

Community Emergency Plan

Marshall Lake Area

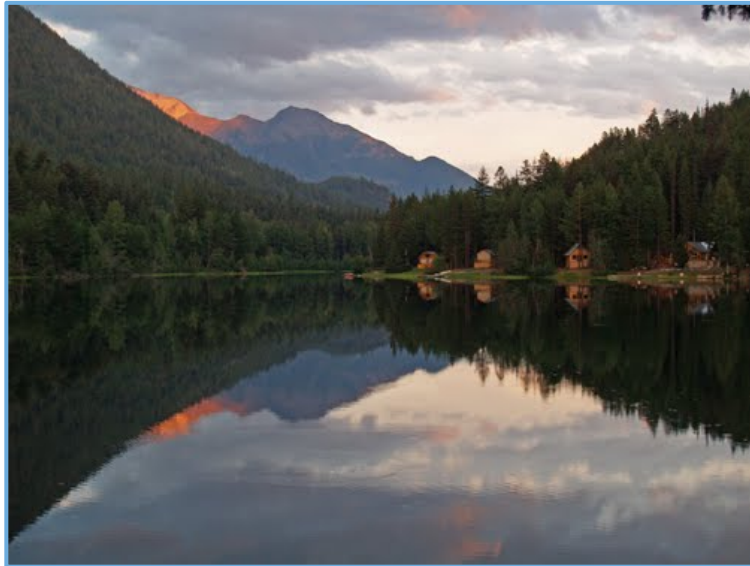


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Key definitions

Emergency	An event that requires prompt coordination of actions to protect the health, safety or welfare of people, or to limit damage to property or the environment.
Hazard	A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.
Resilience	Resilience is the capacity to adapt; by persevering, recuperating or changing to reach and maintain an acceptable level of functioning. Disaster resilience is built through empowering organizations, communities and society to share responsibility for keeping hazards from becoming disasters.
Risk	The combination of the likelihood and the consequence of a specified hazard event happening.
Vulnerability	Physical, social, economic and environmental factors or processes, that increase the susceptibility of a community to negative impacts from hazards. It is also a measure of how well prepared and equipped a community is to minimize impacts and cope with hazards.

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2017

Introduction

The SLRD Emergency Management Program provides emergency management services to the ~5,000 SLRD residents in the four Electoral Areas and partners closely with member municipalities. In addition to the Emergency Management Program, the SLRD funds and/or operates select Emergency Services in the region including:

- 9-1-1 Services
- Diking and drainage in Electoral Area D
- Fire and Rescue Services
- Wildfire Fuel Management Program.

Major emergencies and disasters are on the increase in Canada and worldwide. Disaster effects may be direct (e.g. damage to house, loss of income) or indirect (e.g. increased insurance premiums, reduced air quality due to smoke from wildfires elsewhere).

A number of communities in the SLRD are geographically isolated from traditional first responder organizations such as fire, police and emergency medical services. Communications and other infrastructure may be limited or prone to outages. The effect of this geographical separation is that communities will likely lead their own response, making community knowledge, preparation and skill building a vital aspect of emergency preparedness and increasing the resilience of these communities to adverse events.

The purpose of a Community Risk Assessment (CRA) is to guide practical steps in preparedness, response, recovery and mitigation that reduce both the likelihood of emergencies and the consequences when disaster cannot be avoided. Risk information also informs community residents, business owners, and institution managers of the hazards to expect and how best to prepare for them. Further, A CRA provides a platform from which to progress community-level emergency management and evacuation policy and planning.

A Community Action Plan (CAP) provides a blueprint for communities to increase their resilience through increasing skills, knowledge and connectedness – benefiting the community before a major emergency, during response and through the recovery process.

Community Overview

The Marshall Lake area includes Brett Creek Meadows and Liza Lake, an area some 35 kilometers from Tyaughton. Marshall Lake, approximately 2.5 kilometers long, and the similarly named community are located 13 kilometers above and north of Road 40 at the 1,158m summit/terminus (KM85) of Marshall Lake Rd. In recent years, a small community has developed at Brett Creek Meadows approximately 5 kilometers below and south of Marshall Lake (KM80). There is a recreational use home at Liza Lake at approximately KM96 on the Mud Creek Main FSR, 10 kilometers north of Marshall Lake.

