

Evacuation Route Plan

Regional District of Nanaimo Electoral Area F and Spider Lake / Horne Lake Area H



REGIONAL
DISTRICT
OF NANAIMO



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1. INTRODUCTION

1.1 Purpose

The purpose of this document is to provide detailed planning data for the Regional District of Nanaimo (RDN) emergency program in the event of an evacuation within the RDN Electoral Area F and partial areas of Electoral Area H (Figure 1). This plan specifies agency roles and responsibilities and includes planning considerations for moving at risk populations away from a hazardous environment within the project area.

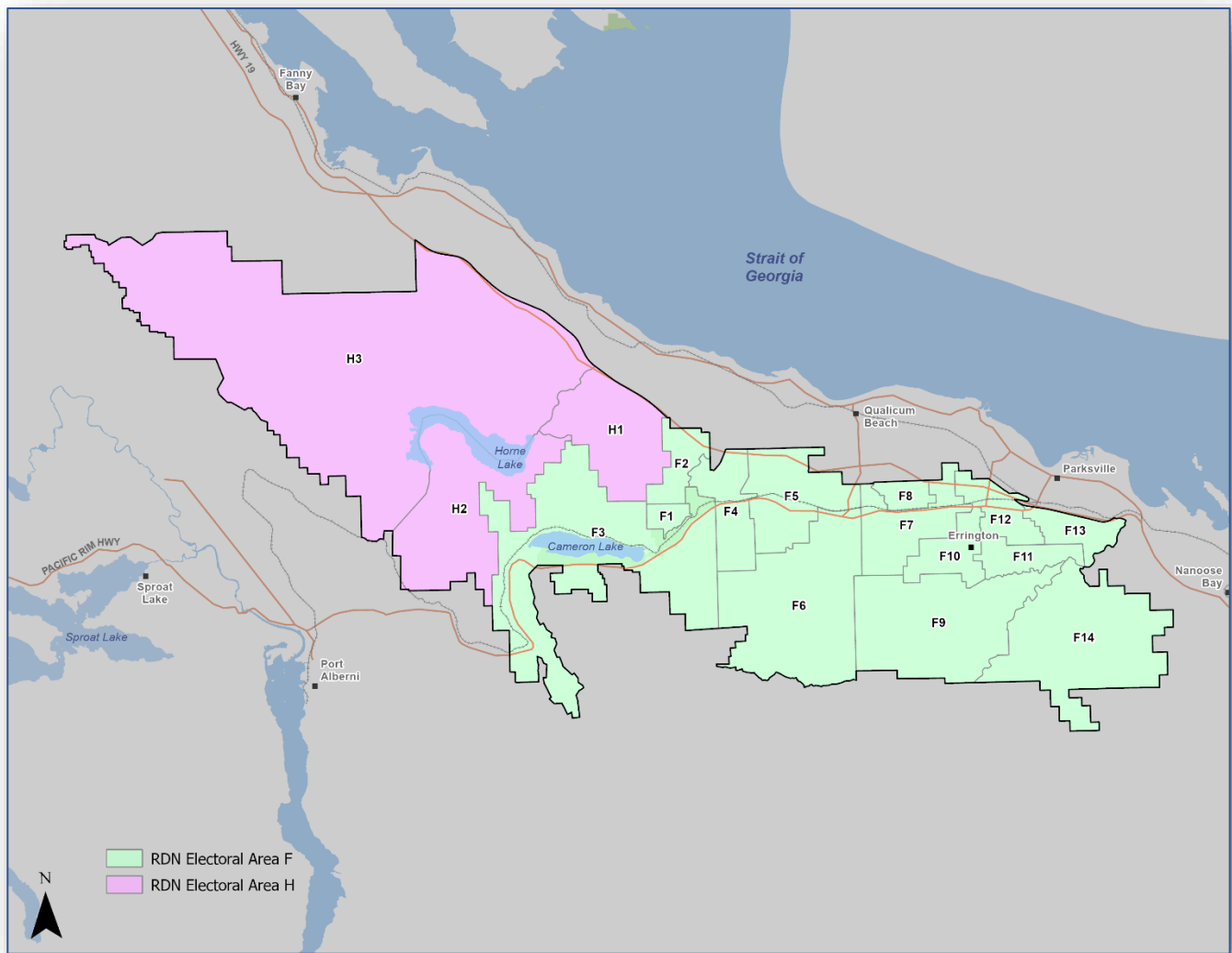


Figure 1 RDN Electoral area F and H Map

1.2 Scope

This document is to be used in conjunction with existing community emergency plans. The RDN is diverse and hosts a growing population within seven distinct electoral areas. An evacuation may impact populations across multiple jurisdictions and require the coordination and services of several agencies and governments. This plan details the resources and routes available to emergency planners and provides hazard-specific considerations which are unique to RDN.

This document does not provide detail regarding the structure of community emergency program(s), Incident Command System (ICS) structures, or Emergency Operations Centre (EOC) operational planning processes. Rather, it provides information to EOC staff such as identifying specific evacuation routes, vehicle staging locations, and other considerations that should be used as part of an evacuation.

1.3 Continuous Improvement

This document has been developed with continuous improvement in mind. A revision tracking table has been included on Page i of this document to track ongoing reviews and updates to critical information within the document. At a minimum, emergency program staff should conduct a review following every activation requiring use of this plan as well as an annual review of this document and its contents. This will ensure that the information remains up to date and to ensure that important information is added, removed, or otherwise modified.

2. COMMUNITY PROFILES

Situated on the eastern mid-center of Vancouver Island the RDN is host to a vast and expansive landscape inclusive of forests, lakes, valleys, beach communities as well as a growing population. Vulnerability is increasing due to climate change, emerging social issues and natural hazards that pose a growing threat to Vancouver Island communities. As such, the need for evacuation education and preparation is of growing importance to the resiliency of communities, including the RDN.

As the neighbourhoods within the RDN are inclusive of farms and rural homes, there are many commuters and families that rely on personal vehicles; also due to the limited public transportation options in both Electoral Area F and H. Equally important to note, is that these neighbourhoods that contain many commuting families also have single point of access roads and while evacuating may lead to higher risk areas [1]. This is discussed further throughout the report.

