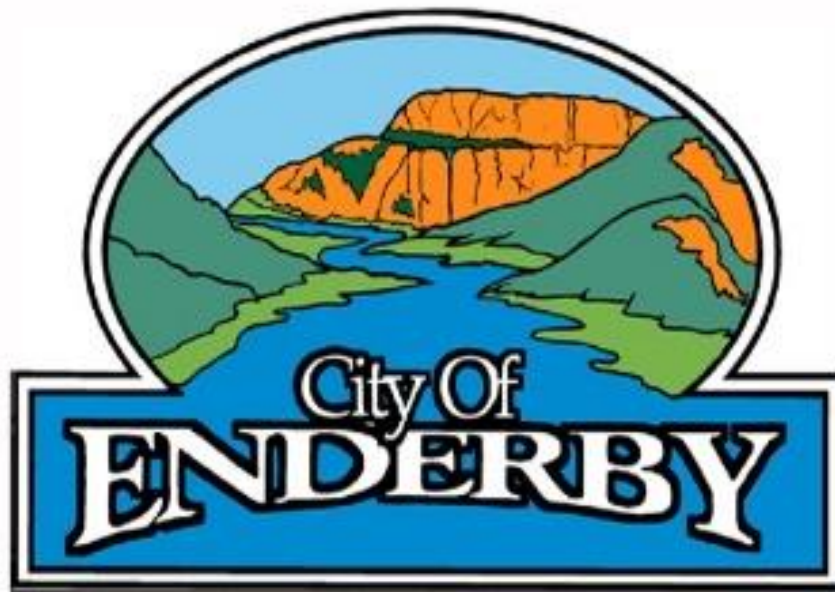




City of Enderby Evacuation Route Plan

Prepared for:
The City of Enderby

Developed and Prepared by:
Frontline Operations Group Ltd.
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www.frontlineops.ca



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Distribution List

Name	Hardcopy #	Role

Record of Amendments

Number	Date	Pages	Amended By

Glossary

BCEMS	BC Emergency Management System – A comprehensive framework that helps to ensure a coordinated and organized approach to emergencies and disasters. The standard practice provincial government ministries and Crown corporations; it is the recommended best practice for all emergency management stakeholders in BC and applies to emergencies, disasters, and catastrophic events
BCWS	BC Wildfire Service – A division of FLNRORD, BCWS is the provincial wildfire suppression service for BC.
CC	Community Contact
CS	The department of Community Services - responsible for emergency preparedness and transit
DS	Development Services Department for the City of Enderby including Planning, Building Inspection, and Bylaw Enforcement
ECC	Emergency Coordination Centre (EMBC)
EMBC	Emergency Management BC – the provincial coordination and support body for emergency management within the province
EOC	Emergency Operations Centre – Location or facility where responsible officials gather during an emergency to direct and coordinate emergency operations.
EPA	Emergency Program Act
ESS	Emergency Support Services, including Reception and Shelter Services
Evacuation Alert	To inform the affected population of a potential or impending threat to their safety – allows for at-risk populations extra time to evacuate
Evacuation Order	A formal written document under which the impacted population is ordered to evacuate the area specified immediately
Evacuation Rescind	Notice issued when the emergency which necessitated the evacuation is under control and the hazard/emergency zone is declared safe
Evacuation Zone	Larger area surrounding the Hazard Zone, in which residents are evacuated to remove them from the potential or actual threat to their safety or health
FLNRORD	Ministry of Forest, Lands and Natural Resources Operations and Rural Development

Freshet	The period when rivers swell from snowmelt, generally April to July. Freshet flooding occurs when atmospheric conditions lead to rapid snowmelt and normal stream channels become overwhelmed.
GL	Group Lodging (ESS)
Hazard	Events or physical conditions that have the potential to cause fatalities, injuries, property damage, infrastructure damage, agricultural loss, damage to the environment, interruption of business, or other types of harms or losses
Hazard Event	A hazard that has already materialized and is impacting people or property (e.g. a hazardous waste spill, structure or interface fire within the community).
Hazard Threat	A hazard that may occur, but that has not yet impacted people or property (e.g. rising water level or a wildfire approaching the interface)
Hazard Zone	Area under direct threat with a high degree of risk to persons or property. There is to be no occupancy or staging within the hazard zone
HEMBC	Health Emergency Management British Columbia is a program of the Provincial Health Services Authority that provides emergency management leadership and support to the health authorities in BC
IC	Incident Command
ICS	Incident Command System – A standardized on-site management system designed to enable effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure
IHA	Interior Health Authority – A publicly funded healthcare provider in the Southern Interior of BC
MoTI	Ministry of Transportation and Infrastructure – responsibility for roads and storm drainage in the rural areas of the RDNO
PECC	Provincial Emergency Coordination Centre
PREOC	Provincial Regional Emergency Operations Centre
PW	The Public Works Department for the City of Enderby including water, wastewater and solid waste
RCMP	Local detachment of the Royal Canadian Mounted Police – authority for policing and public safety

Risk	Likelihood x consequence
Shelter-in-Place	The act of ordering people to stay indoors, rather than physically evacuating from the City. Most often used in order to reduce exposure to airborne contaminants, or in the event of an active shooter or terrorist attack
SOLE	State of Local Emergency
Strategic Evacuation	Pre-planned evacuations in response to hazard events that provide adequate warning and preparation time. Uses the “Three Stage Evacuation Process”: Alert, Order, Rescind
Tactical Evacuation	An evacuation resulting from a hazard impact that forces immediate action thereby allowing little or no warning and limited preparation time. Ordered at the site level by the Incident Commander
RDM	Regional Duty Manager
RDNO	Regional District of North Okanagan

Introduction

Context

The City of Enderby faces multiple hazards that could require a large-scale evacuation or shelter-in-place including flood, debris slide, wildfire, hazardous material release, and windstorm, predominantly. In addition to evacuating in response to a hazard, the City may also be involved in supporting nearby rural community evacuations, such as Kingfisher/Mabel Lake. Major historical events that have impacted the City's infrastructure and/or resident safety include multiple significant flooding events and structure fires. Although no notable wildfires have entered the interface in recent history the risk of wildfires impacting the City should not be discounted.

The experience of other municipalities has shown the importance of having a plan in place to facilitate the rapid organization and implementation of an evacuation or shelter-in-place initiative. Based on this context, the City of Enderby has decided to create and maintain an Evacuation Route Plan that guides the planning and coordination of an evacuation or shelter-in-place response for all or part of the City. This plan builds on the existing Emergency Plan for the City and the Standard Operating Procedures established by EMBC.

Emergency planning is a dynamic process. This Evacuation Route Plan is only one part of preparedness efforts that include training, exercises, and the debriefing of actual events. As the City evolves, so will the Evacuation Route Plan, which will be regularly reviewed and adapted. Due to the nature of major emergencies, there may be a need to adapt the plan during an evacuation or shelter-in-place. Therefore, this plan acts as the foundation for continuous planning efforts rather than a final, rigid solution.

Plan Structure

This plan is divided into two parts:

- The Evacuation Route Plan describes in detail how an evacuation or shelter-in-place incident will be planned and implemented. This part of the plan is designed to be used during training activities, and public reference.
- The Operational Response Guide is designed for use during an evacuation or shelter-in-place incident. This guide is a set of planning and position checklists designed for use by municipal staff and stakeholders directly responsible for implementing an evacuation.

Purpose

The purpose of the City of Enderby Evacuation Route Plan (“the Plan” or “the ERP”) is to describe the provisions that have been made, and the procedures that follow, to ensure the safe and orderly evacuation of people and animals threatened by a natural or man-made hazard within the boundaries of the City of Enderby. The Plan will also establish the principles, structures, roles and responsibilities for a coordinated partial or full evacuation of the City of Enderby. The Plan specifies arrangements, agency roles and responsibilities, and a range of considerations and actions for the evacuation of people from a hazardous community environment to a location where they will be safe.

This plan should be read in conjunction with the following:

- City of Enderby Emergency Plan (City of Enderby, 2018)
- City of Enderby Hazard Risk Vulnerability Assessment (City of Enderby, 2006)
- Evacuation Operational Guide for First Nations and Local Authorities in BC: A guide to managing evacuations during emergency response (EMBC, 2019)

Objective

The objectives of this plan are to:

- Describe how the City of Enderby would organize itself to plan and coordinate the evacuation or shelter-in place for part of or the entire City; and
- Provide the specific tools such as position checklists, planning templates, etc. that will be used during the planning and coordination of an evacuation or sheltering-in-place event

The protection of life, livelihood and critical infrastructure is the key principle and the primary objective of this evacuation planning effort.

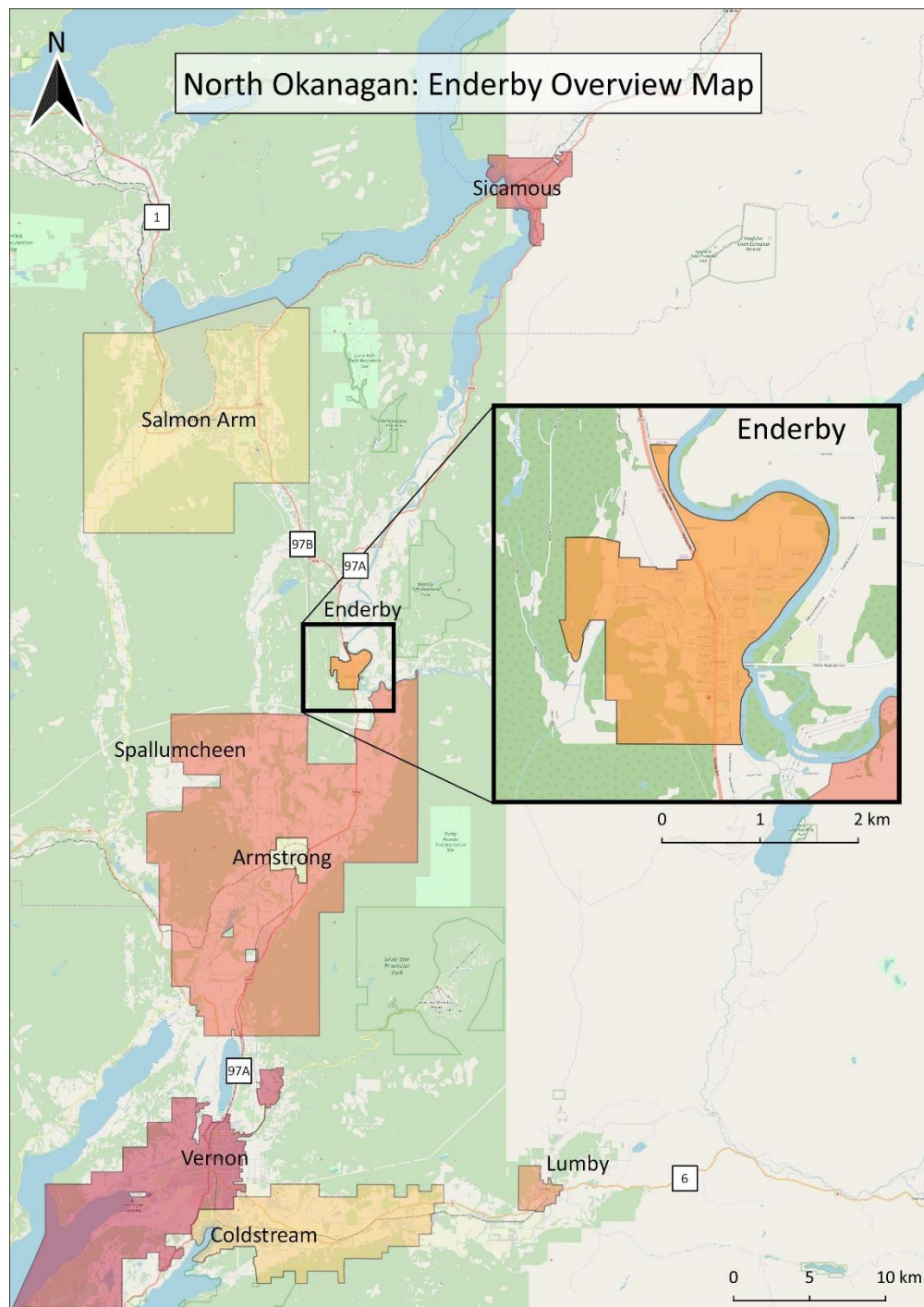
Vision

The vision for the Plan is:

- For all agencies in the City with jurisdiction, responsibility, or resources for evacuation to come together and collaboratively develop an evacuation process and plan to effectively evacuate a partial or entire community;
- That the Plan will be based on realistic scenarios, strategies, resources and timelines, so it will be effective in practice;
- That all agencies with a role in the execution of the Plan will be included in its development and have a clear understanding and a shared approach to evacuation planning;
- To enable evacuations to be executed effectively in a coordinated manner; and
- To demonstrate communities and agencies coming together to protect and service the public in times of emergency.

Scope

The City of Enderby Evacuation Route Plan outlines the process and the resources needed to complete an evacuation of all, or part, of the City. The various identified routes include those to the north and south using the existing highway system. The Plan considers all hazards, meaning the plan and process is not specific to one hazard, but can be implemented for any hazard requiring the complete or partial evacuation of the City. The Plan can be implemented for a hazard threat or a hazard incident and can be implemented for evacuation scenarios that provide advanced warning or those that provide no notice and pose an immediate threat.



The City of Enderby Evacuation Route Plan will be used in conjunction with the City of Enderby Emergency Plan and Hazard Risk and Vulnerability Analysis.

Emergency Plan. The all-hazard Emergency Plan provides an overview of the City of Enderby's emergency response program, provides guidance and direction to City officials and support organizations regarding their roles in the event of an emergency, and includes critical information that can be drawn upon in the event of an emergency. The plan also assigns responsibilities for specific emergency functions, all of which are respected by the Evacuation Route Plan.

Evacuation Route Plan. The Evacuation Route Plan describes who will coordinate an evacuation initiative and how the decision to evacuate or maintain the status quo is made; how the area to be evacuated is determined; and how the following functions will be coordinated:

- Perimeter and access control
- Evacuation routes and traffic control
- On-site notification
- Liaison with external agencies
- Transportation
- Guidance to self-evacuating citizens
- Zone clearance
- Re-entry planning
- Security

What is beyond the scope of the Evacuation Route Plan? The Plan will discuss, but not describe in detail:

- Plans for opening and managing reception centres (this is the responsibility of ESS and should be addressed in the Emergency Plan or a standalone ESS Plan)
- Plans for managing livestock and animals during an evacuation (this is managed by ESS in conjunction with local animal rescue organizations)
- Plans for sheltering outside of the City of Enderby (the initial actions for hosting community has been included)
- Plans for coordinating mass notification with the media

Authority

Authority to implement a mandatory evacuation within the City boundaries rests with the City itself. The Emergency Program Act states that:

“a local authority is at all times responsible for the direction and control of the local authority’s emergency response”.