The community of Marshall Lake consists of 30 recreational lakefront cabins. One cabin, only, is home to two full time residents. Most cabins are “rustic” and are typically used on spring and summer long weekends at which time the temporary population may range between 25 and 50 people. A resident organised fireworks display is now drawing owners and their families to the lake for New Year celebrations. There are approximately 13 recreational lots at Brett Creek Meadows. About half of those include some type of dwelling structure.

Marshall Lake Road provides the main access and egress to the Marshall Lake area and is maintained by Interior Roads. Those familiar with the area and having a properly equipped vehicle can reach the Tyaughton Lake neighbourhood using Mud Creek Main and Noaxe Forest Service Roads (FSRs).

Unlike all other communities in the upper Bridge River Valley, Marshall Lake and Brett Creek Meadows are completely “off grid” with no electricity, telephone lines or cell service. This creates some now fairly rare communication hurdles. Several cabin owners have photoelectric solar systems and/or generators. Three to four cabin owners do use satellite phones but communications are reportedly delayed or patchy due to supplier satellite access. Similarly, three to four cabin owners currently subscribe to satellite wireless internet and TV systems.

The Marshall Lake area is exposed to interface fire risk due to the surrounding forest, hot dry summers, and increasing visitor numbers in the summer months. A severe weather event can isolate residents and delay outside assistance. While there is a BCAS base in Goldbridge, the distances from the nearest first responder agency bases in Lillooet and Pemberton combined with variable road conditions and limited, off grid communications infrastructure generally mean that local community preparedness resources are key factors in emergency response.

Demographics

Mostly seasonal residents with two full time residents.

Land Use

Single family homes, mostly seasonal accommodation and some agricultural use land

Critical infrastructure

Drinking Water	Independent water collection and supply per household.
Sanitary/Waste Water Treatment	Individual septic tanks or septic fields per building.
Electrical Power Systems	Independent power generation (e.g. wind, solar)
Gas Heating Systems	No residential supply other than individual tanks
Communications	No landline access or cellphone reception. Satellite wireless internet only and only to few homes. Three to four privately owned satellite phones with limited satellite access, reportedly resulting in patchy or delayed communication.

Response Capabilities

Structural fire	No structural fire service.
Wildland interface fire	No wildland interface fire training. BC Wildfire crews are dispatched from Lillooet, with support from Pemberton. BRV is within the Lillooet Fire Zone of the Kamloops Fire Centre.
Medical	There is 1 BCAS unit stationed in Gold Bridge, approximately 50 kilometres and a 1.5 hour drive away via Road 40.
Police	Nearest RCMP detachment in Pemberton, though RCMP respond from Lillooet during winter months.
Evacuation	A 'telephone tree' notification (including amateur radio operators) or a direct door-to-door notification system led by identified community contacts is recommended for areas of predominantly recreational property where people either do not have phone/internet access or specifically come to these areas to get away from being 'connected'.
Communication	No landline access or cellphone reception. Satellite wireless internet only and only to few homes. Three to four privately owned satellite phones with limited satellite access, reportedly resulting in patchy or delayed communication. The SLRD Alert system has limited application for such communities and identified community emergency contacts (ideally full time residents) are recommended, so that the SLRD knows who and how best to directly contact the community via these channels.

Hazard, Risk and Evacuation

MARSHALL LAKE AREA HAZARD PROFILE

Flood	Debris Flow/ Landslide	Interface Fire	Storm/ Utility failure	Earthquake	Hazardous Material
MODERATE RISK	LOW RISK	HIGH RISK	HIGH RISK	LOW RISK	UNLIKELY

KEY:*

HIGH RISK

MODERATE RISK

LOW RISK

UNLIKELY

*Note that risk does not equal impact. A low risk event may still occur with high impact.