In 2021 a BC Housing Point-in-Time (PiT) Homeless Count data defines a growth in the unhoused population of Parksville and Qualicum Beach. The PiT identified 87 people experiencing homelessness in 2021 compared to 42 people in 2018[2]. According to the Oceanside Outreach Project there are accounts of unhoused peoples living far from bus routes and walking miles

before reaching food or safety thus, acknowledging that these unhoused people may be in unidentified and remote locations within the project area[2].

2.1 Electoral Area F

The RDN Electoral Area F is inclusive of communities in Coombs, Hilliers, Errington, Whiskey Creek, and Meadowood. It has a total population of 8,216 living in 3,673 private households in 2021[4]. The population has been rising since 2016 by approximately 7%. Along with population growth, the population age has a median of 45.9 which is older than the provincial median of 42.3 and older than the national median of 41.1[5] Approximately 23% of the population was over the age of 65 in 2021; a number which is expected to continually rise.

Within this Electoral Area, 94% of the population only speak English. Of the remaining households, 30 households reported speaking French as the primary language in the home and 55 households reported speaking English plus a secondary language.

2.2 Electoral Area H

The RDN Electoral Area H is one of seven electoral areas within the RDN and hosts the communities Bowser, Qualicum Bay, Horne Lake and Deep Bay. It has a total population of 4,291 with 2,004 living in private households in 2021[6].The median age of the population is 60 which is older than the provincial median of 42.3 and older than the national median of 41.1. Approximately 37% of the population was over the age of 65 in 2021; a number which is expected to rise significantly.

Languages spoken in Electoral Area H are primarily English as approximately 94% of the population speaks English at home. There are 50 official French speakers. The non-official language count is 285 whereby languages spoken are Vietnamese, Cantonese, Russian, German, Dutch etc[6].

2.3 Hazard Identification

The evacuation route plan is all-hazard, meaning that it can be used by EOC staff for planning purposes regardless of the cause of the evacuation. Despite the all-hazard nature of the document, consideration was given to the hazard landscape of the RDN Electoral Areas F and H. This included a review of existing hazard risk and vulnerability assessments, and the subject matter expertise of agencies interviewed during the development of this plan. The table below explores the hazards identified that have the potential to require a full or partial evacuation of the RDN electoral areas F and H. It is based on a collection of hazard risk assessments contained in the RDN HRVA completed in 2019 [7]

Table 1: Primary Hazards for the RDN Electoral Areas F&H

Event	Probable Onset (no notice, limited to advance notice)	Comments
Wildland/Urban Interface Fire	Limited to advance notice	Hazard likely to cause localized evacuation. Within the project area several areas are rated at a Fire Threat Rating of High[8]. Limited egress routes in rural communities may impact evacuation route options.
Earthquake	No notice	Provincial guidance is that residents should be prepared to stay in place following an earthquake and that evacuation is not recommended except for localized movement due to unsafe infrastructure. Major transportation routes including Hwy 19 may have impacts.
Dam Breach Flooding	Limited to advance notice	The Englishman River Water Service owns and operates the Arrowsmith Dam at the south of the Englishman River in Electoral Area F. Failure of this dam could result in a possible hazard event and infrastructure damage. The flooding of roadways and some residential properties may cause hazard impacts to residents.
Riverine Flooding	Limited to advance notice	Hazard likely to cause impacts to Hwy 19 close to the Englishman River and bordering the north of Electoral Area F, as well as communities within the vast watershed.
Hazardous Material Release (HAZMAT)	No notice	Hazard likely to cause localized shelter in place or evacuation. Large volumes of hazardous materials are shipped through the RDN along Hwy 19 and Hwy 4.
Overland Flooding (pluvial flooding)	No notice	Increase in urban development over lower watershed areas has led to impervious surfaces such as roads building, driveways, sidewalks etc. Shifts in the built environment leads to flooding in areas not used to floods; therefore, residents may not be prepared. Equally important is the increase in flooding events due to climate change, higher precipitation, and snow runoff.

3. AUTHORITIES AND LEGISLATION

3.1 Overview

Within the Province of BC, there is various legislation providing authority to key agencies to initiate and / or support with evacuation activities. While these exist at all levels of government (i.e., local, provincial, federal), they aim to work in tandem to ensure that there are clear lines of responsibility and authority in the event of community evacuation.

While Local Authorities are responsible for managing evacuations of their communities, there are multiple levels of government, non-governmental organizations (NGOs), and agencies ready to support through all stages of an evacuation. Annex D provides a synopsis of the various legislation that prescribes authority for initiating and executing evacuation activities.

4. ROLES & RESPONSIBILITIES

The following section briefly outlines the roles and responsibilities of local and regional stakeholders who may contribute to an effective evacuation. The numerous provincial, federal, and large NGOs who may also support evacuation activities are listed in Annex D

4.1 Local / Regional Stakeholders

4.1.1 Local Authority

The local authority is responsible for ordering non-tactical evacuations and managing evacuations within their jurisdictional boundaries. This includes public communications, facilitating the movement of people, operating reception centres / group lodging for evacuees, and coordinating with external stakeholders and neighbouring jurisdictions. Existing emergency management structures within the RDN Electoral Areas F and H should be leveraged when evacuation activities are required.

The RDN Emergency Plan details the roles of the RDN Board regarding States of Local Emergency (SoLE) as well as evacuation orders, alerts and rescinds within the RDN. The RDN Emergency Program is responsible for implementing the emergency plans within the jurisdiction and should be activated for strategic evacuations in the RDN.

When the words *local authority* or *EOC* are used within this plan, it refers to the local authority and associated EOC with responsibility for the impacted population. It is possible that there may be more than one local authority and EOC involved for multi-jurisdictional events. Whenever possible, coordination, frequent communication, and / or a liaison embedded within each other's EOC should be considered by the impacted Local Authorities.

4.1.2 RDN Transportation Services Department

The RDN Transportation Services Department (RDN Transit) can provide critical support during an evacuation. When an evacuation is anticipated, the EOC should coordinate with the department to ensure that RDN Transit fully understands the EOC transit related requirements and can advise the EOC on any constraints RDN Transit may be facing. RDN Transit may be able to provide busses and drivers, support with operational and planning requirements, and provide additional resources for muster locations including signage and portable washroom facilities. Within the project area there are some locations where large vehicles may be too large to travel along the roadways. RDN Transit should be consulted to identify solutions which may include using smaller transit vehicles to shuttle evacuees to a muster location where they can transfer to a larger vehicle.