The legal authority most commonly used by municipal officials to order an evacuation is the Emergency Program Act (1996) Section 12(1)¹. To order a mandatory evacuation, a local authority must declare a State of Local Emergency (SOLE), as presented under Section 12 of the *BC Emergency Program Act*. Under this section a municipal council via bylaw, resolution or by the order of the Mayor, is permitted to declare a SOLE giving legal power to “cause the evacuation of persons and the removal of livestock, animals and personal property that is or may be affected by an emergency or disaster and make arrangements for the adequate care and protection of those persons, livestock, animals and personal property.”

In the City of Enderby, the RCMP – at the request of Local Authorities - will action an evacuation order. In some instances, local SAR volunteers will also be used to support the RCMP.

For advice or assistance with an evacuation, contact EMBC’s 24/7 Emergency Coordination Centre at 1-800-663-3456 and request to speak with the Regional Duty Manager for your region, or PREOC, if activated.

¹ The Emergency Program Act is currently being updated. As such, any changes to the act that pass after the finalization of this plan will need to be incorporated when available.

Alternate Measures of Authority

Not all evacuations require a declaration. In many cases it is preferable to utilize the existing statutes of other authorities and reserve declaring as a last resort. The decision will vary depending on the type of threat and the amount of time available before safety to the public is at risk.

Other authorities may include:

Agency	Legislative Measure
Emergency Program Act **currently being updated	Section 12(1) of the Emergency Program Act permits Council via bylaw or resolution, or the Mayor by Order, to declare a local state of emergency. This then allows implementation of procedures to protect people and resolve the emergency, including evacuation 13(1). Section 9(1) of the Emergency Program Act permits the Solicitor General to declare a provincial state of emergency. Under a provincial declaration, the Solicitor General has the authority to order an evacuation as deemed necessary.
Criminal Code of Canada	The <i>Criminal Code of Canada</i> authorizes the RCMP to evacuate buildings or areas for criminal investigations or activities (i.e. bomb threats, hostage taking, drug laboratory, etc.). The RCMP have the authority to arrest and charge individuals who are obstructing the evacuation process or hindering emergency responder's in the performance of their duties.
Environmental Management Act	Section 80 (2.1 c) of the Environmental Management Act enables an officer (usually a Conservation Officer) to take whatever action is necessary to address a spill that has occurred that may pose a hazard to health or the environment including evacuate persons.
Fire Services Act	Section 25 (1) of the Fire Services Act enables the Fire Commissioner to evacuate a building or area due to threat from fire or explosion.
Forest Practices Code of British Columbia Act	Section 85 (1) of the Forest Practices Code of British Columbia Act enables a designated forest official to, by order, require a person to leave an area specified in the order if the government is engaged in fire control or suppression operations.
Highway Act	Section 23 of the Highway Act allows the Minister of Transportation to close highways for the protection of persons using the highway, or to enable permitted traffic to be handled safely and expeditiously.

Petroleum and Natural Gas Act	When the [Oil and Gas] commission believes that, because of hazardous conditions in a field or at a well, it is necessary or expedient to close an area and to shut out all persons except those specifically authorized, the commission may make an order in writing setting out and delimiting the closed area.
Public Health Act	Section 63 (161) of the Public Health Act allows Minister of Health or any medical health officer to order a person, or persons, to remain in a specified place, or not enter a place, to prevent the transmission of an infectious agent or a hazardous agent (i.e. epidemics, pandemics).
Wildfire Act	Section 11 of the Wildfire Act enables the Minister of Forests, Lands, and Natural Resource Operations to designate, by order, a specified area as a restricted area for a specified period if the minister considers it necessary or desirable to limit the risk of a fire, to address a public safety concern or to avoid interference with fire control.
Workers Compensation Act	Under the Workers Compensation Act, WorkSafeBC can evacuate a workplace, and isolate it with fences, barricades, etc., if it reasonably believes that an immediate danger of serious injury, illness or death exists.

Situation

The City of Enderby is a low density, semi-urban municipality located in the north-western corner of the Regional District of North Okanagan (RDNO). The City is approximately 4.2km², bordered by the Shuswap River to the east and north, with the southern portion joining with Splatkin. The City consists of a mixture of low and medium density residential, commercial, industrial, and civic land uses.

The City of Enderby hosts a population of 2,964, with 30% of the population comprised of residents 65 and older. The economy in Enderby is driven by forestry, agriculture and tourism with a significant number of residents commuting to nearby communities for work. It is located along Highway 97A – a main arterial route for residents, tourists and commuters travelling to and from Salmon Arm, Sicamous, Revelstoke, Armstrong, Vernon and Kelowna. The City's primary geographic features include the Enderby Cliffs and the Shuswap River to the east, and the City's future growth area, "the Knoll", to the west.

Much of the North Okanagan is developed on flood plains and within close proximity to the wildland fire environment. This makes the region and its communities especially vulnerable to the risk of flooding, debris slides and wildfire and the City of Enderby is no exception. According to the City of Enderby HRVA, flooding is a high risk for the community, with debris slides listed as moderate. The City is located on the banks of the Shuswap River, which makes it particularly vulnerable to any major flooding events. Historical discharge and subsequent water levels of the river consistently rise during the months of May to July, with June being the peak month. Historical flooding has resulted in considerable damage to local bridges and submersion of local roads, resulting in decreased access and egress for residents. Critical infrastructure that lies within, or partially within, the flood plain includes (but not limited to): the wastewater treatment plant, A.L. Fortune Secondary School, Enderby Arena, M.V. Beattie Elementary School and Enderby Fire Hall.

The City of Enderby HRVA rates the risk of wildfire as high. This can be attributed to the fact that the City is located within the Interior Douglas Fire biogeoclimatic zone, the second warmest zone in BC. The characteristics and climate of this zone are ideal for wildfire ignition and spread. Despite these ideal fire conditions, the Enderby valley bottom has only experienced minor fires throughout recorded history, likely due to farming and cultivation. Perhaps more notable than any direct wildfire impacts on the City are the indirect impacts including heavy valley smoke during busy fire seasons such as the Silver Creek fire in 1998, Okanagan Park fire in 2003 and the Monashee Complex in 2018. Busy fire seasons also have impacted availability of resources when personnel and equipment are directed towards the more heavily populated areas of the Okanagan Valley to the south of Enderby.

Review of Hazards

The Evacuation Route Plan is considered “all-hazard” meaning the evacuation process and plan can be used to coordinate a partial or full evacuation for any threat or hazard. Although the plan can be implemented for any or all hazards, a review of the hazards that could necessitate an evacuation of the City was included in the planning process. This review informed the potential scale of evacuation, the intensity of the event, the amount of time between the onset and the need for evacuation, and specific considerations for each hazard.

 NATURAL HAZARDS				
Hazard	Frequency/ Likelihood	Onset	Primary Responding Agency	Considerations
Fire – Interface	Moderate	Slow or sudden	BCWS, in coordination with the Enderby Fire Dept. and EMBC	Rated as high in HRVA, CWPP noted most threat is on private land.
Overland flooding	High	Slow	Enderby Public Works for local roads. MoTI for highways.	River Forecast Centre provides stream advisories and warnings to local government
Snowstorm	Moderate	Slow or sudden	Enderby Public Works, MoTI, BC Hydro	
Fire- structural (Urban/Rural)	Moderate	Sudden	Enderby Fire Dept.	
Windstorm	Moderate	Slow or sudden	Enderby Public Works, BC Hydro, MoTI	
Debris slide	Moderate	Sudden	Multiple depending on affected area	Refer to Emergency Plan for more detail
Ice Jam	Low	Slow	Enderby Public Works	MoTi if bridge is impacted
Loss of essential services or critical infrastructure	Low to Moderate	Sudden	Enderby Public Works, EMBC, BC Hydro, Fortis	Dependant on critical infrastructure that is affected
Further information on responding agencies can be found in the ‘Roles and Responsibilities’ section. Risk is based off the existing HRVA. For all significant responses, the City will engage with EMBC for support as needed.				



HUMAN-CAUSED

Dangerous goods release	Low to Moderate	Sudden	MoTI, MoE, BCEHS, Enderby Fire Dept.	Likely caused by an MA involving the transportation of dangerous goods
Hazardous substance spill or release	Low to Moderate	Slow or sudden	MoE	Response could include shelter-in-place.
Disease/Pandemic	Low to Moderate	Slow or sudden	HEMBC, Interior Health	

Hazards of Note

While the plan can be used for any hazard requiring a full or partial evacuation of Enderby, there are specific hazards that are of high concern to the City and extra consideration was given to them during the planning process.

Wildfires and Wildland Urban Interface Fires

Enderby is located within a regional area characterized by wildfire occurrence, but the likelihood of a wildfire spreading into the majority of the municipal boundary is relatively low. The northern and eastern borders of the municipal boundary are surrounded by agricultural development, which represents minimal fuel hazard to the city (see Figure 1).

The driest, and most continuous forest is located along the eastern aspect of a steep slope above (west of) the community. Interior Douglas Fir stands (C7 fuel type) dominates the slope with varying heights of crown base and pinegrass, which is in a cured state for most of the wildfire season. Wildfires in this fuel type are quick moving and easily ignitable, due to the abundance of fine fuels, and are often wind driven, due to the open characteristic of the fuel type. Along with the combination of slope, homes within the municipal boundary located in the west and south have the highest risk of being impacted by wildfire.

The possibility of embers being transported from a nearby wildfire and igniting spot fires within the city should not be discounted, highlighting the importance of homeowners taking proactive FireSmart measures to reduce potential fuel sources that could be ignited on their property. Fortunately, the open grass and Interior Douglas-fir fuel types (termed O1a/b and C7, respectively) are significantly less conducive to ember transport and spot fire generation than conifer fuel types found at higher elevations and more northerly latitudes (e.g. C2 -Black spruce).

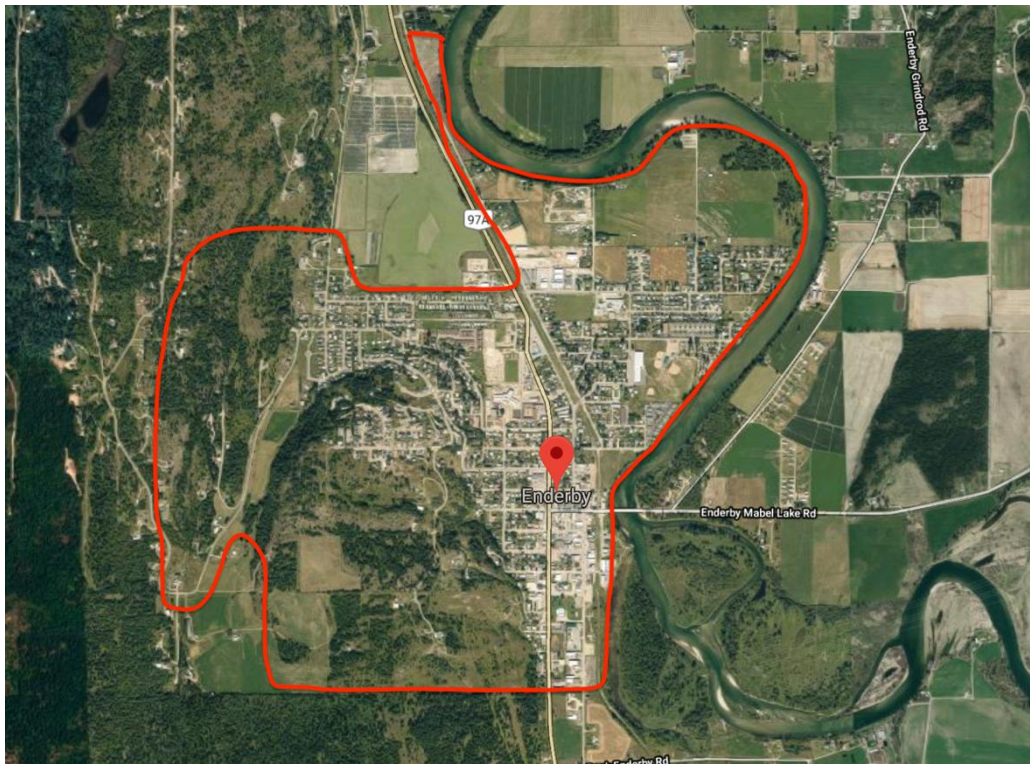


Figure 1 - The City of Enderby; Agricultural development to the North and East and Interior Douglas Fir stands to the West and South.

The City of Enderby completed a Community Wildfire Protection Plan (CWPP) in July 2018 and the RDNO also completed a CWPP in January 2019. Both assessed and analyzed wildfire threat within a 2km buffer around the designated Area of Interest (AOI). Weather conditions and trends were also analyzed and presented in the CWPPs, specifically the number of Fire Danger Class 4 & 5 days calculated for several BCWS fire weather stations in the region. The closest fire weather station to the City is presented here – Salmon Arm – in order to demonstrate an increasing annual trend of danger class 4 and 5 days (Figure 2). As climatic conditions continue to shift towards warmer temperatures the trend of increasing danger class 4 and 5 days is expected to continue.

Under plausible worst-case scenarios, using fire weather data from the Salmon Arm weather station and Enderby climate normals, resulting fire behaviour in the surrounding area of Enderby is predictably extreme. In the C7 (Ponderosa Pine / Douglas-fir) fuel type, with 40km/h wind in alignment with a 60% slope, the equilibrium rate of spread (ROS) and head fire intensity (HFI) are not able to be calculated using the Field Guide to the Canadian Forest Fire Behavior Prediction (FBP) System “Red Book” alone as this worst-case fire behaviour situation pushes its limits. It can be assumed that the ROS would be in excess of 36m/min and the HFI would be in excess of 10,000kW/m.