Evacuation Routes

Marshall Lake Road provides the main access and egress to the Marshall Lake area and is maintained by Interior Roads. Those familiar with the area and having a properly equipped vehicle can reach the Tyaughton Lake neighbourhood using Mud Creek Main and Noaxe Forest Service Roads (FSRs). The chosen evacuation route in the event of a major emergency will depend on threat, location and time to evacuate, and will be at the direction of first responders. The condition of forest service roads to carry residential vehicle traffic will also be a factor. The recommended evacuation route will be printed on the official evacuation notice delivered by First responders and/or published on the SLRD website.

Muster Point: Community to confirm

Community Muster Points are used if evacuation is by bus or RCMP escort due to road conditions, or to receive additional information or supplies (e.g. bottled water) before evacuating.

Types of Evacuation

Evacuation Alert

This is the time to get ready to leave, putting together 'grab and go' bags with essential supplies, papers and prescriptions, and making any other arrangements to leave the property with all household members and pets. Residents may self-evacuate (voluntary) during this time, particularly if they have mobility issues or health conditions that may make it difficult to evacuate quickly. This is also the time to move livestock to safer areas.

Evacuation Order

Mandatory evacuation occurs when a population is ordered to leave a defined area according to a formal written document that outlines the impact area and why an evacuation is necessary.

Shelter-in -Place

Essentially, an instruction to the public to stay inside for safety reasons. It may also mean "seal the room", i.e. take steps to stop outside smoke or other contaminants from entering the room.

Evacuation Rescind

Formal notification that it is safe to return to the evacuated area. The affected area may still be under an Evacuation Alert under further notice, if the hazard still presents a threat.

Interface Fire

The Marshall Lakes area is located in a wildfire environment. Wildfires will happen – exclusion is not a choice. The variables in a wildfire scenario are:

- when the fire occurs, and
- where the fire occurs.

During the summer of 2009, the community was evacuated due to a wildfire of note burning in the area and there is a history of wildfire starts in the wider area, which have fortunately not resulted in structural loss for this area. Evacuation in 2009 was delayed due to emergency livestock relocation, creating a bottleneck of traffic behind livestock being moved along the evacuation route. There is provincial financial assistance available for emergency livestock relocation and care to enable commercial livestock producers to make preparations at the evacuation alert stage and the SLRD has published a guide on this topic, available at:

<https://www.slrd.bc.ca/services/emergency-management/preparedness/your-emergency-plan/pets-livestock/commercial-livestock-relocation-guide>

Potential ignition of an interface fire includes a lightning or human caused forest fire, a structural fire in the community that spreads to the wildland area, and ignition relating to a vehicle accident or sparking.

The consequences of an Interface Fire event have the potential to be severe/catastrophic for the Marshall Lake area.

EVACUATION PROTOCOL

At the **Evacuation Alert** stage:

- Residents with mobility or chronic health issues may choose to voluntarily evacuate to ensure their safety and continuity of care. If they choose to stay at this time, they should contact the SLRD Emergency Program staff to discuss their situation and/or make arrangements with a neighbor if they do not have a vehicle, and their primary healthcare provider if evacuation is medically complicated (e.g. dialysis, oxygen tanks).
- All other residents should make preparations to leave, ensuring that they have a plan for the safe evacuation of all people and pets, gather essential documents, medicines and necessities of food, clothing and other items.
- A 'telephone tree' notification (including amateur radio operators) or a direct door-to-door notification system led by identified community contacts is recommended for areas of predominantly recreational property where people either do not have phone/internet access or specifically come to these areas to get away from being 'connected'.

At the **Evacuation Order or Tactical Evacuation** stage:

- At the direction of BC Wildfire Service, RCMP or other authorized First Responders, residents will evacuate according to the evacuation route directions given.
- All residents must leave, ensuring that all people and pets in their household safely evacuate, and taking the previously gathered essential documents, medicines, necessities of food, clothing and other items. If these items have not been gathered in advance, there may be no time to take anything at the time of evacuation.
- Emergency Support Services (ESS) will be provided to full time residents of the area evacuated, including emergency accommodation if required.