4.1.3 Fire Departments

The project area is protected by several volunteer fire departments with comprehensive mutual aid and automatic mutual aid agreements.

- Bow-Horn Bay Volunteer Fire Department
- Coombs-Hilliers Volunteer Fire Department
- Dashwood Volunteer Fire Department
- Errington Volunteer Fire Department
- Nanoose Volunteer Fire Department

Fire Departments will have a key role to play in supporting evacuations.

- Act as lead agency if a fire occurs within their Fire Protected Area and for other emergency response incidents within their jurisdictional responsibilities;
- Direct and assist in the evacuation of people;
- Provide fire suppression and fire control;
- Provide specialized services as trained in cooperation with other departments and agencies; and
- Implement mutual aid agreements as necessary.

4.1.4 Royal Canadian Mounted Police

The Royal Canadian Mounted Police (RCMP) polices the RDN and will have a key role to play in supporting evacuations. The responsibilities include:

- Lead agency for major motor vehicle accidents, aircraft incidents and terrorism;
- Direct and assist in the evacuation of people for life safety purposes;
- Enforce emergency restrictions and regulations;
- Control and, if necessary, disperse crowds within the affected area;
- Ensure the protection of lives, public and private property; and
- Coordinate use of auxiliary and / or special police (Citizens on Patrol (COPS)).

4.1.5 Ground Search and Rescue

Upon request by the RCMP or Emergency Management and Climate Readiness (EMCR) through the EOC, Ground Search and Rescue (GSAR) will provide support for community notifications of evacuation alerts and orders and other tasks as necessary.

5. EVACUATION MANAGEMENT

5.1 Shelter-in-Place

When residents or the community exposed to a hazard, sheltering-in-place should be considered the preferred course of action and local authorities should consult with technical advisors to develop an informed decision regarding whether this option is safe for the community. If it is determined to be unsafe, then appropriate evacuation Alerts and / or Orders should be initiated.

Implementing shelter-in-place protocols can reduce costs, reduce the impacts of evacuations on the public, and may improve response effectiveness, reduce negative physio-social impacts of evacuations and expedite community recovery.

Sheltering-in-place recommendations are generally issued in response to hazards such as chemical, biological, or radiological contaminants, police incidents or disturbances, or severe weather events. These protective measures are dependent upon residents being able to stay in the location they are in at the time of the threat, provided that the location offers a reasonable level of protection from the threat.

The BC Evacuation Operational Guide provides the following guidance on what shelter in place entails Figure 2. This should be communicated to residents as part of a broader public education campaign specific to the expected rollout of evacuations.



Shelter-in-place:	
IS: 	IS NOT: 
<ul style="list-style-type: none"> directing individuals to: stay within the building they are currently in or to immediately find refuge in the closest safe building; select a small, interior room with few or no windows; and take refuge there until the threat has passed an official recommended protective measure from the authority having jurisdiction, when determined to be the safest course of action 	<ul style="list-style-type: none"> directing individuals to a particular shelter to be confused with a community deciding not to evacuate after receiving a recommendation to evacuate from the hazard Incident Commander to be confused with an individual deciding not to evacuate after an Evacuation Order has been issued and direction has been given to leave the area

Figure 2 BC Evacuation Operational Guide Shelter in Place Guidance

5.2 Shelter-in-Community

There may be times when some residents may temporarily require additional support to safely endure the event, or the isolation caused by an event. This is referred to as shelter-in-community. Examples of supports may include warming, cooling, or cleaner air centres. Generally, shelter-in-community decisions should be made following consultation with Health Emergency Management British Columbia (HEMBC). Consultation with EMCR prior to shelter-in-community actions is also recommended to clarify reimbursement options.

Cost recovery is sometimes possible during these types of events. Open dialogue and Expense Authorization Forms with EMCR should be established early in any incident requiring this type of evacuation to ensure that services being provided to residents meet criteria for reimbursement by the province.

5.3 Types of Evacuation

There are two types of evacuations: tactical and strategic.

A **tactical** evacuation is performed when there is a direct threat to the life safety of responders or the public. Evacuation documentation is not necessary prior to a tactical evacuation. It is imperative that life safety takes precedence and is performed at the discretion of the Incident Commander (IC). During a tactical evacuation, it is necessary to inform evacuees why they are being evacuated, where to go, and how they can receive further information and updates.

While a SoLE is **not** required for a tactical evacuation, it is recommended to contact EMCR through the Emergency Coordination Centre (ECC) when it is safe to do so. If residents will be displaced for a prolonged period, a formal Evacuation Order and SoLE should be issued as soon as it is operationally appropriate.

Strategic evacuations are evacuations that safely allow time for formal documentation to be issued. It is recommended that strategic evacuations have staged documentation, including an Evacuation Alert, Evacuation Order, and Evacuation Rescind as noted in Section 5.4.

While the local authority has the legal authority to issue Evacuation Alerts, Orders, and Rescinds for areas within their jurisdiction, it is recommended it does so on the advice of hazard specific Subject Matter Experts (SME). Generally, the IC for the emergency event will communicate directly with the local authority regarding the impact of the event on the jurisdiction. The IC has site level awareness and expertise, so it is recommended that the local authority follows the recommendations of the IC; however, the local authority can choose to also consider additional expert advice from other SMEs including Traditional Indigenous Knowledge Keepers who may have relevant information for the local authority to consider.

5.4 Alerts, Orders, and Rescinds

There are three different types of evacuation documentation. See Annex C for an Evacuation Management flow chart regarding the use of these documents. See Annex I. Evacuation Order Templates for templates for each type of evacuation documentation.

Evacuation Alerts: Advises the affected population of a current or potential threat that may lead to an Evacuation Order. The Evacuation Alert should have clearly defined boundaries and include instruction to residents.

A SoLE is not required for an Evacuation Alert.

Evacuation Orders: Advises the public that an order has been issued and that the affected population must leave the specified area immediately. The Evacuation Order should have the same information as the Evacuation Alert and must clearly state that the Evacuation Order is mandatory. The Evacuation Order should also include information about designated evacuation routes, closed routes, and the location of Emergency Support Services (ESS) Reception Centres.