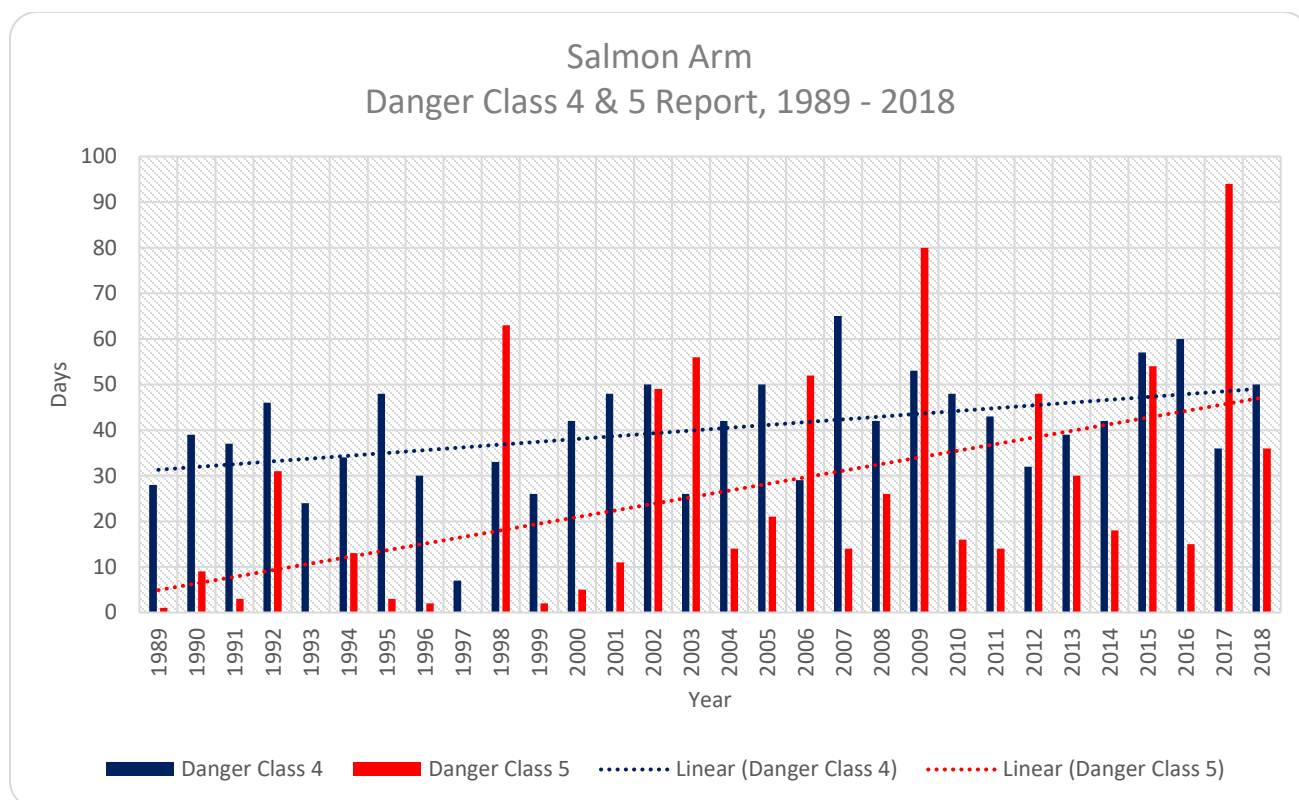


Figure 2 - The number of Fire Danger Class 4 and 5 days, per year since 1989 for the Salmon Arm weather station.

Historical data collected for the area, however, shows that ideal conditions for extreme wildfire behaviour has previously occurred within the area. The highest Fire Weather Index (FWI) recorded for the area predicted fire behaviour in C7 fuel types of a ROS of 15m/min with an HFI of >10,000kW/m, a situation in which intermittent crown fire would have likely been seen. Wildfire occurring on local slopes of 60% would have seen an increased ROS of 42.26m/min.

Historically, the City of Enderby has seen very little for wildland interface. According to the City's CWPP (2018), "there has been 8 recorded wildfires in the AOI from 1933 to 2016, totaling 79.4 hectares (Note: the AOI for the CWPP would have extended beyond the boundary of the City to the greater forested landscape). This could be due to several factors including development of surrounding agricultural land, presence of fire-resilient deciduous stands, and proximity to wetter ecosystems. The City has been more recently impacted indirectly by wildfire from heavy valley smoke from large neighboring and provincial fires. Heavy valley smoke during busy fire seasons can significantly impact air quality in the area, causing direct impacts on vulnerable populations with weakened respiratory systems.

In assessing and recommending potential evacuation requirements in relation to a wildfire in proximity to Enderby, careful consideration is required. Potential evacuation routes could put people into closer proximity with hazardous wildland fuels and dangerous wildfire behaviour, particularly along routes to the north and to the east. Prior to making any decision to evacuate people during a wildfire, careful assessment of the evacuation route(s) in relation to the potential for wildfire to impinge on the route(s), must be conducted. This is especially important in the case

of Enderby as there is significantly less risk of catastrophic wildfire spreading into several parts of the city boundaries and therefore, the City can be considered and established as a safe zone.

Overland Flooding and Flood-related Hazards

The City of Enderby is located on the western bank of the Shuswap River, which makes it particularly vulnerable to major flooding events. Recent flood events include flash floods from high precipitation and overland flooding from high river levels during spring freshet. Notable historic events include a spring freshet flood in 1928, marking the highest river levels recorded at 6.7 meters, and a subsequent freshet event in 1948 which came close to those same levels during which the Hupel dike was washed out.

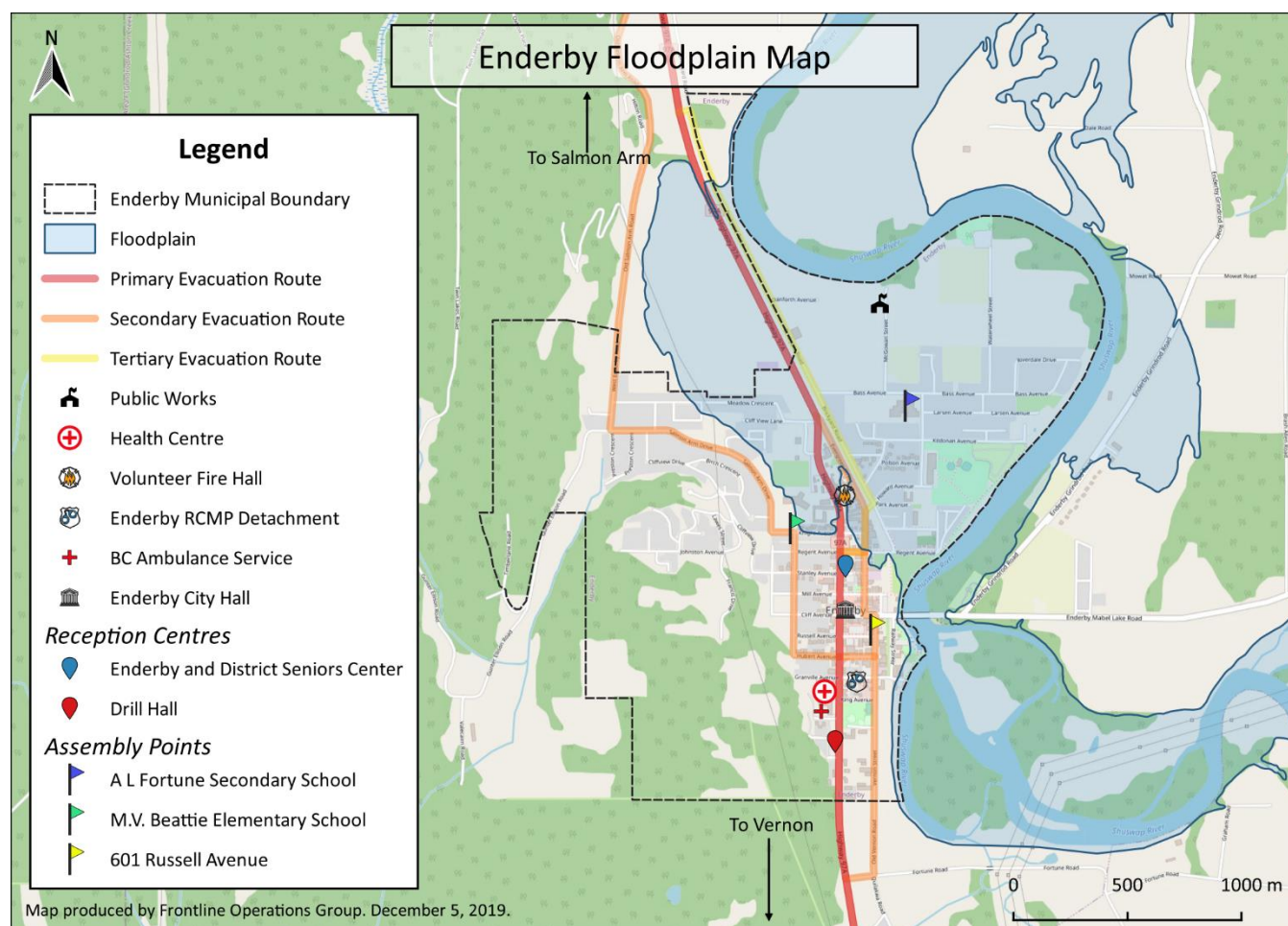


Figure 3 – City of Enderby 200-year floodplain map

More recently, in May 2018, the area of Tuey Park, Kildonan Boat Launch and Riverdale Drive were inundated by high river levels when the spring freshet overwhelmed the Shuswap River, which peaked at 5.139 meters. The EOC was activated for approximately one month to monitor water levels and localized flooding with minimal disruption to residents. Throughout the 1990's the City also experienced several significant flood events and in 2012, heavy rain caused some localized flooding in rural Enderby as well as a city-wide flood advisory and damage to homes

along Riverdale Drive within Enderby proper. Historically, the main causes of flooding to the City are heavy rain or high river levels during spring freshet.

During the spring of 2019 excessive rain overwhelmed the city's drainage system causing flash flooding throughout the City. The extreme weather event caused several roads to be inundated with mud and debris resulting in damaged roads, boulevards, and pedestrian paths. The storm also caused power outages throughout the City which affected sanitary sewer lift stations and the sewer treatment plant. Although no residents were displaced due to the event, several businesses and personal residences were affected by overland flooding as well as Barnes Park.

There are approximately 425 civic addresses located within the 200-year floodplain (Figure 3), meaning that much of the community is located within the flood hazard area. It is currently understood that areas sitting at 353.4-meters elevation and below are at risk of flooding. This includes a section of the downtown commercial area, and critical infrastructure such as the municipal public works department, the wastewater treatment plant, the volunteer fire hall and both schools. In some of these areas, only a portion of the lots are within the 200-year floodplain but the structures themselves are not. It should also be noted that during high river flow the hydraulic connection between the Shuswap river and ground water levels on the flood plain mean that some areas are also at risk of ground water infiltration.

Heavy spring and summer run-off associated with freshet can have a direct impact on the City due to its proximity to the Shuswap River and its multiple tributaries such as Brash Creek. Although Mabel Lake serves as a buffer and storage for excess water, it should not be assumed that river capacity will not reach levels that will impact the City.

It should also be noted that the risk of flood-related hazards is expected to become more common in the City and surrounding areas, as climate change brings heavier, more intense precipitation events. Rapid increases in temperature during the spring will also contribute to high river levels in the Shuswap River and an increased risk of flooding during the spring freshet.

Community Profile and Evacuation Design

Understanding the demographics of the community was a significant part of the planning process as it ensures that the Evacuation Route Plan accurately represents the number of people and vehicles that may require evacuation. Information was compiled in the form of a demographic profile, which was then used to establish evacuation design and scenarios for modelling purposes.

Key questions that guided the design of the demographic profile:

- What is the maximum number of people, who we may need to evacuate?
- Estimated numbers of personal vehicles that will be used during evacuation?
- What is the potential demand for transit services (i.e. how many people do not have their own transportation)?
- Where will people go once evacuated?
- How many people may require assistance to evacuate?
- How many people will require shelter and ESS services?
- How many people travel through the City every day?
- What are the road capacities?

The demographic profile for the City of Enderby was used to:

- Develop evacuation design scenarios to guide the evacuation planning process
- Estimate the potential travel demand
- Estimate the transit resource and shelter requirements
- Determine clearance times for a mass evacuation scenario

Frontline Operations Group reviewed the following data sources to retrieve this information:

- 2016 Census data
- City of Enderby Emergency Plan
- City of Enderby Hazard Risk and Vulnerability Assessment (HRVA)
- City of Enderby Community Wildfire Protection Plan (CWPP)
- RDNO CWPP
- City of Enderby Official Community Plan (OCP)
- MoTI Traffic Data
- Interviews with municipal staff and participating agencies
- ICBC insurance information
- BC Housing assessment data

Population Demographics

According to the 2016 Canadian Statistics Census, the City of Enderby has a population of 2,964, with a median age of 53 years old. Enderby is accessible via Highway 97A from the north (Sicamous and the Trans-Canada HWY) and south (Armstrong and Vernon), and Highway 97B (Salmon Arm) from the northwest. The City is located near the communities of Salmon Arm to the north, Armstrong and Splatina to the south, with smaller neighbouring communities including Grindrod, Grandview Bench, and Ashton Creek. Enderby borders Electoral Area F of the Regional District of North Okanagan (RDNO), which is home to 4,316 people divided between six unincorporated communities.

Enderby is located along the banks of the Shuswap River and can be characterized by its iconic landscape and abundance of outdoor activities that contribute to an influx of seasonal travellers throughout the summer months. The area itself acts as a conduit for tourists and commuters alike, but also draws in many tourists and neighboring residents through local attractions such as the Enderby Cliffs, tube floating on the Shuswap River and, the Starlight Drive-In Theatre.

Most residents rely on private vehicles for transportation as there are minimal public transit options and no local taxi service. The majority of commuters in the City leave their homes between 7:00am and 7:59am, making it one of the busiest times on the roads. It was also noted that 83.95% of the population drive their own vehicle to work and 4% of those, carpool. The total residential population fluctuates to some degree during the week when approximately 67% of the working population commute outside of the City for employment.

A detailed demographic profile can be found in the Operational Evacuation Guide. The demographic profile includes demographic information for permanent residents, vulnerable populations, seasonal residents, commuters and visitors. The median age of people living in these demographic groups were evaluated separately to better understand their points of origin, potential travel patterns and possible needs in an evacuation.

Road Capacity

The MoTI Traffic Data Program (2018) identified that approximately 16,000 vehicles travel northbound through the city daily during summer months, lowering to 12,000 during winter months. An additional 16,000 vehicles pass through travelling southbound staying relatively consistent, year-round. These numbers include both local and commuter traffic and it should be noted that the study does not provide information on the number of vehicles that stay in the City versus those that are passing through.

Utilizing the US army corps (USAC) road lane capacity tool, the 50km speed limit and a contingency amount (during an evacuation) we derive the highway capacity is approximately 700 vehicles per lane/per hour. This figure includes an allowance for emergency access vehicles and road obstructions. Other traffic models produce road lane capacity at 1000 vehicles per hour at 40 km/hour or even higher. For the City, due to the number of constrictions, the potential delays at intersections and the fact that all merging traffic must enter one central transportation route, the USAC calculations have been deemed appropriate.

If a mass evacuation of residents took place of 3,500 citizens², assuming no lead in time for preparation, it would take a **maximum** of 4hrs 13mins to clear all residents from a state of readiness. With an approximate lead in time for decision making we can include an additional minimum two hours which would result in the City being cleared within 6hrs 13mins. A Tactical Evacuation, due to an impending threat, would be implemented by the Fire Chief, RCMP or other leading agency IC and, as such, would be an expedited process. These estimations do not include the lead in time for evacuation of a vulnerable population where preparation takes place during the Alert stage.

² Highest estimated number of people that may be in the City during a peak summer, weekend day.

Evacuation Design Scenarios

The evacuation design scenarios for the City were built using the maximum estimated population that can be expected during the year, which would be a peak summer weekend day. This includes permanent residents, commuters, seasonal residents, vulnerable populations, and visitors. We use the highest estimated numbers to develop our plan to accommodate for the worst-case scenario. Evacuation clearance times outside of peak days are not expected to be considerably different from a planning perspective due to the relative stability of the residential population base and minimal tourism numbers, as well as high vehicle ownership within the community.

