no longer sufficient for this incident. They are requesting the community declare a state of local emergency. The Declaration will allow the community to obtain the extra ordinary powers necessary for undertaking a large-scale community evacuation.

REQUIRED MATERIALS

- Form 11 - EOC 400 - Declaration of State of Local Emergency (Order)

QUESTIONS/TASKS 5

<ul style="list-style-type: none"> • Question: List the actions that need to be performed to develop the Declaration of State of Local Emergency and Delegation of Emergency Powers Matrix. 	<ul style="list-style-type: none"> • Consult with Incident Command • Consult with EMBC/PREOC • Determine required powers • Determine geographical area • Complete relevant paperwork, including template Declaration, matrix, and map • Consult with Policy/Executive Group • Develop communications/release strategy
<ul style="list-style-type: none"> • Question: How should your Policy/Executive Group (Elected Officials) be involved in the Declaration process? 	<ul style="list-style-type: none"> • EOC director should consult with Policy/Executive Group early on • Council/Board will ideally provide a formal resolution of Declaration (if possible) • Chief & Council will provide final sign-off of the declaration • Policy/Executive group should be engaged in strategy for release to the public

<ul style="list-style-type: none"> • Task: Complete a Declaration of State of Local Emergency and Delegation of Emergency Powers Matrix 	<p>The following should be taken into consideration when completing the Declaration:</p> <ul style="list-style-type: none"> • All fields to be completed • Only required powers designated • Dated and signed-off by Chief <p>Note: Map showing geographical areas of declaration and delegation matrix should be attached to declaration, but players will not get to this in the exercise.</p>
<ul style="list-style-type: none"> • Question: Assume the Chief/Council has signed the Declaration. What steps should now be taken to enact the state of local emergency? 	<p>Player answers may include, but are not limited to:</p> <ul style="list-style-type: none"> • Make sure Chief has signed declaration • Copy of Declaration must be forwarded to the provincial government via EMBC/PREOC • Details of declaration must be made available to the affected population • EOC/response personnel must be briefed on impact of declaration and designation of obtained powers

MODULE 3: COMMUNITY EVACUATION

Now that Chief and Council has declared a State of Local Emergency, an Evacuation Order may be formally issued by the EOC. It is confirmed that the fire is at risk of impacting all persons who reside in the immediate residential/commercial area(s). Other parts of the community may also be at risk and require evacuation alerts to be issued.

REQUIRED MATERIALS

- Form 13 - EOC 421a - Evacuation Alert
- Form 14 - EOC 421b - Evacuation Order
- Form 26 - Media Messaging

QUESTIONS/TASKS 6

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| <ul style="list-style-type: none">• Task: Identify six or more action items that must be planned for when evacuating a community. | <ul style="list-style-type: none">• Identification of evacuation zones/routes• Development of Evacuation Order• Public communication strategy• Coordination/support of door-to-door notification• Evacuation of residents without transportation (pickup points)• Activation and support of Reception Centers• Security of evacuated areas• Support for vulnerable populations in evacuated area• Evacuation of pets and livestock |
|--|--|

<ul style="list-style-type: none"> • Question: Which EOC functions/elements have primary responsibilities related to evacuations and what are those responsibilities? 	<ul style="list-style-type: none"> • EOC Director- overall accountability, approval of evacuation orders • Liaison Officer- Development of order (with others), communication of order to other stakeholders not directly involved • Information Officer- Development and implementation of public communication strategy around order • EOC Ops section- consult with IC, determine scope of requirements, coordinate support to site personnel, activation/coordination of Reception Center, coordinate transportation for residents • EOC Planning Section- review/development of plan in consultation with Ops, obtain background data, identify critical infrastructure and vulnerable populations, identify evac routes/control points, plan for re-entry • EOC Logistics Section- obtain resources as directed by Ops
<ul style="list-style-type: none"> • Task: Complete an Evacuation Order and/or Evacuation Alert for Impacted area(s) 	<ul style="list-style-type: none"> • All fields to be completed • Authority to implement referenced from Declaration (for Order) • Areas of impact clearly identified, not greater than areas of declaration • Information on travel routes and activated Reception Centers should be included • Signed off by functions designated with appropriate powers from the Declaration

<ul style="list-style-type: none">• Task: List actions that need to be performed by the EOC in order to implement the Evacuation Order	<ul style="list-style-type: none">• Inform incident command that evacuation measures have been ordered• Provide copies of Evacuation Order and supporting public information to site/incident command for distribution• Release evacuation order and supporting public information to media and the public• Post information online and in other public areas• Develop question/answer scripts for call centre (if applicable)• Brief EOC personnel on any actions taken so far• Continue to support site personnel and ESS with evacuation
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MODULE 4: AFTER ACTION REPORTING

An After Action Report is a report developed after an exercise has been conducted. It contains copies of all exercise materials as well as observations made by evaluators and the facilitator.

The After Action Report serves as a record of events for the exercise and can be used to identify weaknesses and resource gaps; as proof that the exercise took place, and as a planning resource for future exercises. An After Action Report should be developed after each exercise. The contents of the After Action Report will vary based on the needs of the participating agencies.

REQUIRED MATERIALS

- After Action Report (Form 30)

AFTER ACTION REPORT CONTENTS

- Exercise Overview
- Exercise Date and Location
- Overview of Scenario
- Type of Exercise (i.e., Discussion-based)
- Purpose of Exercise
- Exercise Objectives
- Participating Departments/Agencies
- Exercise Organizer (name and title)
- Exercise Agenda/Outline
- Exercise Conduct
- Scenario (cut and paste in full)
- Questions and Player Responses
- Evaluation
- Evaluation Summary
- Evaluation Findings
- Strengths
- Weaknesses
- Lessons Learned