****Reminder – A SoLE must precede an Evacuation Order****

Evacuation Rescinds: Advises the public that the Evacuation Order is no longer in effect. The Evacuation Order can be formally rescinded, or it can be downgraded to an Evacuation Alert. If only a portion of the impacted area can be rescinded, the local authority has two options:

1. An Evacuation Rescind can be issued for the entire area, with a new Evacuation Alert or Evacuation Order issued immediately for the new area; or
2. An amendment can be issued to the existing Evacuation Order clearly defining the changes.

5.5 Notification

Issuing Evacuation Alerts, Orders, and Rescinds should adhere to the following procedures:

5.5.1 Issuing an Evacuation Alert:

1. The EOC in consultation with the IC and available hazard-specific SMEs including Traditional Indigenous Knowledge Keepers and technical specialists, decides that an Evacuation Alert is required.
2. Notify the policy group and first responder agencies.
3. If the hazard may impact other jurisdictions within the RDN coordinate with other EOCs.
4. If the hazard may impact the urban Indigenous population, consider consultation with First Nations Health Authority (FNHA) and Indigenous Services Canada (ISC).
5. Request assistance to perform Evacuation Alert notifications (e.g., from first responders or other identified groups such as Ground Search & Rescue (GSAR)). Local authorities and the EOC Activation Authorities may determine the appropriate level of activation and an evacuation alert/order.
6. Based on advice, map the geographic boundaries of the Alert. Identify the Alert area using civic addresses, street names, or any combination that works.
7. Complete an Evacuation Alert Template and include:
 - The issuing authority (e.g., RDN);
 - The reason for the Alert with a description of the hazard;
 - The areas under Alert with as much detail as possible, including a map of the Alert area;
 - A general listing of important personal supplies that should be prepared for the potential evacuation (e.g., identification, medication, insurance papers, warm clothing, specialty medical equipment, eyeglasses, hearing aids, prostheses, work clothes); and
 - Where to get additional information.
8. Notify the impacted area of the Alert (e.g., through social and traditional media, door-to-door, Emergency Notification System, etc.)
9. Email a copy of the Alert to the EMCR Provincial Regional Emergency Operations Centre (PREOC).
10. Once the Alert is in place, consider providing information regarding vulnerable populations and recommending livestock relocation.

5.5.2 Issuing an Evacuation Order:

1. The EOC in consultation with the IC and available hazard-specific SMEs including Traditional Indigenous Knowledge Keepers and technical specialist, makes a determination that an Evacuation Order is required.
2. Notify the policy group and first responder agencies.
3. If the hazard may impact other jurisdictions within the RDN coordinate with other EOCs.
4. If the hazard may impact the urban Indigenous population, consider consultation with FNHA and ISC.

5. Request assistance to perform Evacuation notifications (e.g., from first responders or other identified groups such as GSAR).
6. Based on advice, map the geographic boundaries of the Order. Identify the Order area using civic addresses, street names, or any combination that works.
7. Declare a SoLE, publish online, and notify the public.
8. Complete an Evacuation Order Template and include:
 - The issuing authority (e.g., RDN);
 - The reason for the Order with a description of the hazard;
 - The areas under Order with as much detail as possible, including a map of the Order area;
 - Designated evacuation routes and identification of closed routes;
 - Location of Reception Centers, including hours of operation;
 - If using virtual Reception Centres or online registration, how to register;
 - A general listing of important personal supplies that should be prepared for the potential evacuation (e.g., identification, medication, insurance papers, warm clothing, specialty medical equipment, eyeglasses, hearing aids, prostheses, work clothes); and
 - Where to get additional information.
9. Notify the impacted area of the Order (e.g., through social and traditional media, door-to-door, public notification systems, etc.)
10. Email a copy of the SoLE and the Order to the EMCR PREOC.
11. Consider how to best support those individuals who cannot self-evacuate.
12. Consider how to best support evacuees using ESS.

5.5.3 Issuing an Evacuation Rescind:

1. The EOC in consultation with the IC and available hazard-specific SMEs including Traditional Indigenous Knowledge Keepers and technical specialist, makes a determination that an Evacuation Rescind is required.
2. Notify the policy group and first responder agencies.
3. If the hazard impacted other jurisdictions within the RDN coordinate with other EOCs.
4. If the hazard impacted the urban Indigenous population, consider consultation with FNHA.
5. Coordinate early re-entry for community support agencies (e.g., health agencies, school district, critical infrastructure agencies, etc.) prior to Rescind in preparation for returning evacuees.
6. Consider allowing residents who may have lost homes or property early access into the evacuated area.
7. Complete an Evacuation Rescind template.
8. Notify evacuated residents of Rescind (e.g., through social and traditional media, automatic notification systems, announcements at ESS Reception Centres and Group Lodging facilities).
9. Email copy of the Rescind to the EMCR PREOC.

Partial Evacuation Order Rescind – If only a portion of the Evacuation Order can be rescinded, an Evacuation Rescind can be issued for the entire Evacuation Order area, with a new Evacuation Order and / or Alert issued immediately afterwards identifying new geographical boundaries. An alternative is to issue an amendment to the existing Evacuation Order, clearly identifying the changes. Whichever option is preferred, it is important to issue clear and consistent maps that undoubtedly show what properties remain on Alert or Order.

5.6 Phasing

Evacuation phasing promotes a controlled evacuation that does not overwhelm first responders, traffic control personnel, or the roadway traffic flow capabilities. When possible, this is the preferred method of evacuation. Evacuation phasing may include:

- Evacuating those closest to the incident first and then increasing the buffer zone as traffic or time allows;
- Evacuating areas closest to main high flow roadways first, improving the flow of neighbouring areas that will need to travel through to reach the main roadways;
- Evacuating areas with the densest population first as they will take longer to evacuate;
- Allowing vulnerable populations more time to move to pick-up areas or make alternate arrangements to evacuate the area as they may require more time; and
- Utilizing control traffic management strategies to allow for maximum flow on main roads first, then switching to enable priority to other areas.

Evacuation Phasing allows for different zones to be sent to different locations, therefore reducing the load on one specific egress. Tactical evacuations should be developed based on the nature of the situation and are generally the responsibility of the IC.