If an evacuation occurred on a weekday during working hours while commuters are outside of the City, there may be fewer vehicles on the highway however, the remaining residents of single-vehicle households would require alternate transportation. It was decided that there are too many variables to accurately model this assumption.

Design Scenario	Total # of evacuees	Number of vehicles ³	Require transportation ⁴	Predicted destination	Require group lodging	Require evacuation assistance
Peak summer weekend day	3,500	3,300	200	Salmon Arm	300	200
Peak summer weekday during business hours	2,600	2,400	600	Armstrong Vernon (dependant on location of hazard)	150	200

³ Due to the rural location of the City, it is assumed that 90% of residents will have access to a vehicle

⁴ It is assumed that during summer weekdays the population figure that requires transportation is comparatively higher than that of a weekend based on numbers of single vehicle families

Assumptions

General Assumptions about emergency planning include:

- Emergency management is a dynamic process. This means that the current plan is a snapshot of preparedness activities and actual events may require a change in what has been written in the plan. The Evacuation Route Plan should be regularly tested, reviewed and adapted to reflect lessons learned from tests and actual experiences.
- Emergency response requires room for flexibility and improvisation. The nature of emergencies and disasters is such that not all aspects of a response can be planned for. The structures and systems described in the Evacuation Plan should therefore be seen as guidelines that can be adjusted and adapted by those responsible for evacuation.

Specific Assumptions about Evacuation Planning are:

- **Shelter-in-Place**
 - Spontaneous Evacuation may occur despite warnings to shelter-in place rather than evacuate
- **Evacuation**
 - Spontaneous evacuation will occur when there is enough warning of the threat.
 - Between 5 and 20 percent of the people at risk will self-evacuate before being directed to do so.
 - Some people will refuse to evacuate, regardless of the threat
 - Some individuals will require transportation support to evacuate
 - Some owners of animals will refuse to evacuate unless arrangements have been made to care for their animals
 - Many evacuees will seek shelter with relatives, friends or motels rather than use government-provided facilities
 - For some hazards, such as flooding and wildfire, designated evacuation routes must be used to safely evacuate people.
 - The day of the week and time of day will determine if individuals/families will be at their homes or separated at work/school
 - Many hazards provide a warning period which allows for a planned evacuation and re-entry
 - Approximately 10-20 percent of the population impacted will require some form of assistance from local ESS teams in Receptions Centres or Groups lodging facilities; this figure could vary depending on the compositions of the community.

Concept of Operations

Framework and Principles

In order to safely and efficiently evacuate the residents of the City of Enderby, it is essential to establish a shared comprehensive framework that clarifies organizational structure, roles and responsibilities of stakeholders, and coordination processes. The Concept of Operations (CONOPS) for evacuation is based on the BC Emergency Management System (BCEMS) which was developed under the BC Emergency Program Act to standardize practice for all municipal and provincial governments and is the recommended *best practice* for all stakeholders in BC.

This CONOPS aims to aid evacuation planners in planning and coordinating all evacuation operations with multiple stakeholders at various levels and jurisdictions. This section provides an overview of the common framework and guiding principles that will be used during a mass evacuation scenario for the City of Enderby, including BCEMS, Incident Command System (ICS), Unified Command (UC), inter-agency communications and standard operating procedures.

An overview of the coordination and management of an evacuation is also provided. The specific roles and responsibilities of each agency involved in evacuation are covered in the Roles and Responsibilities of Agencies section.

BC Emergency Management System (BCEMS)

BCEMS is a comprehensive framework that helps ensure a coordinated and organized approach to emergency and disaster response. Developed under the authority set out in the BC Emergency Program Act and the Emergency Program Management Regulation, BCEMS is standard practice for all provincial government ministries and Crown corporations as indicated in the Regulation. It is an emergency management system founded on the principles of the Incident Command System and includes common language, span of control, and management by objective and scalability. BCEMS is the recommended 'best practice' for all emergency management stakeholders in BC and applies to emergencies, disasters and catastrophic events. It operates under four operational levels: site level, site support, provincial regional coordination, and provincial central coordination.

Incident Command System (ICS)

ICS is a standardized on-scene incident management concept designed specifically to allow responders to adopt an integrated organizational structure equal to the complexity and demands of any single incident or multiple incidents without being hindered by jurisdictional boundaries.

An ICS enables integrated communication and planning by establishing a manageable span of control. An ICS divides an emergency response into five manageable functions essential for emergency response operations: Command, Operations, Planning, Logistics, and Finance and Administration.

Unified Command

Although a single Incident Commander normally handles the command function, an ICS organization may be expanded into a Unified Command (UC). The UC is a structure that brings together the "Incident Commanders" of all major organizations involved in the incident in order to coordinate an effective response while at the same time carrying out their own jurisdictional responsibilities. The UC links the organizations responding to the incident and provides a forum for these entities to make consensus decisions. Under the UC, the various jurisdictions and/or agencies and non-government responders may blend together throughout the operation to create an integrated response team.

The UC is responsible for overall management of the incident. The UC directs incident activities, including development and implementation of overall objectives and strategies, and approves ordering and releasing of resources. Members of the UC work together to develop a common set of incident objectives and strategies, share information, maximize the use of available resources, and enhance the efficiency of the individual response organizations.

Coordination and Management of Evacuation

The following section will describe the actions taken by each level of response from the local to provincial level.

Site Level

Incident Commander/Unified Command

- The Incident Commander provides information and recommendations to the EOC for when an Evacuation Alert, Order or Rescind needs to be issued
- If the emergency situation shows an immediate threat to the health and safety of people, the Incident Commander can initiate a Tactical Evacuation
- Confers with the EOC (if activated) to determine area to be evacuated, proposed evacuation routes, Assembly Points, etc.
- Provides regular situational awareness to the EOC and EMBC on variety of topics
- Agencies, organizations, and partners at the site level should have representatives in the EOC in order to provide information and coordinate communications

First Responders

First Responders work at the site level of an event and include police, fire and ambulance. Activities of first responders include medical response, firefighting and managing crowds or evacuation zones. When a local authority EOC is activated, police and fire first responder agencies provide situational awareness to the local authority and submit requests for support to the local authority EOC. The BC Ambulance Service provides situational awareness and coordinates resources through the PREOCs and PECC.

Site Support

Emergency Operations Centre

- Activates the evacuation plan
- Supports the Site Level operations with resources and information, as required
- Initiates/authorizes early evacuation for vulnerable people and livestock
- Manages all aspects of the evacuation cycle including providing support to evacuees through ESS
- Ensures evacuees have essential supplies such as food, water, beds, sanitation services, clothing, and medical equipment and supplies
- Prepares for and coordinates Evacuation Alerts, Orders and Rescinds including the mapping of the evacuation area, and the identification of evacuation routes and reception centre locations
- Identifies and notifies potential host communities, maintains communication between identified host communities through the full evacuation cycle
- Tracks and records information on evacuation details, such as areas and numbers of impacted individual
- Provides concise, consistent, transparent, and accurate information to the public and the media
- Ensures elected officials have been alerted and kept informed
- Tracks costs and resources

Emergency Support Services (ESS)

- Works with EOC to determine locations of Reception Centres and Group Lodging
- Establishes and manages Reception Centres and Group Lodging facilities, under direction from the EOC
- Communicates resource needs to EOC
- Provides regular situational awareness to the EOC and EMBC on variety of topics, such as number of registrants, approximate value of referral distributed, additional supports required, and current status of operations

Provincial Regional Coordination

EMBC has its headquarters in Victoria and incorporates six regional offices. During an emergency, one or more of the PREOCs will activate as required, in support of local authorities and provincial ministries. PREOCs are responsible for the provision and coordination of provincial support or local authorities and First Nations within designated regional boundaries.

The PREOC for the City of Enderby is covered by Central PREOC, located in Kamloops.

Local Authority

Local authorities include municipalities and regional districts. Local authorities hold primary responsibility for emergency planning, response and recovery within their jurisdictions. Under Section 6(2) and 6(3) of the Emergency Program Act, the local authority must develop emergency

plans for response and recovery as well as establish an emergency management organization to develop and implement emergency plans and other preparedness, response and recovery measures.

During an emergency or disaster, the local authority will activate its emergency operation centre (EOC). In larger events, neighbouring local authorities may choose to run a joint EOC. Through the EOC, the local authority performs the following tasks:

- Assess the situation
- Provides support to the first responders, including resources
- Provides public information, including media briefings
- Coordinates the provision of food, clothing, shelter, and transportation
- Liaises with volunteer groups
- Provides situation reports to the PREOC
- Tracks finances
- Coordinates recovery of essential services
- Coordinates community recovery efforts
- Authorizes States of Local Emergency, Evacuation Alerts, Orders, and Rescinds
- Provides policy direction and establishes priorities during all phases of an evacuation, based on recommendations by the EOC Director or Chief Administrative Officer (CAO)

Provincial Central Coordination

Emergency Coordination Centre (ECC)

The Emergency Coordination Centre (ECC) is a 24-hour centre that records, reports and monitors emergency incidents across the province 365 days per year. If an emergency incident occurs with potential to escalate or has required the activation of the local emergency operations centre(s), the ECC will contact designated EMBC regional and headquarters staff. EMBC staff will activate the PREOC and/or PECC if deemed necessary. The ECC facilitates the flow of information within and between agencies and senior officials if local telecommunications are impacted.

Provincial Emergency Coordination Centre (PECC)

The PECC is the central EOC responsible for the overall coordination of the integrated provincial response and implementation of the provincial priorities. The PECC is located in Victoria.

During activation, the activities of the PECC include:

- Supporting PREOCs
- Coordinating provincial response and recovery activities
- Assigning provincial critical resources
- Providing provincial messaging
- Creating and distributing provincial situation reports
- Liaising with the federal government
- Ensuring provincial senior officials are apprised of provincial response activities
- Implementing policy directives received from the Central Coordination Group (CCG)

Central Coordination Group (CCG)

During large emergency responses the Central Coordination Group (CCG) is activated to ensure cross-government and multi-agency coordination of response activities. The primary function of the CCG is to provide strategic direction as well as oversight of provincial integrated emergency response and recovery activities to the PECC. Participation is hazard-based and includes senior representatives from ministries/agencies with responsibilities associated with the event.

Organizational structure of the CCG is determined by the hazard type and the identified consequences or potential consequences of an emergency or disaster. It is generally co-chaired by EMBC and a senior representative (Executive Director or ADM level) from the ministry with primary responsibility for the event hazard.

Interagency Communications

The City of Enderby is responsible for its own Emergency Management Services. However, in the event of an emergency or disaster event, the City can request support from the RDNO, or another neighbouring community, which may include activation of their own EOC if needed.

Roles and Responsibilities of Agencies

Executing a mass evacuation that could require sheltering in a neighbouring community requires collaboration between many agencies and clarity on the role of each. This section outlines the general roles and responsibilities of local, provincial, federal, private and not-for-profit agencies during a mass evacuation of the City of Enderby.

When preparing for or executing an evacuation there are roles and responsibilities common to all agencies which include:

- Participate in evacuation planning and exercises
- Activate agency EOC when notified of mass evacuation
- Provide a representative to the local government EOC when requested; if this is not possible, provide a 24/7 direct point of contact that can be reached by phone
- Provide situational updates to the local government EOC

Local Agencies

City of Enderby

- Activate EOC
- Coordinate alternative EOC if identified location is in hazard area or if entire City must evacuate
- Coordinate and liaise with local stakeholders
- Provide local knowledge to responders
- Provide IC as appropriate
- Oversee the evacuation process

- Provide data and information to response and support agencies
- Issue and coordinate dissemination of evacuation alerts and orders
- Provide space for ESS set-up to support evacuees
- Issue press releases and messaging for media
- Assist individuals that cannot evacuate themselves
- Coordinate damage assessments to facilitate re-entry process

Regional District of North Okanagan (RDNO) or Neighbouring Jurisdictions

At the request of the City:

- Activate EOC to assist in facilitating centralized decision-making, acquiring and coordinating resources (vehicles, personnel, equipment)
- Assist in coordination and liaison with neighbouring local governments and provincial agencies.
- Assist in communication and coordination link between agencies and organizations involved in the evacuation
- Assist in providing updated public information
- Assist in the evacuation process
- Assist staffing the EOC
- Assist ESS

Splatsin

- Liaison in EOC
- Subject matter expert on sensitive or culturally significant land
- Assist with evacuation planning and implementation

RCMP

Operating on behalf of the Local Authority:

- Supports the notification of an Evacuation Order to the community
- Requests capacity support from Ground Search and Rescue (GSAR) for community evacuation notifications
- Staffs security checkpoints for evacuation area to support public safety
- Facilitates temporary access as directed by Local Authority and/or responding agency
- Supports re-entry upon Evacuation Rescind
- Implement ICS of actual event at site level
- Fill Operations position in EOC
- Configuration of Evacuation Routes in coordination with EOC
- Traffic control
- Safety and security of people and community
- Notification (door-to-door)
- Action person movement (direct people out of hazard zone)
- Containment and access control of evacuated area

- Provide additional police resources if required
- Security of evacuated areas

Enderby Fire Rescue Services

- Minimize hazards, including fire protection
- Assist with notifications
- Assist with stabilizing and directing residents away from the hazard
- Communicate situational awareness

Interior Health

- Continuity of care for home health and mental health community clients once evacuated
- Disaster psychosocial support at the ESS
- Provision of a health care system “navigator” at Reception Centre
- Continuity of care for First Nations clients who are evacuated, if requested
- Communication of reduction or elimination of health care services in town
- Evacuation of clients in long-term care home (Parkview Place)
- Check water quality prior to re-entry

BCEHS

- Respond to medical emergencies reported through 911
- When emergent, assist with movement of residents of care facilities
- EOC/Frontline – medical standby for responders working in the hazard area
- EOC participation as needed

School District #83

- Report to superintendent’s office
- Responsible for evacuation of students and staff during school hours
- Provide area of refuge (schools)
- Provide transportation (school buses)

Provincial Government Agencies

Emergency Management BC (EMBC)

Through activation of the Provincial Regional Emergency Operations Centre (PREOC), or Provincial Emergency Coordination Centre (PECC), or the Regional Duty Manager, as required

- Coordinates any supports required for impacted communities
- Hosts daily coordination calls for Local Authorities, First Nations, and all responding agencies
- Provides connection and coordination between all responding parties
- Reviews and provides feedback on evacuation plans for the impacted community
- Assist with evacuation route planning and re-entry planning, upon request
- Assist in executing evacuations by way of resource requests or expenditure authorization for critical resources (e.g. transportation services, security, physical blockades, Search and Rescue)
- Assist with communications to evacuees and the general public
- Accesses provincial volunteer resources (Search and Rescue, ESS Mobile Support Team, Provincial Emergency Radio Communications Service, PEP Air, Road Rescue) as required

Ministry of Agriculture (AGRI)