Severe Storm (All Seasons)

The communities may become temporarily isolated by a severe winter snowstorm or a summer storm with high winds and torrential downpours. Winter heating is a concern, especially for vulnerable residents, while noting that there are currently only two fulltime residents. All utilities for the Marshall Lake Area are off grid, which can be a protective factor against outages. Damage to independent utility infrastructure (e.g. solar or wind power generation) make take time to repair. Blocked roads and winter road conditions can compromise access to and by emergency services. Limited and off grid communication infrastructure could make reaching 9-1-1 service challenging.

EVACUATION PROTOCOL

- Shelter in place until storm has passed. Exit structures with caution due to potential for structural debris, fallen trees, pooling water and other hazards. If emergency assistance is required, call 9-1-1 if possible. If a storm related evacuation is required, follow the instructions of first responders and official information from the SLRD. Emergency Support Services (ESS) are available to full time residents of the affected area.
- Residents who are vulnerable due to health conditions should discuss a plan in advance with their primary healthcare provider. This may include voluntary self-evacuation when a severe storm event is forecast, access to a back up power supply, and additional supplies of medication or an emergency prescription.
- A 'telephone tree' notification (including amateur radio operators) or a direct door-to-door notification system led by identified community contacts is recommended for areas of predominantly recreational property where people either do not have phone/internet access or specifically come to these areas to get away from being 'connected'.

SLRD ALERT.

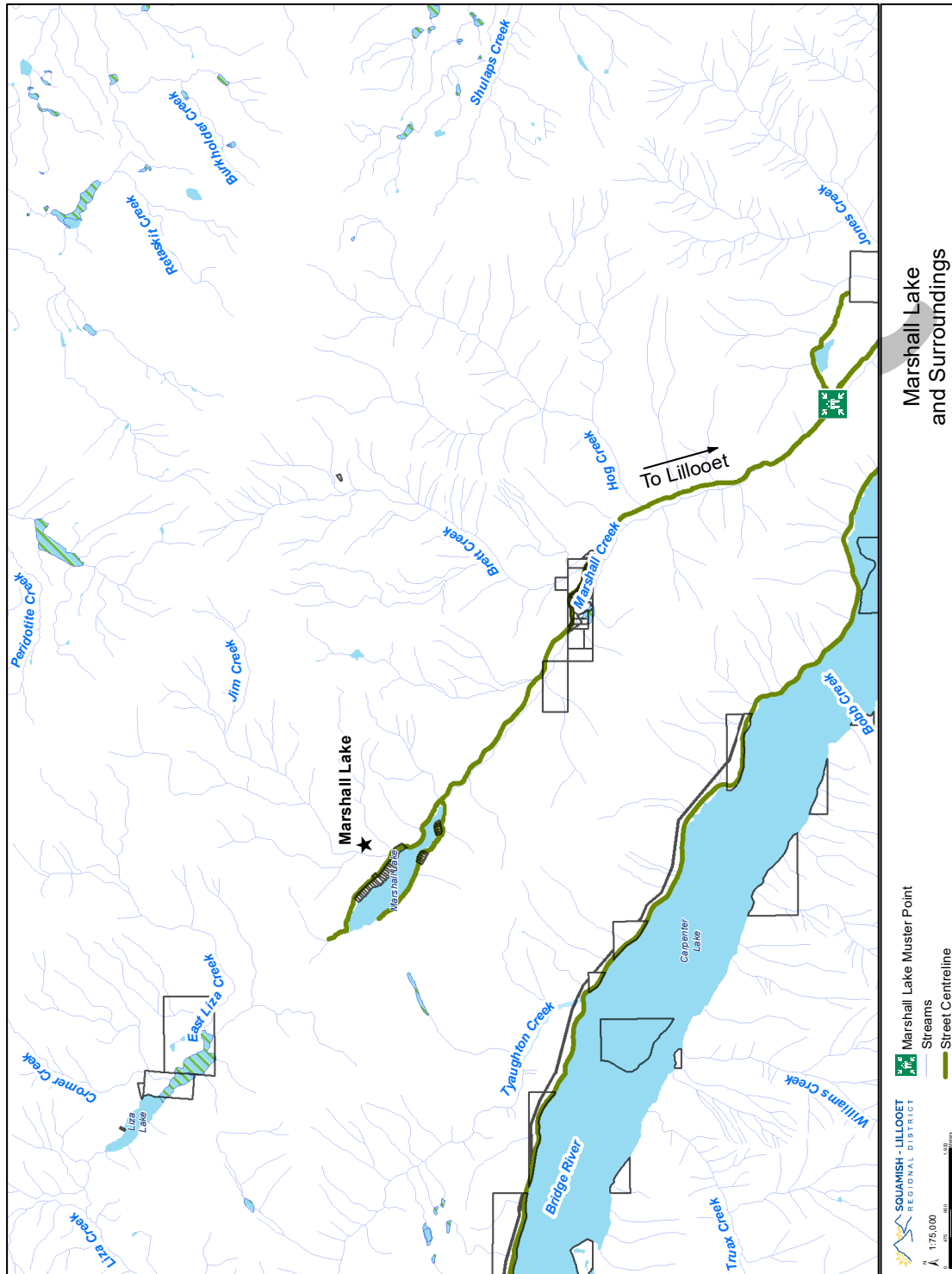
Be in the know, not in the dark.