5.7 Destination

An Evacuation Order should clearly identify to the public that they must leave the area. It is best practice to include specific intended destinations and routes within the Order. Depending upon the type of evacuation, the EOC may include different types of destinations including:

- **Designated Reception Centres** – will be leveraged for incidents resulting in the evacuation of residents. The usage of existing Reception Centres will be determined based on the nature, location, and the scope of the incident. Although many residents will not require supports or lodging, all evacuees should be encouraged to register in person or virtually at a Reception Centre for tracking; and
- **Muster Points** – will be leveraged for incidents where the evacuation of residents requires special transportation (e.g., transportation via bus or escort through private industrial roads). Muster points may be located within the evacuation zone or outside of the zone depending on the availability of infrastructure such as large parking lots and access points. If a muster

point is within an evacuation zone and an incident requires immediate evacuation away from the area, the EOC should use discretion to direct residents elsewhere.

5.8 Vulnerable Populations

There are many people who cannot evacuate without support. For simplicity, this Plan refers to anyone who cannot self evacuate as a member of the *vulnerable population*.

For planning purposes, it should be understood that this can be due to a lack of transportation, lack of financial means to self-evacuate, lack of physical ability to self-evacuate, lack of cognitive ability to understand the need to self-evacuate, or other factors impacting a person's ability to self-evacuate.

Pre-planning can assist the RDN to better understand where barriers to self-evacuation exist in the community. Ongoing communication during each phase of an evacuation or shelter-in-place should be structured to ensure that the local authority is able to identify people who need supplemental resources to support their safe evacuation. Organizations like the Community Action Initiative and the Oceanside Outreach Project etc. have built relationships with vulnerable communities that can be leveraged to ensure information is disseminated by trusted agents.

Strategies include:

- Instructing the public to contact the local authority directly if they need resources;
- Liaising with advocacy groups to help identify and communicate with vulnerable populations; and
- Targeted emergency preparedness education programs.

The public should be encouraged to assist by helping neighbours, friends, or family evacuate.

The population of the RDN is aging. This is an important consideration when the RDN plans resources for evacuations. For most seniors, the best option is to stay with family or friends in the closest safe area to their home. A local hotel may be a good alternative if family or friends are not available.

5.8.1 Community organizations

5.8.1.1 School District 69

The School District (SD) is responsible for the management of any evacuation affecting schools. Nonetheless, it is helpful for the RDN Electoral Areas F and H to inform the School District as soon as operationally possible that an evacuation is expected. (Table 2).

Table 2: Schools by Zone

Facility	Address	Zone
Errington Elementary School	1390 Fairdowne Rd Errington, BC, V0R 1V0	F11

5.9 Security in Evacuation Zones

It is the local authority’s responsibility to control access to evacuated areas, except for tactical access. Tactical access pertains to the access of goods or personnel required for response efforts and is the responsibility of the IC. While tactical access doesn’t require the same process for access into an evacuated area, it should ensure area security and simplified access control point.

The RCMP can support the EOC in controlling access for life safety purposes. If the RCMP does not have the resources to maintain security of evacuation areas, the EOC should coordinate the necessary resources to provide adequate security of the evacuation areas. This includes determining the processes to grant access to the evacuation zone when it is safe to do so.

The EOC should ensure clear communication with the public regarding how and where they can apply to be granted temporary access to evacuation zones. Clear communication and a simple, well-defined process will reduce the emotional toll on the public, responding staff and volunteers.

When there is an evacuation across multiple jurisdictions within the RDN, a consistent approach to all impacted areas should be considered although the access control remains the responsibility of each local authority.

6. TRANSPORTATION MANAGEMENT

6.1 Overview

The goal in evacuating is to move the affected population out of the anticipated area at risk as safely and efficiently as possible. The following analysis considers several transportation solutions available in the RDN Electoral Areas F and H. Although this plan describes road and air independently, these should be considered by the EOC as multimodal tools that may work in conjunction with one another to support the evacuation needs.

This section will discuss each mode independently and provides guidance to the EOC on how each mode of transportation can be leveraged during an evacuation. Annex C provides a flowchart with operational decision-making guidance to support evacuation planning within the EOC. It includes details as to who is responsible for decisions at various stages of the operational planning process and is a critical tool in the decision-making process and has been informed by the Evacuation Operational Guide for First Nations and Local Authorities in British Columbia.

6.2 Analysis

Traffic Management during emergencies is critical to the success of an evacuation. Local strategies for road traffic management are identified in the RDN Electoral Areas F and H Evacuation Zones section of this document, where primary roads for each zone are identified along with detailed information regarding estimated population, approximate evacuation times, and key considerations related to evacuations.

The capacity to move people from one area to another is locally influenced by bottlenecks and roadway constraints, as well as chance constraints caused by dynamic parameters that may exist during an evacuation. The impact of these uncertainties can be minimized by:

- limiting the bottlenecks;
- anticipating the need for traffic control at merge points;
- identifying appropriate destinations for evacuees (i.e., vehicle staging locations); and
- controlling the evacuation through phasing where possible to minimize congestion.

During a strategic evacuation, the EOC can limit the impacts on an evacuation by addressing these four considerations. A summary of each zone is provided in Annex F.

In the event of a strategic evacuation, communication with critical stakeholders should be initiated as early as possible. Key stakeholders who may be able to assist in traffic management are:

- The City of Parksville;
- The Town of Qualicum Beach;
- EMCR;

- Ministry of Transportation and Infrastructure (MoTI); and
- The local contractor for highways under contract to MoTI, Mainroad Group.

During a limited or no notice evacuation, traffic congestion will saturate transportation route capacity and can be minimized by prioritizing traffic control at critical merge points such as access points along Hwy 4A, Hwy 4, Horne Lake Road, or Corcan Road.

6.3 Zones

Evacuation zones break up the RDN Electoral Areas F and H into manageable geographic areas. The zones are based on the following criteria:

- To ensure areas have clearly defined boundaries for public awareness purposes;
- To create strategically phased areas for evacuations either out of the RDN Electoral Areas F and H or to another pre-defined zone;
- To distribute the potentially affected population across zones; and
- To ensure areas have safe access to primary road.