- Provides advice to farmers, aqua-culturists and fisheries on the protection of crops, livestock, and provincially managed fish and marine plant stocks
- Coordinates the emergency evacuation and care of poultry and livestock
- Provides support to lead agencies, Local Authorities, First Nations, and agriculture producers, including with the planning and execution of livestock evacuation, emergency feeding, sheltering and care
- Provides support to EOC/CCs, PREOCs, and the PECC with assessing temporary access requests by individual agriculture producers
- During an animal health emergency, establishes quarantine or control zones that may prohibit, limit, or impose requirements in respect to the movement of persons into, from, or within the area
- During a plant or animal disease incident, or pest outbreak, serves as the Provincial lead agency for response, coordinating with the Canadian Food Inspection Agency as required

BC Wildfire Service (BCWS)

For wildfire hazard events:

- Leads the response of all operations to wildfire hazard
- Provides recommendations to First Nations and Local Authorities on Evacuation Alerts, Orders, and Rescinds
- Assists with delineation and mapping for boundaries of recommended Evacuation Alerts and Orders
- Provides recommendation on safety of temporary access

- Provides public information regarding Evacuations, in support of and in close conjunction with EOC/CC
- Maintains consistent and effective communication platforms and structures with EOC/CC and RCMP
- Provides technical expertise where requested for flood hazard event, as requested by PECC and/or PREOCs
- Provides resources, communications and logistical support

Ministry of Children and Family Development (MCFD)

As required, through support and coordination with the Emergency Management Unit, MCFD:

- Liaises with EMBC through regional and Provincial coordination calls
- Provides support to Service Delivery Areas and Local Service Delivery offices in the continuity of services
- Provides direct assistance to caregivers and contracted care providers in impacted areas
- Maintains a mechanism for the tracking of displaced children and youth in care
- Receives, assesses, and responds to reports of unattended children •
- Upon request, liaises with communities to assess need for local MCFD representation during major evacuations

Ministry of Environment (ENV)

- Monitors, augments, or takes over the response to hazmat incidents related to evacuations
- Provides technical advice to EOC/CCs, PREOCS, or the PECC, First Nations or Local Authority fire departments, public works, or other agencies or parties to support a timely effective response to hazmat incidents or consequences related to evacuation
- In regard to hazardous spills, identify and evaluate the immediate risks to and impact on the environment, human health or infrastructure and as necessary advise agencies or parties to take protective action in relation to the spill, which would include evacuations
- Declares a State of Environmental Emergency when required
- Orders response or recovery actions to protect the environment and human health

Forests, Lands, Natural Resource Operations and Rural Land Development (FLNRORD)

In response to flood hazards, and through the PREOCs and/or PECC:

- Through River Forecast Centre (RFC), issues advisories and provides forecast updates to First Nations and Local Authorities
- Communicates with First Nations and Local Authorities and Diking Authorities on flood mitigation works
- Provides technical advice and specialist expertise, support services, and staff for PECC/PREOCs
- May assist with facilitating access to Forest Service Roads at the request of the EOC

Health Emergency Management BC (HEMBC)

- Provides leadership and support to health sector

- Responsible for providing health services and care to existing patients and clients
- Evaluates the risk to affected communities and moves patients to health care facilities in other communities, as appropriate, usually during the Evacuation Alert stage
- Tracks outpatients during evacuations (those receiving home care, outpatient treatments, etc.) and makes certain outpatients are continuing to receive specialized care in host communities
- Provides psychosocial support to evacuees through the Disaster Psychosocial Services (DPS) program
- Prior to an Evacuation Rescind being issued by the EOC/CC, health authorities work to re-establish key health services
- During re-entry, health authorities utilize appropriate health programs to provide public health advice and guidance (e.g. how to address houses contaminated by moulds or freezers filled with rotten food)

Ministry of Transportation and Infrastructure (MoTI)

In respect to provincial highways:

- Work closely with First Nations and Local Authorities, and the RCMP during the pre-planning of an evacuation with regards to the selection, capacity, and conditions of proposed evacuation routes, and ensuring that all detours are viable for all types of traffic
- Assist with strategizing on proposed messaging to the public through DriveBC about alternate routes once an Evacuation Order is in effect
- Assist RCMP with traffic control and posts signage at key decision points along the evacuation route
- Local Maintenance Contractors conduct roving patrols, assisting evacuees with breakdowns along the route or fuel shortages etc.
- Responsible for staffing all checkpoints on provincial highways
- Prior to Evacuation Rescind, works closely with EOC/CC to establish timing of repatriation, and ensuring transportation infrastructure is in a condition to support evacuees returning home

Federal Government Agencies

Canadian Armed Forces (CAF)

Through written request by the Province in the form of a Request for Federal Assistance (RFA):

- May provide extraction services to trapped evacuees
- May deliver emergency resources to difficult-to-reach areas
- May provide any needed support as authorized by RFA Coordinated by the Joint Rescue Coordination Centre in Victoria, leads all Marine or Aircraft Search and Rescue

Indigenous Services Canada (ISC)

- ISC enters into service agreements with the Provinces, Territories or other response agencies, who in turn support evacuation from reserves during emergencies. ISC reimburses evacuation costs and supports First Nations and partners to resolve jurisdictional questions

and other issues as they arise. Additionally, under ISC's Build Back Better Strategy Guide, the Department can contribute funding for additional social and cultural supports such as traditional foods and cultural continuity services.

Innovation, Science, and Economic Development Canada (ISED)

- Acts as the federal coordinator for telecommunication stakeholders whose infrastructure may be impacted
- Works closely with telecommunication carriers to support their efforts to mitigate or restore impacted services
- Acts as federal representation of the telecom stakeholders' interests in efforts such as temporary access, fuel prioritization, power re-energization, credentialing, public communications, international assistance, and the movement of resources
- Manages the information flow to and from telecom stakeholders and other federal government departments, particularly Public Safety Canada

Public Safety Canada (PSC)

- Coordinates Provincial Request for Federal Assistance (RFA) and works with federal family to provide support on behalf of the Government of Canada

Private Entities and Non- Profit Agencies

Canadian Red Cross (CRC)

Upon invitation from the Local Authority, and with approval from EMBC:

- Under contract with the City of Enderby to provide ESS services for level 1 responses
- Provides capacity support to local ESS team
- In the absence of local ESS, manages the ESS framework for evacuees

Ground Search and Rescue (GSAR)

Upon request by the RCMP or the EOC/CC:

- Provides support to RCMP for community notifications of Evacuation Alerts/Orders
- Provides short-term temporary checkpoint support until appropriate contracted resources arrive

Canadian Disaster Animal Response Team (CDART)

Upon request from Local Authorities:

- Maintenance of animals left at home (food, water, etc.)
- Provide vet care if needed for evacuated animals
- Temporary sheltering
- Assistance with evacuating animals

- Assist evacuees looking for a place for their animals to be cared for
- Rescue animals in evacuated areas
- Emotional support for pet owners
- Supplies for people with evacuated animals
- Support/assistance with “non-farm, farm animals” (hobby farm animals)
- Mortality team if needed
- Implementation of record keeping and identification system
- Transportation of animals
- Reuniting animals with caregivers

Oil and Gas Commission (OGC)

- Monitors oil and gas activities in immediate area and prescribed zone around area
- Contacts permit holders with assets within and surrounding evacuation area to ensure they are aware of the situation and taking precautions, if necessary, and enable ongoing communication between responding parties
- Releases safety advisories to permit holders updating them on emergency event conditions

Fortis BC

- Coordinate and help execute gas system isolations
- Monitor the threat area, expand the gas system shutdown if required
- Communicate with other agencies to maintain safety
- Restore gas assets safely once the evacuation is rescinded
- Shut down gas where appropriate
- Provide liaison for EOC
- Work with IC at site level
- Ensure public messaging related to gas safety is accurate and available
- When possible, have community reps at reception centres to offer and provide support
- Coordinate with IC to plan and execute restoration and re-lights of gas appliances

Evacuation Routes, Assembly Areas, and Transportation

There are several strategies, techniques, and tools available to direct and control traffic during an evacuation. Evacuation strategies are implemented to best manage or enhance the capacity of the highway, modify routes to keep traffic moving, and manage the evacuation safely. A mass evacuation of the City would likely overwhelm the capacity of the highway. As a result, during an evacuation of the City, evacuation strategies will be required to reduce congestion and keep traffic moving. Traffic congestion is well-documented and is known to lengthen evacuation clearance times, contribute to evacuee discomfort and stress, and increase demand for enroute services such as food, water, fuel, emergency response vehicles and tow trucks. This section provides an overview of the different strategies available to the City.

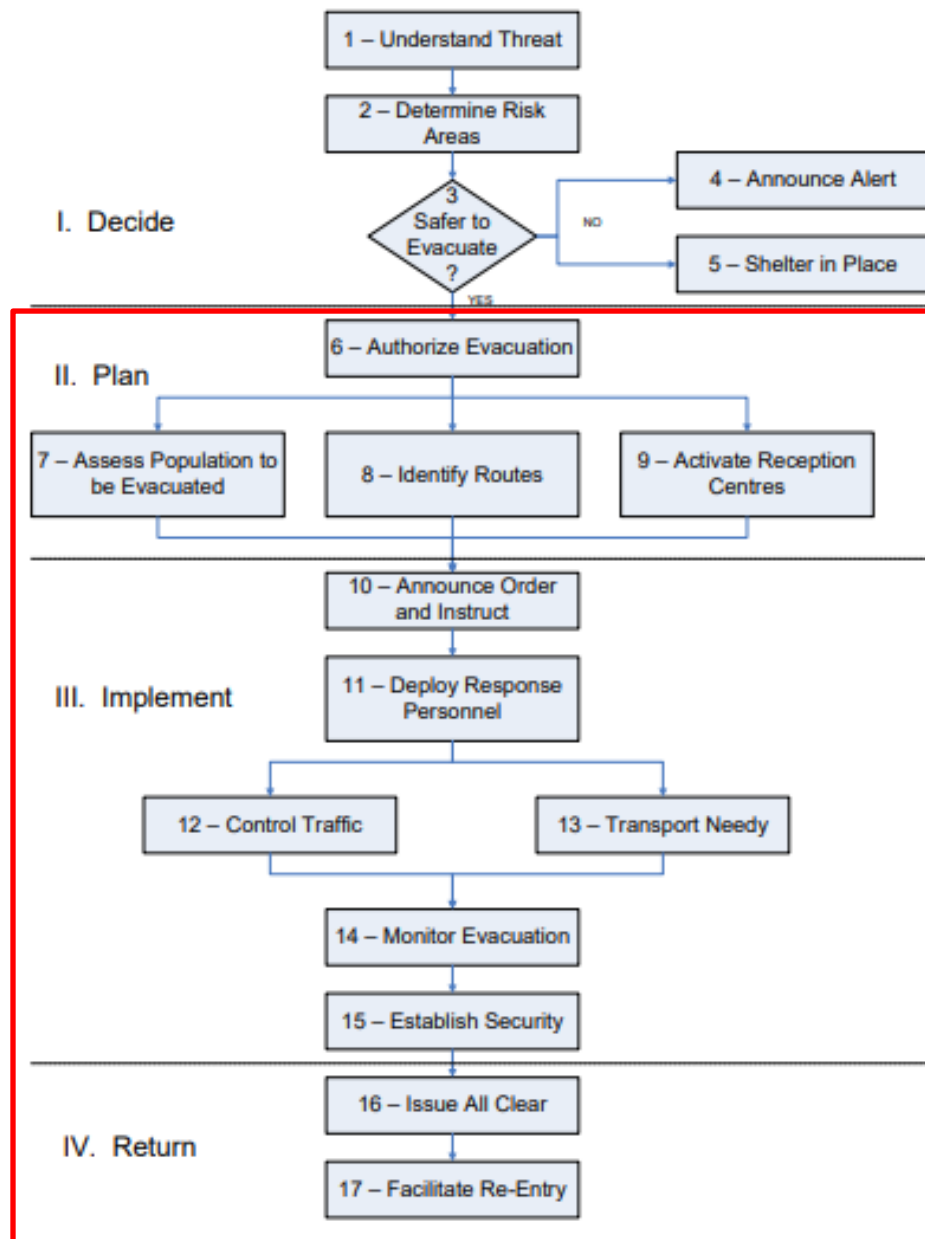
The specific evacuation scenario at the time of the emergency and the availability of resources, will dictate which strategies are implemented and in what capacity. Not all evacuation strategies will be viable or appropriate in every evacuation scenario. This section should be considered a toolbox for decision makers, meaning that only those strategies required and viable for the specific evacuation scenario will be implemented. Detailed checklists for implementing the specific evacuation strategies and locations where the evacuation strategies may be effective are included in the Operational Evacuation Guide.

Decision to Evacuate

The Evacuation process involves the removal of people, animals and livestock from a dangerous, or potentially dangerous area, to a safer location.

The Evacuation Route Plan will outline procedures and resources for all activities within the section defined by a red rectangle, including:

- ✓ Prioritizing/Phasing
- ✓ Egress
- ✓ Assembly points
- ✓ Vulnerable populations
- ✓ Animals and Livestock



The identification of trigger points and indicators will likely happen on an ad hoc basis, dependant on the type of hazard being dealt with. To facilitate the planning process, an overview of what is involved as well as a formula to facilitate the decision-making process has been provided below.

Ordering residents to evacuate is recognized as one of the most difficult decisions a local authority is likely to make. It should occur when the Director of the EOC, in consultation with the IC, decides that the risk to the community is high or the community can no longer provide the necessities of life (food, water, shelter).