Free emergency notification service
direct from the SLRD to you.
Text, voice message and email options

Sign up: <http://www.slrd.bc.ca/SLRDAlert>

draft

Community Map – Marshall Lake Area



Community Action Plan

The SLRD will work with community representatives every three (3) years to review, assess and update the Community Action Plan.

Historical Actions

- Independent utility systems may be a protective element in the event of damaged infrastructure in neighbouring communities.
- Privately owned satellite radios may be used for the benefit of the whole community in times of emergency, noting the reportedly patchy/delayed communication service experienced.

Current and Future Potential Actions by the Community

- Establish a **Neighbourhood Emergency Team (NET)**, with members who have completed a criminal record check (free for volunteers and required in order to be placed in many volunteer roles during disaster response). The SLRD can support the NET through training in basic emergency preparedness, evacuation notification, recovery considerations and other relevant topics that facilitate a two-way knowledge exchange of local government emergency processes and community capacity building. The SLRD can also connect communities to funding when it is available (e.g. FireSmart) and may sponsor a training session by an external provider for multiple communities if budget is available and there is sufficient demand. NET team members would be utilised in a disaster response as qualified volunteers under the direction of the relevant agency. The size of the NET, its organization and the level of training is at the discretion of the community and is independent of the SLRD.

NET team members may be progressively trained in:

- First Aid and simple triage
 - Evacuation Processes
 - Radio Communication
 - Locating victims and resources
 - BC Wildfire S-100 Basic Fire Suppression and Safety
- Work towards becoming an official FireSmart community. More information at : <https://www.firesmartcanada.ca>
- Hold community FireSmart clean up days once a year to pool resources and remove woody debris from around homes and trim trees in the fire ignition zones. The SLRD may assist with reimbursement for equipment such as wood chippers through the FireSmart grant programme, and provide advice and assistance through the BCWS if a safe burn pile can be established.
- Work with the SLRD to develop a basic Disaster Recovery Plan

- Fund generators for emergency power at agreed community locations
- Identify vulnerable residents and develop a plan with them for their continued safety in the event of a major emergency (EMBC resources available to assist planning)
- Identify and document skilled individuals in the community (e.g. doctors, nurses, electricians, engineers).
- Establish an evacuation notification system such as door-to-door notification, carried out by community identified and agreed representatives. Practice evacuation notification with the delivery of emergency preparedness public information resources to each house (these resources available through the SLRD)

Looking for more information to make your community Disaster Resilient?

SLRD	www.slrd.bc.ca/services/emergency-management
GENERAL	http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery
ANIMALS	http://www.cdart.org/beprepared.htm
COMMERCIAL LIVESTOCK	https://www.slrd.bc.ca/inside-slrd/reports/commercial-livestock-relocation-guide
FIRE SMART	www.firesmartcanada.ca