The RDN Evacuation Zones provide details regarding each of the zones. The estimated zone evacuation time is the projected time from the first vehicle leaving the zone until the last vehicle successfully leaves the zone using personal vehicles or transit buses. It assumes that there is appropriate traffic control exiting the zone when a population must access a primary road such as Highway 4 or 4A. It does not account for the time necessary to notify residents or for residents to self mobilize into their vehicles.

6.4 Roads

6.4.1 General

When an Evacuation Order is published, it should clearly indicate the evacuation route so that the public understands where they are expected to go, and what primary and secondary roadways they are expected to use. This will support the additional road management strategies implemented throughout the evacuation. The order should not assume that the population can self-evacuate and should include specific information for the population who cannot self-evacuate.

The goal of moving the affected population out of the anticipated area at risk as safely and efficiently as possible can be achieved by using as few routes as possible to simplify evacuation management for responding agencies.

6.4.2 Industrial Roads

There are numerous industrial road access points within the RDN Electoral Areas F and H. When required, the industrial roads or Forest Service Roads may be utilized for life safety purposes. Although the Fire Departments generally have emergency key access to these sometimes gated

roads, the EOC should contact Mosaic Forest Management or the Ministry of Forests, Lands, Natural Resource Operations and Rural Development prior to using the industrial roads for large evacuations.

Mosaic Forest Management utilizes gates to manage access to industrial lands. The EOC should assume gates may be locked at any time and should ensure that appropriate personnel can access the gates to confirm not only that the initial gate for egress is open, but that all gates along the egress route are open and accessible during an evacuation.

Due to the complex nature of these roads, it is recommended that if utilized, the EOC inform vehicle traffic to congregate at a defined muster point if safe to do so while either signage or a pilot car for convoy is implemented along the industrial road route.

The EOC should anticipate that some people may need to leave their personal vehicles at the muster site and rideshare or use provided transportation along the industrial roads.

6.4.3 Muster Points

For the purposes of this guide, muster points are defined as locations where residents will be directed for either vehicle staging, or locations where residents will be sent with their vehicles to park and access bus transportation out of the area. The intended use of these sites should determine the specific location chosen by the local authority as some sites provide ample space for parking vehicles, and some sites only provide sufficient space for organizing vehicles prior to departure.

Within RDN Electoral Areas F and H there are several access points to industrial roads. If the EOC determines egress through an industrial road is appropriate, the EOC should consider if there is a muster site appropriate for the evacuees, based upon their evacuation route. Muster sites may include forest service roads, industrial locations such as gravel pits etc., or other locations as determined by the EOC in consultation with local SMEs. The available muster sites near these locations are not controlled by the local authority, therefore must be assessed as needed as their utilization may determine if they are appropriate as a muster site.

Several RDN neighbourhoods have single point of access roads and may be at higher risk due to a lack of secondary routes for emergency access. This is a concern for Electoral Area F and H communities with only one paved public access road including Meadowood Little Qualicum Estates, Whiskey Creek, Dobson/Englishman River Roads, Englishman River Estates (Middlegate Rd), and Chatsworth Road (Whiskey Creek).

Table 3: Muster Points

Area	Facility Name	Details	Address
North of Horne Lake Area H	Horne Lake Regional Park Parking lot / Horne Lake Cave Parking Lot	<p>In the event where Highway 19 is inaccessible neighbourhoods in the north of Horne Lake should muster at the Horne Lake Regional Park parking lot or at the Horne Lake Cave parking lot as they are alternate options less than 1.5km apart.</p> <p>The Horne Lake Regional Park is located at the north of Horne Lake and is host to a large parking lot that also connects to service roads heading to north Vancouver Island or south to Port Alberni such as the Cook Creek Forest Service Road.</p> <p>The Horne Lake Cave Parking lot has capacity for many vehicles and connects to service/industrial roads heading to the northern parts of Vancouver Island by Cook Creek Forest Service Road. This muster site is a great location to meet and organize before traveling through less travelled roads.</p> <p>More details in Annex H 1 and H 1.1</p>	3890, Horne Lake Caves Rd, Qualicum Beach, BC / Horne Lake Caves Provincial Park, Qualicum Beach, BC
Englishman River Regional Park Electoral Area F	South Englishman River Regional Park Gravel Pit	<p>In the event where Highway 19 is inaccessible the population living close to Englishman River Regional Park may muster at the south of the park close to the Englishman River Falls Provincial Park. This unnamed gravel parking lot has space for many vehicles and is a central location leading to industrial roads which may serve as an evacuation route to safety.</p> <p>More details in Annex H 2</p>	Errington, BC V0R 1V0 49°14'37.3"N 124°21'31.4"W
Meadowood Electoral Area F	Meadowood Community Park	<p>The Meadowood Community Park offers a large space for vehicle staging and parking. More Details in Annex H 3</p>	1810 Galvin Pl, Qualicum Beach, BC V9K 2V3

The EOC should ensure that appropriate resources are made available at these muster locations during evacuation activities including, but not limited to:

- Clear signage / identification of entrances and traffic flow at each muster site;
- Appropriate health and safety resources (as appropriate) e.g., emergency lighting, sanitation facilities, medical staff etc.;
- Clear identification of bus loading zones; and
- Registration and information services.

6.4.4 Public Transportation / Buses

The primary focus for all actions should be the safe movement of the most amount of people in the least amount of time. This includes considerations for people without access to personal vehicles who must be considered by the EOC. Direction should be provided in any emergency messaging released by the local authority and identify how residents can identify that they do not have transportation from their homes.

Although many residents within the RDN have their own vehicles, there is a portion of the population that may not have access to one at the time of evacuation. People without access to personal vehicles can be supported by transit, utilizing designated pick-up and muster points.

Communication during Evacuation Alerts and Evacuation Orders should include specific information regarding community evacuation transit muster sites and instructions for the population on how to self mobilize to the muster site if they are capable.

7. PUBLIC COMMUNICATIONS

7.1 Overview

The main communication objectives in any emergency that impacts the RDN include:

- Develop and distribute messaging as early and as consistently as possible through pre-existing methods of communication;
- Consistent messaging across all platforms;
- Monitoring of incoming messages and responding as required;
- Opening communication channels between stakeholders and the public;
- Supporting internal communication between site level and decision-makers; and
- Providing messaging in the primary languages spoken in the region.