Timing is important; considering that ordering an evacuation too far in advance can expose the evacuees to unnecessary hardship and/or create a complacency for future evacuations. The general formula for determining the time needed to conduct an evacuation is provided below:

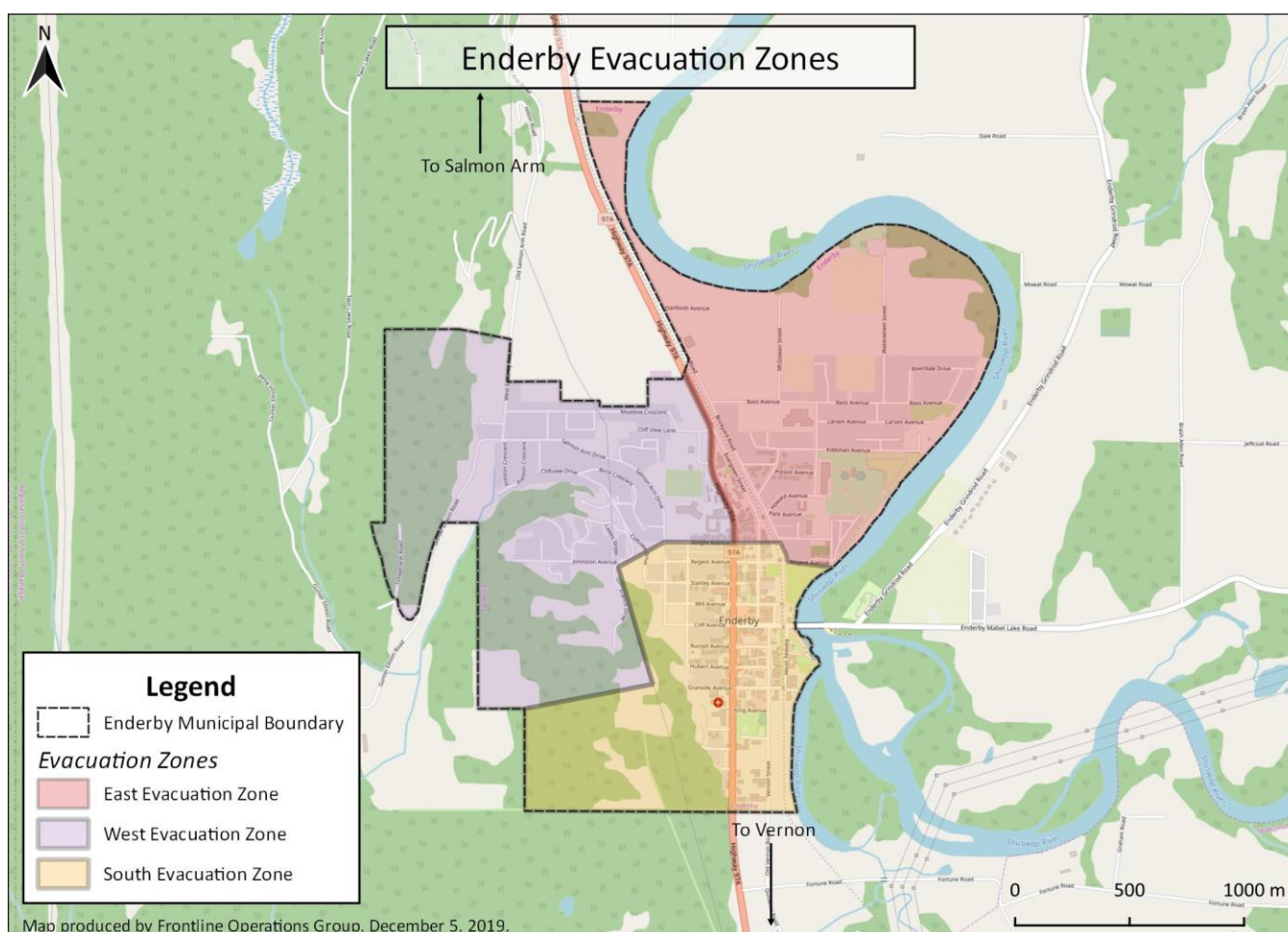
FORMULA FOR DETERMINING EVACUATION TIMELINE

Time required to process the paperwork (drafting and sign-off) +
Time required to mobilize notification personnel +
Time required to notify impacted population +
Time required to physically conduct the evacuation +
120 minutes contingency =
Trigger point for evacuation

A detailed process and timeline for evacuation procedures for the City of Enderby can be found in the Operational Guide.

Evacuation Zones

As part of evacuation planning, the City of Enderby has identified evacuation zones. Evacuation zones delineate the population by area for the purpose of location-specific evacuation planning and response. During the evacuation planning phase, evacuation zones allow officials to evaluate the hazards, demographics, emergency traffic demand and egress routes of specific areas. During evacuation response, evacuation zones allow officials to issue evacuation alerts and orders to specific areas and to provide tailored information and instructions by location. Evacuation zones allow officials to provide residents and visitors with clarity on what actions they need to take based on their location and proximity to the hazard. It is critical that residents and employees know which evacuation zone they live and work in.



Evacuation Phasing

Evacuation phasing involves scheduling the departure times of evacuees by evacuation zone, so that people are evacuated in stages, rather than all at once to reduce congestion on roadways. Although the goal of an evacuation is to move people away from the threat as quickly as possible, a single concentrated travel departure pattern can inhibit overall traffic movement, particularly where there are critical constraints, such as intersections and merging lanes. In addition, because evacuations usually involve movement in a single direction away from the hazard, evacuees closest to the hazard can sometimes experience the longest travel times.

Although a phased evacuation may take longer overall to execute, it will provide a more efficient systematic evacuation through better traffic control, lower highway volumes and will decrease the likelihood of backups and driver travel times. Whenever possible, a phased evacuation is preferable. Public communication will be critical to promote trust and adherence as compliance with a phased approach may be challenging if people perceive a serious threat.

There are different strategies to implement phased evacuations, and the specific evacuation scenario at the time of the emergency will dictate if, and in what capacity, a phased evacuation is implemented. These strategies include:

1. Issuing sequential evacuation orders that begin evacuations in areas closest to the hazard first, and then working away from the hazard. This ensures that people most at risk are moved out of the hazard area first.
2. Issuing evacuation orders to evacuation zones closest to the outbound end of the community first and working backwards across the community. This strategy moves the outbound neighborhoods out of the way, so inbound traffic can move through.
3. Evacuating the neighborhoods with the densest population areas first, as this will take the longest.
4. Asking non-resident populations to leave during the evacuation alert stage to reduce the number of people that need to evacuate once the need for evacuation is confirmed and an evacuation order is issued.
5. Allowing people, who will take more time to evacuate (e.g. people with disabilities or medical health issues), to leave first to ensure they have the time they need to evacuate safely.

Note: Because it is impossible to enforce phased evacuations, they are a guidance-only strategy and will need to be included in public education prior to an evacuation, and once an evacuation is possible or confirmed. Public information is important to avoid shadow evacuees: people outside a declared evacuation zone, who evacuate unnecessarily or at the incorrect time. Shadow evacuees congest roadways and inhibit the egress of those evacuating from an area at risk.

Destination Assignment

Another strategy to modify demand in an evacuation is to assign evacuees to specific destinations. Destination assignment involves assigning evacuees to specific routes and destinations to decrease congestion on main evacuation routes. This strategy involves asking or directing evacuees, or in a worst-case scenario implementing roadblocks to compel compliance to a specific route or destination. In the City of Enderby this would likely involve asking or directing some people to evacuate north, as one assumption is that congestion will be heavier heading south if evacuation routes to the south are open.

While destination assignment is an option, it is preferred that people are able to select their own route and destination, as they are more likely to have support at their preferred destination. If circumstances justify destination assignment, it is preferred that it be voluntary. Making destination assignment mandatory by way of a roadblock should be a last-resort option, as it can force people to unfamiliar areas where they lack support, and separate families and friends. Only in the most immediately life-threatening situations should people be evacuated without being able to gather their family, friends and pets.

Assembly Points

If public/group transport is being used, an assembly point(s) should be designated for people to report to. Assembly points will be determined based on the type and location of the emergency.

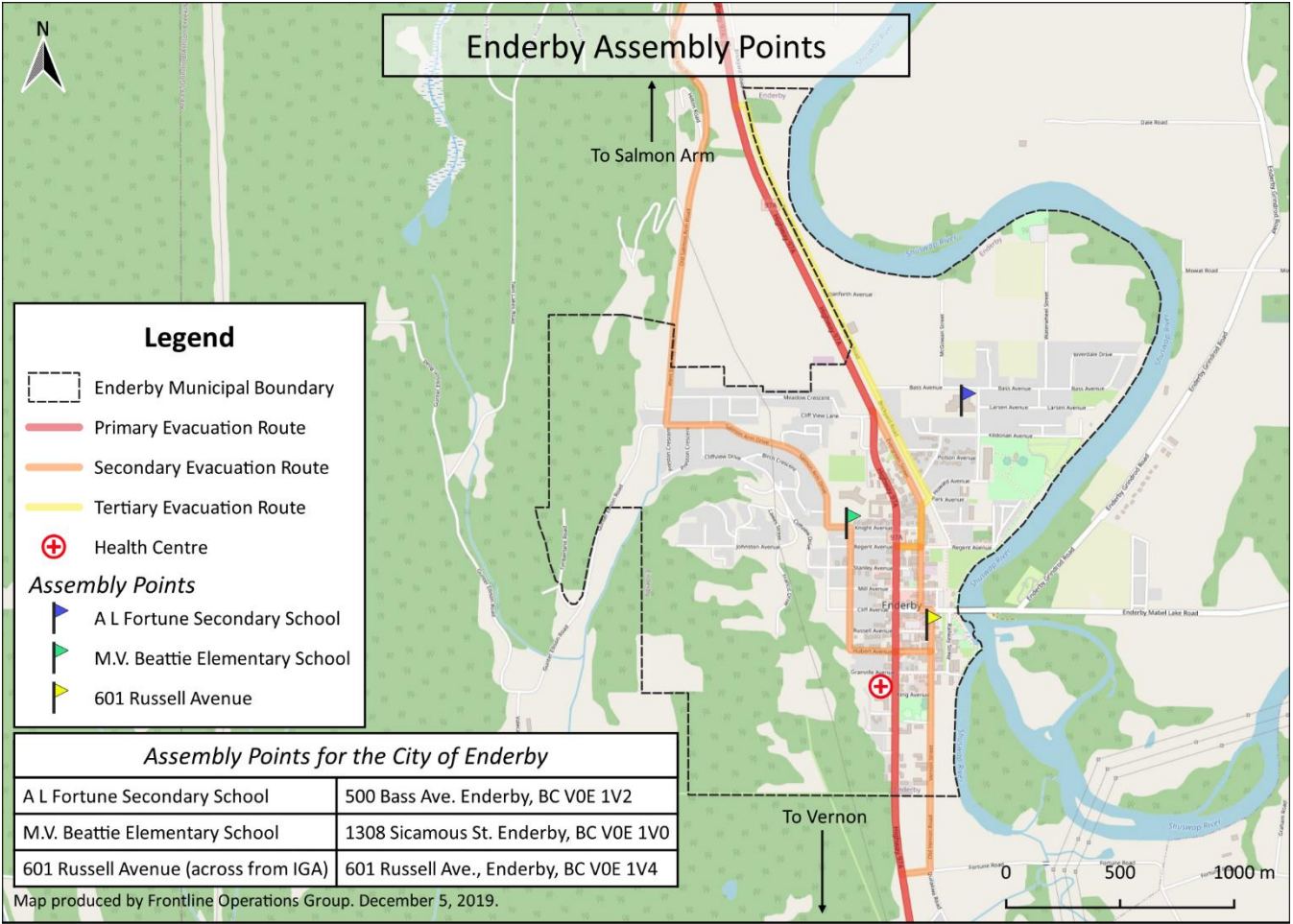
Transportation Assistance

People who are unable to travel to the designated assembly points for transportation should develop a personal emergency plan with a family, friend or neighbour that can provide them assistance and/or transportation assistance. If this is not an option, they will be directed to contact the EOC to arrange transportation directly from their residence. The EOC call center will ask a series of questions to determine transportation needs and forward the information to the EOC Operations desk for review and implementation. Details about accessible transit resources is available in the Operational Evacuation Plan.

Requests for Additional Transportation Resources

It is likely that the local transportation resources will be insufficient to meet the demand for transportation in a mass evacuation, thus transportation resources will likely be required from outside the region. At the request of the City, EMBC will coordinate and provide additional resources in support of evacuation operations. The City should put in a resource request for extra transportation resources, ideally as soon as an evacuation is considered and definitely at the evacuation alert stage. This is included in the Operational Evacuation Plan pre-evacuation checklist.

Pre-determined assembly areas for the City are as follows:



Transportation Options for People with Pets

In addition to people, pets must also be considered during evacuation planning. For the purpose of this plan, household pets are defined as domesticated pets (e.g. dogs, cats, birds, rodents) that are traditionally kept in the home for pleasure, rather than commercial purposes and can travel in commercial carriers and be housed in temporary facilities. In coordination with EMBC, the City will make every attempt to ensure that dedicated transportation resources are available to people with pets.

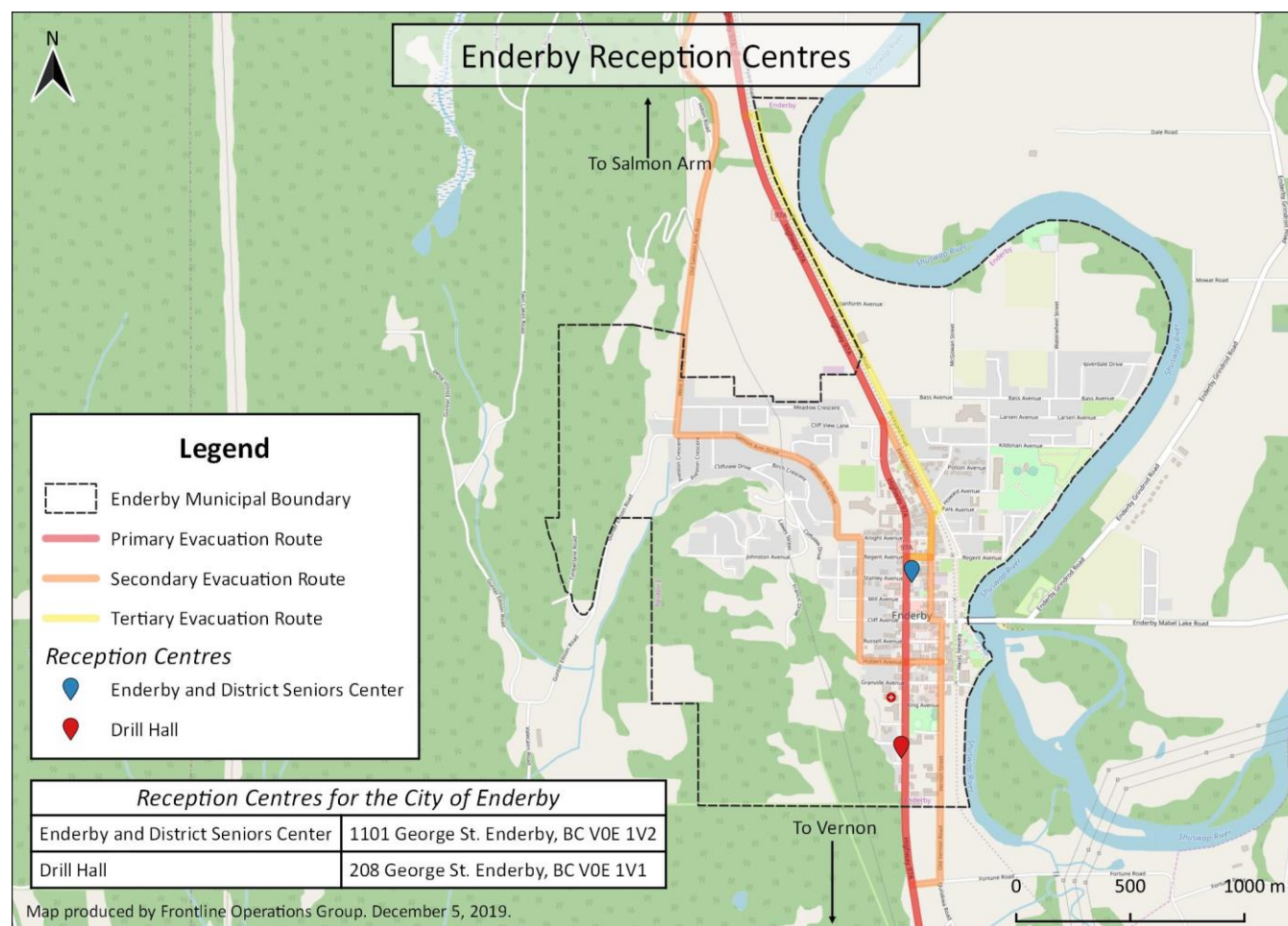
Reception Centres

Reception Centers are safe gathering places for people displaced from their homes as a result of an emergency or disaster. At a Reception Center, individuals can register and receive Emergency Social Services as well as information about emergency situation including the evacuation. If the City is evacuating the entire community the reception centre will likely be located in a pre-determined neighbouring community. Local reception centres could be activated to help during a localized incident or to accommodate evacuees from neighbouring communities that are in need of a host community.

The services that are provided at a Reception Center include, but are not limited to:

- Registration
- Referrals for food, clothing, lodging and/or amenities
- Reunification with family or friends
- Emotional support
- Assisting persons with special needs
- First aid
- Multi-cultural services
- Pet care

Pre-determined Reception Centers for the City are as follows:



Traffic Management

Coordination

The EOC, in coordination with the RCMP, will provide direction on the best routes to be used to facilitate an evacuation. Routes may need to be selected at the time of the incident depending on the type of hazard and degree of risk. This plan will identify the best/most direct routes out of the City, with a focus on high-risk neighbourhoods. Evacuation Routes should be separate from disaster routes intended for use by emergency responders and support vehicles. As Enderby is located along HWY 97A, a main thoroughfare for residents, tourists and commuters, excess traffic could quickly impede the ability to evacuate residents.

The following factors should be considered when selecting evacuation routes:

- Most evacuees utilize personal transportation
- Approximate vehicle capacity thresholds for routes based on
 - An average flow rate of 800-1,200 vehicles/hour/lane on arterial roadways
 - Average flow rate of 1,800 vehicles/hour/highway
- In Enderby the flow rate would be 16,000 vehicles/day heading south and 16,000 vehicles/day heading north including local and visitor vehicles - this would result in approximately 700/hour respectively. According to the 2016 census data, most Enderby commuters most leave their homes between 7-8am.
- The average vehicle occupancy during evacuation is four persons but evidence from real life evacuation show that families will tend to use two vehicles if they have them
- Route markings and identification
- Safety and condition of infrastructure, including:
 - Bridges
 - Roads

Traffic Control

The EOC Director and RCMP liaison will approve traffic controls and management in consultation with MoTI. Measures may be established and controlled at key intersection and at access control points to major evacuation routes if needed.

In some cases, it may be necessary to control traffic on other routes to minimize impact on the evacuation traffic. The following information, may assist in planning;

- Many commuters will return home to gather family and belongings before beginning an evacuation
- Time of day (morning vs. night) and day of the week (weekday or weekend) will dictate where people will be and will affect the number of evacuees that may need assistance and/or transportation
- Evacuation routes may require maintenance and blockage extrication to keep routes flowing; on the highway, this is the responsibility of MoTI, all other roads throughout the City are the responsibility of the municipality.
- Emergency and support vehicles require clearly identified lanes/routes to provide not only access to the evacuation/shelter-in-place zone, but also to exit from the zone
- Assembly points need to be identified that are familiar with the population at risk

- Mass transit routes may require a designated route or lane to facilitate and promote use of this means of evacuation

Strategies

Many traffic management strategies exist to help expedite the evacuation process. While all strategies are intended to improve evacuation traffic flow, any potential impacts should be considered in decision-making.

Implementing traffic management strategies in an evacuation is complex. To ensure that traffic management strategies are coordinated and implemented safely, it is recommended that a Traffic Management Plan (TMP) be developed as an addendum to the Evacuation Route Plan. The TMP would outline the specific traffic control devices that will be used and how they will be implemented. This may include text descriptions, customized traffic control layouts, and customized drawings of temporary traffic control devices (signs, signals, lighting, channelizing devices, paving markings, etc.) and traffic control persons. The TMP will meet standards of MoTI's *Traffic Management Manual for Work on Roadways*.

Some traffic management strategies to consider are:

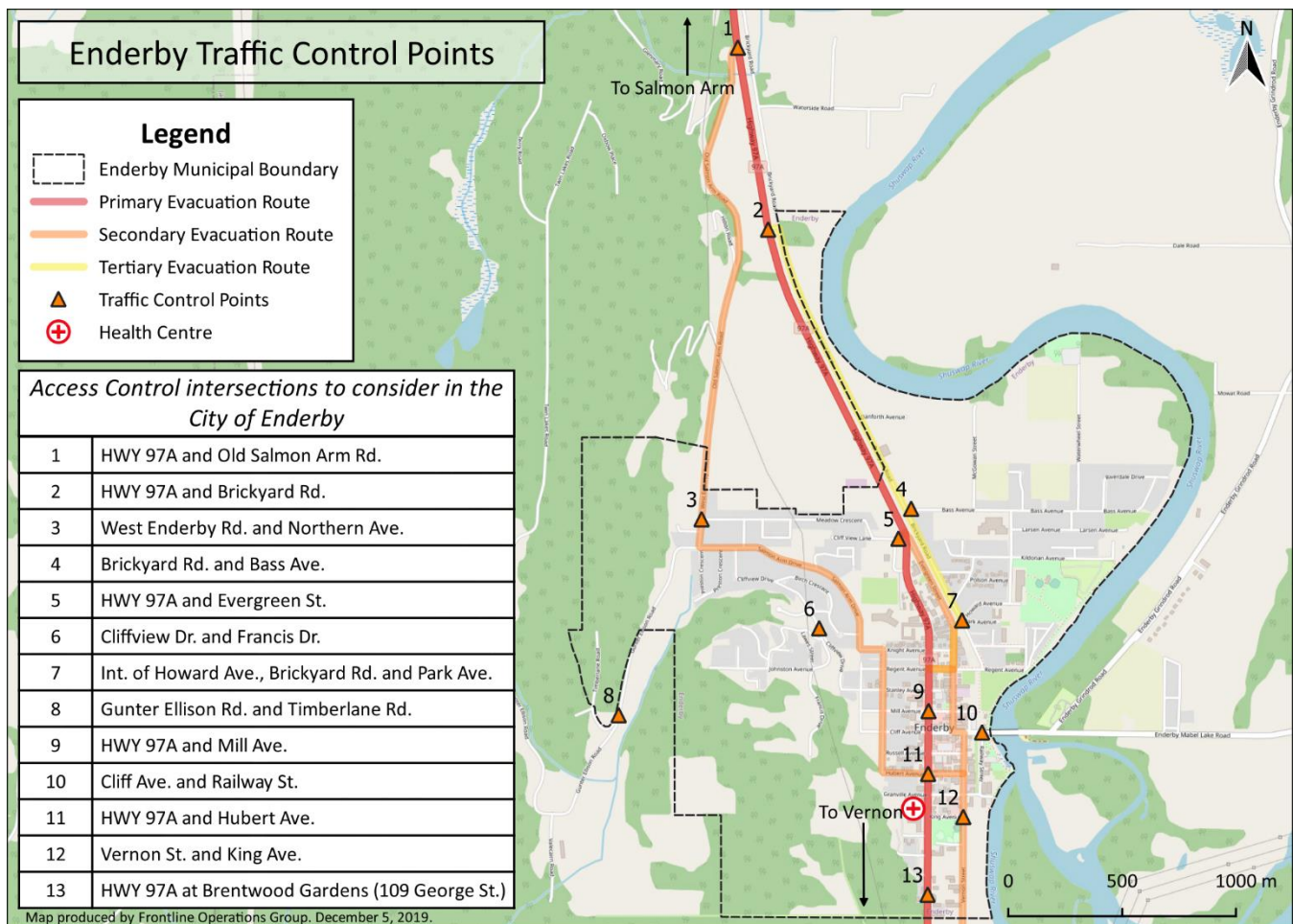
- Detours
- Road Closures and Access Control such as restricting inbound traffic to Emergency Services
- Flashing Signals
- Traffic Cones and Delineators
- Evacuation Lane Reconfiguration
- Signage
 - Dynamic Message Signs
 - Portable Changeable Message Signs
 - Printed Signage
- Modifying Highway Travel Speed
- Signal Timing Modification

Control Points

Traffic Control Points will be established to assist in guiding residents to the appropriate evacuation route, advise on hazards, and designate speed restrictions. The control points may be staffed by emergency personnel or may have signage and/or barriers as applicable.

- Traffic controls should be established at key intersections and at access control points to major evacuation routes as needed
- In some cases, it may be necessary to control traffic on other routes to minimize the impact on the evacuation traffic (eg. Engage MoTI to re-route highway traffic away from Enderby)
- Traffic control points will be designated and managed by the RCMP in coordination with the EOC
- Control Points are outlined on the pre-designated map attached to this plan

- Each traffic control point should have a minimum of one tow truck equipped with fuel to assist stranded motorists or to remove disabled vehicles – on highway routes this should be coordinated by MoTI



Security

As an area is being evacuated, access control measures must be established. Security may be obtained by establishing staffed access control points and barricades at key locations around the perimeter. The objective of access control is to:

- Provide a controlled area from which an emergency evacuation will take place and prevent entry by unauthorized persons
- Protect lives by controlling entry into hazard areas
- Maintain law and order in the hazard area
- Specific criteria for allowing entry into closed areas will be established for each incident

No Access

- Prohibits the public from entering the closed area
- Authorized personnel are the only ones allowed access (i.e. local, provincial work as required)
- Media representatives will be allowed access on a controlled basis

Temporary Access

- Allows persons into closed areas according to access criteria established by the EOC director
- Entry criteria should define the persons who will be allowed and whether motor vehicles are allowed
- A log of all vehicles/people entering the area will be kept at each point and forwarded to the EOC
- Staffing at access control points will be assigned in coordination with the RCMP and may include members of RCMP, SAR, or contracted security professionals

The placement of security control points will be dependent on the area evacuated and the hazard. The goal of the security control points is to prevent entry into a hazardous area and ensure homes are secure from vandalism and looting while they are vacant.

Notification

The notification of an evacuation in a timely and effective manner is one of the most important steps that must be completed during an emergency event. Under the *Local Authority Emergency Management Regulation*, the City of Enderby is required to establish “procedures by which those persons who may be harmed or who may suffer loss are notified of an emergency or impending disaster”.

Timely notification is essential to ensure that residents are aware of the emergency situation and have all the information needed to evacuate safely. For further information and recommendations on communications during evacuations, refer to the EOC Communications Toolkit on the EMBC website.

There are several ways in which the City of Enderby can notify their community of an evacuation including:

- ✓ Broadcast media – local radio and television
- ✓ Sirens
- ✓ Public address systems
- ✓ Door-to-door visits
- ✓ Notice boards
- ✓ Social media platforms (Facebook, Twitter, etc)
- ✓ Amateur radio
- ✓ Website
- ✓ Print media
- ✓ Automatic notification systems

**Send a copy of all evacuation notices to the appropriate EMBC PREOC, who can then share and amplify the information on Emergency Info BC’s website, Twitter, and Facebook feeds.

Broadcast Media, Social Media and Local Government websites

As the City of Enderby does not currently subscribe to an automatic or geo-based notification system, broadcast media, social media and the municipal website will be the first sources of information for residents.

Door-to-door

Door-to-door notification is still one of the best practices for notifying residents of an Evacuation Order. Trials and experience have shown that door knocking, when conducted by the emergency services, is the most effective method of issuing notifications during an emergency or evacuation, it is however, extremely resource intensive and slow.

If door knocking is used as a method of ordering evacuations, then it is recommended that doorknockers:

- ✓ Are uniformed members of a recognized organization
- ✓ Work from a script
- ✓ Provide handouts of written information to residents if possible

Generally, upon notification of the Order and through request, the following agencies will coordinate the door-to-door notification process for the impacted area(s) on behalf of the City.

- ✓ RCMP
- ✓ The Volunteer Fire Department
- ✓ Search and Rescue (SAR)
- ✓ City Staff

If the capacity to provide door-to-door notifications is beyond what the City can provide, a resource request can be submitted to the PREOC to source additional resources.

The steps for facilitating door-to-door notifications include:

- ✓ Request the assistance of the RCMP, Fire Department or SAR, and provide:
 - Evacuation Notification Kit containing:
 - Evacuation clipboard with Evacuation Recording Procedures and Evacuation Logs
 - Colour-coded flagging tape rolls
 - Waterproof pens
 - Copies of the Evacuation Order with a map of the geographic boundaries of the affected area
- ✓ Ensure each notification team has a method of communication (i.e. phone or radio)

House Marking

In British Columbia, a system of flagging tape in four different colours has been adopted which allow police and volunteers to quickly identify the status of any residence in an evacuation area.

The tape is attached to a location that can be viewed during a windshield evaluation to identify residents who:

BLUE	Not home/no answer and must be canvassed again
PINK	Have been notified of an order to evacuate
YELLOW	Have been verified as evacuated
ORANGE	Have been notified and are refusing to evacuate

Special Provisions for At-risk Populations

Residents of the impacted area may have specialized needs for evacuating. The aged, infirm, hospitalized, mentally or physically disabled, residents of nursing homes or retirement homes, daycares, schools, etc. may require specialized transportation and care to evacuate.

The facilities responsible for the care of the special group must have an evacuation plan for their site and a pre-selected destination where the needs of the special groups can be managed. They should be notified at the earliest possible time that an evacuation may occur – even before the Alert stage if possible. At this time, the EOC should engage in discussion with both the local facilities/operators and the provincial agency to determine trigger points for evacuating these facilities.

A portion of the population with special needs, reside in family homes or their own homes and may not have a personal evacuation plan. Special populations under home care need to have a preparedness plan and identify themselves to emergency services personnel to ensure that they can be safely removed from danger. It is recommended that the City develop a voluntary registry to identify residents that require additional assistance to evacuate their home.

Emergency Support Services

The local authority is required under Section 2 (3) (f) of the Local Authority Emergency Management Regulation to: “coordinate the provision of food, clothing, shelter, transportation and medical services to victims of emergencies and disasters, whether that provision is made from within or outside of the local authority”.

Under the direction of their First Nation or Local Authority, ESS teams will provide evacuee services through facilities usually referred to as Reception Centres (RC) or Group Lodging (GL). It is important that the location and hours of operation for Reception Centres are provided on the Evacuation Order and available on information sites throughout the service area. For information on operating an ESS program, refer to the ESS Field Guide located on EMBC’s website.

Emergency Support Services (ESS) will assist in determining types and locations of emergency shelter.

Sheltering is the process of providing for the basic needs of the affected people away from the immediate or potential effects of the hazard. In the City of Enderby, ESS provisions will be provided by the Canadian Red Cross.

ESS will principally be involved in evacuation in the event that evacuees need to be sheltered. An ESS Liaison may however be activated during a shelter-in-place incident in anticipation of a transition to evacuation.