In evacuations and emergencies, many stakeholders will require information. Communication must be clear, consistent, and easy to understand. Ensure that the language is clear and use maps and visual representation when possible. The goal is to communicate using short sentences frequently. Key messages should be pre-crafted to allow for fast, efficient communication from the EOC.

This section is not a comprehensive communications plan in and of itself; however, it provides key considerations to the EOC for planning and disseminating emergency communications.

7.2 Education & Awareness

Education is paramount to ensure that the public will know what to do when an evacuation is required.

A trusted, clear and consistent message delivered in a timely manner will support public confidence, reduce the psychosocial impacts of an evacuation, and aid the local authority in managing a disruptive event. Establishing trust-based relationships with the community is a key responsibility of the local authority in the preparedness and planning phase and includes conducting outreach with residents through various means (i.e., town hall sessions, presentations to community groups, etc.). Community engagement prior to incidents will allow the local authority to identify how information will flow during emergency evacuations and will provide information to residents on how they can expect to be notified.

The public should be encouraged to sign up for and monitor all information sources that are used by the local authority to communicate instructions prior to an emergency. The following list identifies various means that can be leveraged for distributing emergency / evacuation-related information:

- The Website;
- TV, radio and print news;
- Social media platforms (Twitter, Facebook,)
- Voyent Alert! Mass Notification System;
- Written information on community message boards;
- Information packages (i.e., pamphlets); and
- Word of mouth within the community.

For the purposes of this guide, there are specific information requirements that the public will require to adequately prepare for evacuating. This includes, but is not limited to identifying:

- How evacuation information will be disseminated, and where it will come from (i.e., the local authority);
- How residents can prepare themselves, their family, their pets and / or livestock and their property for an evacuation;
- How to prepare a "grab and go" bag; and
- Other general preparedness as relevant.

7.3 Dissemination

Dissemination of information is critical during evacuations. The local authority should make early and ongoing information available for residents in areas under either Evacuation Alerts, Orders or Rescinds.

When activated, an ESS Reception Centre can be an effective venue for disseminating information. Pamphlets, handouts, and flyers can be used to provide general guidance and information to evacuees. Local community groups should also be engaged in the distribution process where possible and copies of all critical information (i.e., Evacuation Alerts, Orders, and Rescinds) should be shared as broadly as possible.

The local authority should conduct ongoing monitoring of local Social Media Groups, local community groups, and other forums where residents may post or reach out for situational information. Misinformation and concerns from the public should be addressed promptly through corrective messaging and directing residents to official sources of information. Misinformation and/or rumors may be identified online, or in-person by responders supporting with activities on the ground.

7.4 Motorist Information

MoTI can control highway digital message signs (DMS) and change messages as needed. Requests are achieved by communication through the EMCR ECC. Additionally, the EOC may consider using portable digital highway signs to provide motorist information when required. Both Drive BC and EmergencyInfoBC are trusted sources of information that can be shared with evacuating public for reliable road conditions and updates. In situations where Highway 19, 4, or 4A is impacted and / or specific travel instructions are required for motorists, the EOC should engage with the MoTI to ensure appropriate messaging is provided to motorists.

7.5 Additional Considerations

Preplanned communication templates reduce the work of communication during an event. Consideration should be given to developing and maintaining an inventory of templates for communication. The list below identifies generic messaging priorities during each phase of an evacuation:

- **Prior:** general risk awareness and preparedness education, personal and family emergency plan education (i.e., 72 hour kit and / or “go-bags”);
- **Imminent Evacuation:** specific reminders to prepare necessary items required for evacuations such as medication, identification, pet food and supplies, reminder to keep vehicles fully fueled; as well as the location of transit muster points or transit instructions, and suggestions for vulnerable populations;
- **During Movement:** routing information;
- **Safely Evacuated:** updates on affected areas such as flooding levels, damages, temporary access process, and available psychosocial supports; and
- **Returning:** re-entry process, re-entry checklists, insurance resources, and how to access other relevant resources.

8. OTHER CONSIDERATIONS

8.1 Emergency Support Services

The ESS component of an evacuation can be a large undertaking and may have reverberating impacts across the RDN and neighbouring jurisdictions. Most evacuation scenarios will require ESS to various degrees; however, some evacuation situations will require a large, coordinated ESS response.

The primary objective of ESS staff will be to process and ensure that all evacuees are provided with options for reception and lodging. Existing ESS plans should be used to support ESS activities. While it is understood that many residents may have family or friends that they will chose to stay with, the EOC should work to ensure that evacuees register at the reception centre for appropriate record keeping and resident counts.

ESS activities should be planned in close coordination with neighbouring jurisdictions when necessary. Ongoing coordination will ensure any potential overlap of resource needs are identified and resolved accordingly.

Some residents may have unique needs which are either difficult to fulfill or may limit their ability to evacuate. Island Health and the Ministry of Social Development should be consulted to identify and coordinate complex health supports which may be required for some evacuees.

When ESS is provided to displaced community members, cultural considerations may be necessary, including if community members will need to be housed as large family units or if specific supports are required for Elders. Whenever possible, ESS should leverage the knowledge of the local authority regarding the ESS needs of the displaced community.

Careful coordination of communications between all impacted jurisdictions, including urban Indigenous populations will limit confusion for evacuees and should be considered whenever possible.

8.3 Pets

The EOC should ensure that any organization engaged to provide mass transportation via bus or other means during evacuations allows evacuees to travel with their pets provided their movement is adequately controlled. When communicating with the public regarding the use of transit for evacuations, evacuees should be directed to ensure they can safely secure their animals using pet carriers or leashes when possible.

8.3.1 BC Society for the Prevention of Cruelty to Animals (SPCA)

The SPCA can provide services when available including pet care supports, leashes, pet food, carriers, and other pet related services if required. The EOC should coordinate directly with the SPCA to understand the availability of support and resources at the time of an evacuation.

8.4 Livestock and Hobby Farms

It is the direction of the Ministry of Agriculture and Lands that all agricultural producers, livestock or otherwise, be prepared for disasters and have plans in place. Ministry of Agriculture and Lands has resources available on their provincial website to assist in planning for these events. Agricultural producers are not required to wait for a SoLE to evacuate livestock and questions regarding livestock relocation and reimbursement can be directed to Agri-services BC or a representative from the Ministry of Agriculture. The RDN has existing tools pertaining to Livestock evacuations and the EOC should refer to the available plans and documentation for guidance.