During an evacuation, the role of ESS is to:

- Receive evacuees at Emergency Reception (ER) and Lodging Centres (LC)
- Provide food, water, and psycho-social support to evacuees
- Maintain a record of all persons who report to and ERLC
- Allocate resources to assembly points, depending on the size and scope of the emergency

It is required to track all evacuees, including where they evacuated to, and what ESS services they are receiving for the duration of the evacuation.

The City of Enderby has entered into an agreement with the Canadian Red Cross Society (CRCS) for the provision of ESS.

In the event of a disaster or impending disaster where emergency social services are sought or are reasonably expected to be sought within a short period, the City of Enderby shall immediately contact the CRCS to determine what services will be delivered, the terms and conditions for organizing the services, and the duration of the services. If it is determined that the ESS needs exceed what the CRCS can deliver under the contract, the City may need to seek additional support through PREOC.

The information to be provided by the City to the CRCS at the time of notification includes:

- Confirmation of a task number through Emergency Management BC;
- Nature and location of disaster (or impending disaster);

- Time disaster occurred;
- Number of people affected (if available);
- Current or possible evacuation;
- Emergency services on-scene;
- Any identified threats or hazards to the affected population and/or CRCS personnel;
- Time frame for response;
- Any special instructions, limitations, etc.;
- Location of affected vulnerable persons/populations, such as Long-Term Care facilities, hospitals, etc.; and
- Entity liaison officer names and contact information.

The CRCS Disaster Management representatives are available 24-hours a day, 7-days a week, 365 days a year, and the 24/7 emergency line is 1-888-800-6493.

Should a fire event trigger the need for emergency support services, and fire dispatch is unable to reach a CRCS representative or CRCS is not able to respond to the event in a reasonable time frame, dispatch will contact the City's Emergency Program Coordinator (EPC) directly at which point it will be the EPC's responsibility to coordinate emergency social services.

Type of Emergency Lodging Services

Evacuees may be accommodated in the following ways:

- Private Accommodation: lodging with persons volunteering accommodation in their own home or with family or friends
- Commercial Accommodations: lodging in motels, hotels, hostels or commercial boarding homes
- Group Lodging Facilities: buildings such as schools, churches, community centres, arenas, auditoriums or other public facilities not normally used for living purposes that are adapted as dormitory types accommodation for large numbers of people in an emergency

Minimum Evacuee Care Requirements

The facility used as a shelter must be secure, meaning that it is a safe location that protects the evacuees from further danger. The minimum service delivery requirements for physiological needs of the evacuees are maintaining a normal body temperature, alleviation of thirst, provision of facilities for excretion (toilets), providing the opportunity for rest and providing meals.

Shelter Activities

The activities that may occur in Group Shelter Facilities include:

- Registration of evacuees
- Building security
- Dormitory/rest areas
- Sanitation facilities (washrooms/bathing)
- Food storage, preparation, and service

- Cleaning and maintenance
- Preventative medicine, public health and first aid
- Planning care of evacuees and shelter operations
- Supervision of evacuees
- Scheduling of activities, volunteers and staff
- Coordination and liaison with on-site agencies and Emergency Management Team
- Recreation activities
- Communications and information
- Management of supplies, resources and records

Host Communities

When it is not possible to keep evacuees in the impacted community, it is common to ask neighbouring communities to help by providing shelter and care to the evacuees as needed. It is important for the City to reach out to potential host communities in advance of an evacuation to pre-establish relationships and communication channels. There is no obligation for another community to act as a host community but fostering proactive, strong relationships with other communities will encourage mutual assistance in times of need.

For information on how host communities can be reimbursed for eligible costs associated with hosting another community's evacuees, refer to the [Host Community Response Costs](#) memo located on EMBC's website.

Note: do not send evacuees to another community without first confirming the host community is able, willing, and ready to receive and support your evacuees. Include EMBC in these discussions, wherever possible.

There are a few ways in which an evacuating First Nation or Local Authority can support a host community:

- ✓ Confirm with the host community that they are able to receive evacuees, and provide details on how many evacuees are being sent and any special considerations they should be aware of (e.g. number of vulnerable people, etc.)
- ✓ Provide an approved Extraordinary Evacuee Authorization Form to any evacuee not covered under an Evacuation Order to ensure the host community's ESS team has appropriate validation to support the evacuees
- ✓ When possible, evacuate vulnerable people with a support person (e.g. health care worker or care giver) able to assist with their safety, reducing the burden on the host community
- ✓ Provide a regular information-briefing schedule for the host community and evacuees
- ✓ Maintain consistent, planned contact between the evacuating community's officials and the host community's officials
- ✓ Evacuate local community staff with their residents so they can provide support to the host community in matters concerning their residents
- ✓ Where possible, designate a Community Navigator to act as a liaison for the evacuees and provide a point of contact for the host community emergency support structures. See "Community Navigators" info box above
- ✓ Further support for the host community's ESS team can be provided via a request through EMBC

Pets and Service Animals

Evacuation and care of domestic animals is an increasingly important issue for emergency managers and the public. Providing options for domestic animal care during emergencies is one way to prevent homeowners from remaining in evacuation zones because they refuse to leave pets behind. It is the decision of the local authority emergency program if the community would like to incorporate domestic animal care into emergency planning and response.

In most cases, ESS coordinates pet services (including transportation and shelter) with assistance from local animal shelters and non-profit organizations⁵. The preparation and planning for pets in reception centres (or pet-specific facilities if required) should be done in consultation with local or regional community groups such as the Canadian Disaster Animal Response Team (CDART) and the local BC SPCA chapter.

Service animals are domestic animals trained to perform a specific service to assist their owner and should not be considered as household pets. Individuals with disabilities who are accompanied by qualified service animals must be allowed access to any location where the general public is allowed, and consideration should be made as to how to house individuals and families with service animals.

People, who have pets and require group lodging, will optimally find housing with a friend and family member. Co-located owner-pet shelters will be identified in sheltering communities where available, as an option for people, who evacuate with their pets. Use of such shelters should be encouraged and publicized, if other options are not possible.

Pet shelters may not be immediately adjacent to the human population shelter. In such cases, transportation to and from the shelters may need to be arranged. Separation of pets and owners should be avoided, if possible, but pets should not take the place of a person, if resources are limited. Service animals should not be separated from their owners, and adequate space for people with service animals will need to be provided in group lodging sites. Keeping people and pets together decreases stress for both people and their pets and is less labor-intensive.

⁵ An Operational Guideline for Pet Services is currently under review by the Provincial Emergency Program which will further outline how local governments can plan for animal relocation during community evacuations.

Livestock

Livestock are an important source of livelihood in the region. As there are livestock farming operations within the City of Enderby boundaries, livestock should be considered during evacuation scenarios. The basic responsibility for livestock protection and relocation rests with the individual producers and livestock owners who should have their own emergency plans in place to ensure that their exposure to loss is appropriately reduced. However, the Emergency Program Act (EPA) vests some responsibilities with local government if a State of Local Emergency (SOLE) is declared.

Specifically, a local government may “cause the evacuation of persons and the removal of livestock, animals and personal property from any area of the local government’s jurisdiction that is or may be affected by an emergency or a disaster and make arrangements for the adequate care and protection of those persons, livestock, animals and personal property.”

Relocation of livestock, if required, should be done during the Evacuation Alert stage. Many of the costs for the movement of livestock and the supports provided to livestock producers are eligible response costs through EMBC, when certain conditions are met. No SOLE is required to evacuate livestock during the Alert stage, or for Local Authorities and First Nations to be eligible for reimbursement of these costs.

A representative from the Ministry of Agriculture may be available in the PREOC to help with the coordination needed for livestock relocation. Refer to the [EMBC Policy 2.01 Provincial Support for Livestock Relocation During an Emergency](#) for more information on how to evacuate livestock and what constitutes as eligible costs for reimbursement. Also, refer to the Ministry of Agriculture’s **Livestock Relocation Website** for guidelines and tools.

Contact EMBC prior to relocating livestock to confirm eligible costs for reimbursement and to receive a task number.

The City of Enderby must be prepared to work in conjunction with several stakeholders to ensure the safe and efficient evacuation of livestock, and the following considerations should be made:

- A Ministry of Agriculture representative should be requested to attend the EOC and at the very least advised of the incident and the potential for displaced animals
- CDART needs to be contacted and alerted of potential support requirements; the intent would be for CDART volunteers to work in conjunction with ESS under the Operations Section at both the incident level and at the EOC
- Livestock evacuation is based on the same premise as that for people; if time allows, the three stages, Alert, Order and Rescind will apply
- The livestock Alert level may precede that of people due to the loading and transport times required

Further Considerations for Animals and Livestock Evacuations:

Establishing liaisons with the following organizations could assist with evacuations of animals and livestock:

- Local Humane/Societies for the Prevention of Cruelty to Animals
- Local Veterinarians
- British Columbia Veterinary Medical Association
- Cattleman's Association

As part of the greater evacuation planning process, the following lessons from previous evacuation incidents should be considered:

When a reception centre cannot handle pets:

- the location of a pet reception centre must be close to the human centre, so evacuees can be close to their pets
- Use same registration process for pets as for people
- Some people chose to live in vehicles rather than be separated
- Have an excellent working relationship with local kennels and animal boarding facilities.

When a reception centre has the facilities for evacuated pets and people:

- A detailed registration system for pets is needed
- Electronic records allow for easy retention of information and forwarding if animals are moved into care or another community
- Clear information on owner (i.e.: contact information, location, etc.)
- Access to veterinarian/vet services
- Cleaning schedule and staff
- Restricted access to pet area

Public Information

Once the decision to issue an evacuation alert or order has been made, the City will provide information to the public through official channels, including details about the hazard conditions, areas affected and evacuation activities and actions they should take to ensure safety.

All public notifications and information for advanced notice evacuations will be coordinated through the local government EOC Information Officer and approved by the EOC Director. Pre-scripted messages for use by the EOC Information Officer can be found in the Operational Plan.

Key Considerations

Public information should consider:

- ✓ Multiple sources – timely, accurate, relevant information should be provided through official channels
- ✓ Repetition – clear, concise messaging should be repeated
- ✓ Timeliness – information should be shared with the public as early as possible and regular updates should be provided
- ✓ Clear messaging – messages should be simple, clear, concise, consistent and free from technical jargon
- ✓ Translation and language options – if needed, key messages should be translated for residents and visitors

Message Dissemination

The City will share the information through the following channels:

1. Local Government Website

The main portal for up-to-date information will be the City of Enderby website. An emergency alert will be posted on the home page of the website. Emergency alerts will only be issued for current emergency events, including evacuation alerts and orders. Instructions for people in the evacuation area, regular updates and situation reports will be posted as new information becomes available.

2. Radio and Television Broadcasts

The City of Enderby recognizes that radio and television broadcasters are a critical resource during an emergency. Residents and visitors rely heavily on local broadcaster for emergency information.

Evacuation information and updates will be supplied to local and provincial media sources for broadcast on radio and television. This will be particularly effective if the internet is not available or if people are in their vehicles and need updated information while travelling.

If the municipal website is functioning, radio and television broadcasters will be asked to monitor the local government website for the most current updates and to broadcast the information in a

simple, clear, concise, and consistent format. Information will also be shared with broadcasters through media releases.

In Enderby, information can be broadcast on:

- CBC Radio One, CBYX-FM 92.7 FM
- Beach Radio, CKIZ-FM-1 93.9FM
- Sun FM, CICF-FM-4 98.7 FM
- EZ Rock, CKXR-FM-2 104.3 FM

3. Social Media

In addition to the City website, the City of Enderby EOC will share timely information regarding the evacuation on social media. The posts will include a link to the municipal website for more information.



@OurEnderby (<https://twitter.com/ourenderby?lang=en>)



Our Enderby (<https://www.facebook.com/OurEnderby/>)



#cityofenderby (<https://www.instagram.com/explore/tags/cityofenderby/?hl=en>)



City of Enderby website (<https://www.cityofenderby.com>)

Reciprocal Agreements/Arrangements

If the response effort maximizes the City's available resources, or if they need assistance coordinating with outside agencies, neighbouring communities may provide response support to the City of Enderby at the request of the City.

The RDNO is currently developing an evacuation plan for the neighboring community of Kingfisher (Mabel Lake). In the event that the community is required to evacuate, members of the community and seasonal tourists are likely to be directed to the City of Enderby. Considerations for hosting and/or providing shelter to evacuees have been included into both Evacuation Route Plans.

The City may also reach out to neighbouring communities for support, as needed. It is recommended that the City contact communities that they anticipate requesting assistance from, in order to foster relationships and facilitate engagement.

Administration and Logistics

The information throughout this plan can be used by the public, emergency management team and partner agencies alike for general knowledge about the evacuation process for the City of Enderby. It can also be used for public education campaigns and training purposes. The detailed plan, in the form of checklists, decisions trees, templates, mapping, contact information, etc. can be found in the accompanying Operational Guide.

Resource	URL
BC Emergency Management Systems Guide (BCEMS)	https://www2.gov.bc.ca/gov/content/safety/emergency-preparednessresponse-recovery/emergency-management-bc/bcems
EOC Communication Toolkit	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/localgovernment/local_gov_communications_toolkit.pdf
Declaring a State of Local Emergency in BC	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/policies/declaring_a_state_of_local_emergency_in_bc_jan_2019.pdf
EMBC Emergency Operations Centre Operational Guidelines	https://www2.gov.bc.ca/gov/content/safety/emergency-preparednessresponse-recovery/local-emergency-programs/guidelines
EMBC Regional Office	https://www2.gov.bc.ca/gov/content/safety/emergency-preparednessresponse-recovery/contact-us
Emergency Support Services (formerly Emergency Social Services) Field Guide	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/ess/fieldguide/essfieldguide.pdf
EOC Expenditure Authorization Form (EAF)	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/localgovernment/eoc-forms/eoc_expenditure_authorization_form.pdf
Evacuee Living Assistance Guidelines	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/policies/503_evacuee_living_assistance_annex_-_guidelines_aug_2016.pdf
Financial Assistance for Emergency Response and Recovery Costs	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/localgovernment/financial_assistance_guide.pdf
Host Community Response Costs	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/

	recovery/localgovernment/emergency_management_b c - host community response costs memo.pdf
Introduction to the Incident Command System	https://www2.gov.bc.ca/assets/gov/environment/air-landwater/spills-and-environmental-emergencies/docs/intro-ics.pdf
Local Authority Emergency Management Regulation	http://www.bclaws.ca/civix/document/id/lc/statreg/380_95
Managing Access to Areas Under Evacuation Order	Evacuation Order https://www2.gov.bc.ca/assets/gov/public-safety-and-emergencyservices/emergency-preparedness-responserecovery/managing_access_to_areas_under_evacuation_order.pdf
Ministry of Agriculture Livestock Relocation	https://www2.gov.bc.ca/gov/content/industry/agricultureseafood/business-market-development/emergencypreparedness/livestock-relocation
Provincial Support for Livestock Relocation During an Emergency, EMBC Policy 2.01	https://www2.gov.bc.ca/assets/gov/public-safety-and-emergencyservices/emergency-preparedness-responserecovery/embc/policies/201_provincial_support_for_livestock_relocation_policy_aug_2016.pdf