Hobby farmers are not agriculture producers; however, they may still have complex needs which will impact their ability to evacuate. The local authority should encourage hobby farmers to evacuate their animals at the time of an Evacuation Alert using pre-planned solutions. Generally, hobby farmers are encouraged to plan in advance how and where they will move their animals during an emergency.

8.5 Cost Recovery

The BC Evacuation Operational Guide outlines the process to be followed to track and claim eligible expenses for reimbursement following evacuation events. These may be costs incurred by either the local authority as a result of conducting evacuations, or by neighbouring jurisdictions as supporting agencies during evacuations. This cost recovery is outside of pre-negotiated agreements and is handled on an individual basis with the province.

REFERENCES

- [1] Diamond Head Consulting. (2022). *Community Wildfire Resiliency Plan for Electoral Area F in the RDN*.
- [2] BC Housing. (2021). *Parksville Qualicum 2021 Homeless Count*. Retrieved February 1, 2023, from <https://www.bchousing.org/sites/default/files/media/documents/Homeless-Count-Parksville-Qualicum-2021.pdf>Smith, S. (2019, September 23). Oceanside Outreach Project. *Island Crisis Care Society*.
<https://www.islandcrisiscaresociety.ca/oceanside-outreach-project/>
- [3] Government of Canada, S. C. (2022a, February 9). *Profile table, Census Profile, 2021 Census of Population—Nanaimo F, Regional district electoral area (RDA) [Census subdivision], British Columbia*.
- [4] Statista. (n.d.) *Canada: Median age of population by province 2021*. Retrieved October 13, 2022, from <https://www.statista.com/statistics/444816/canada-median-age-of-resident-population-by-province/>
- [5] Government of Canada, S. C. (2022b, February 9). *Profile table, Census Profile, 2021 Census of Population—Nanaimo H, Regional district electoral area (RDA) [Census subdivision], British Columbia*. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>
- [6] Government of Canada, S. C. (2022c, July 13). *Focus on Geography Series, 2021 Census—Nanaimo H (Census subdivision)*. <https://www12.statcan.gc.ca/census-recensement/2021/as-sa/fogs-spg/page.cfm?lang=E&topic=1&dguid=2021A00055921036>
- [7] CCEM Strategies. (2019). *Hazard, Risk and Vulnerability Analysis*. Prepared for Regional District of Nanaimo, Town of Qualicum Beach, and City of Parksville.
- [8] Government of British Columbia. (2021). *Provincial Strategic Threat Analysis*. <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/vegetation-and-fuel-management/fire-fuel-management/psta>

ANNEX A. ACRONYMS

BC	British Columbia
BCEHS	British Columbia Emergency Health Services
CAF	Canadian Armed Forces
CMHA	Canadian Mental Health Association
CRC	Canadian Red Cross
DMS	Digital Message Sign
DPS	Disaster Psychosocial Services
ECC	Emergency Coordination Centre
EMCR	Ministry of Emergency Management and Climate Readiness
ESS	Emergency Support Services
EOC	Emergency Operations Centre
FLNRORD	Ministry of Forests, Lands, Natural Resource Operations and Rural Development
FNHA	First Nations Health Authority
GSAR	Ground Search and Rescue
HAZMAT	Hazardous Material
HEMBC	Health Emergency Management British Columbia
HRVA	Hazard, Risk, and Vulnerability Analysis
IC	Incident Commander

ICS	Incident Command System
ISC	Indigenous Services Canada
MAL	Ministry of Agriculture and Lands
MoTI	Ministry of Transportation and Infrastructure
MOU	Memorandum of Understanding
NGO	Non-governmental organization
PREOC	Provincial Regional Emergency Operations Centre
RCMP	Royal Canadian Mounted Police
RFA	Request for Assistance
SAR	Search and Rescue
SD	School District
SoLE	State of Local Emergency
TMCBC	Transportation Management Centre of British Columbia

ANNEX B. DEFINITIONS

Disaster	A calamity that is (a) caused by accident, fire, explosion, technical failure, or the forces of nature, and (b) has resulted in serious harm to the health, safety or welfare of people, or in widespread damage to property.
Emergency	A present or imminent event or circumstance that (a) is cause by accident, fire, explosion, technical failure, or the forces of nature and (b) requires prompt coordination of action or special regulation of persons or property to protect the health, safety or welfare of a person or to limit damage to property.
Emergency Program Act	Further referred to as "the Act." The Act, which governs all aspects of Emergency Management, including all four pillars: Preparedness and Prevention, Response, Recovery, and Mitigation.
Emergency Support Services (ESS)	The Local Authority Emergency Management Regulation 2 (3) (f) states "the local authority must coordinate the provision of food, clothing, shelter, transportation, and medical services to victims of emergencies and disasters". Emergency Support Services (ESS) may provide up to 72 hours of support to help British Columbians meet their basic needs following a disaster or emergency.
Emergency Support Services Reception Centre	A location operated by ESS that is a safe place where people impacted by a disaster can receive supports including information about the emergency, assistance meeting their basic needs, and other services as deemed necessary by the local authority.

Evacuation	An event that may require identified populations to leave the area for life safety reasons.
Evacuation Alert	Document that is released by the local authority to inform the public that an evacuation may occur at any time.
Evacuation Order	Document that is released by the local authority to inform the public that there is an imminent threat to life safety, resulting in the need to evacuate the area.
Evacuation Rescind	Document that is released by the local authority to inform the public that it is safe to return to a previously evacuated area.
Shelter-in-Place Order	A document released by the local authority to inform the public to remain indoors and follow precautions to limit exposure to outside sources.
State of Local Emergency (SoLE)	Document that is prepared by the local authority and approved by the Minister responsible declaring that the local authority requires additional powers described within the Emergency Program Act to deal with an emergency within their jurisdiction.
Strategic Evacuation	Evacuations that allow time for formal documentation to be issued.
Tactical Evacuation	Evacuations resulting from a hazard impact that require immediate action and allow for little warning or preparation.

ANNEX C. EVACUATION MANAGEMENT FLOW CHART

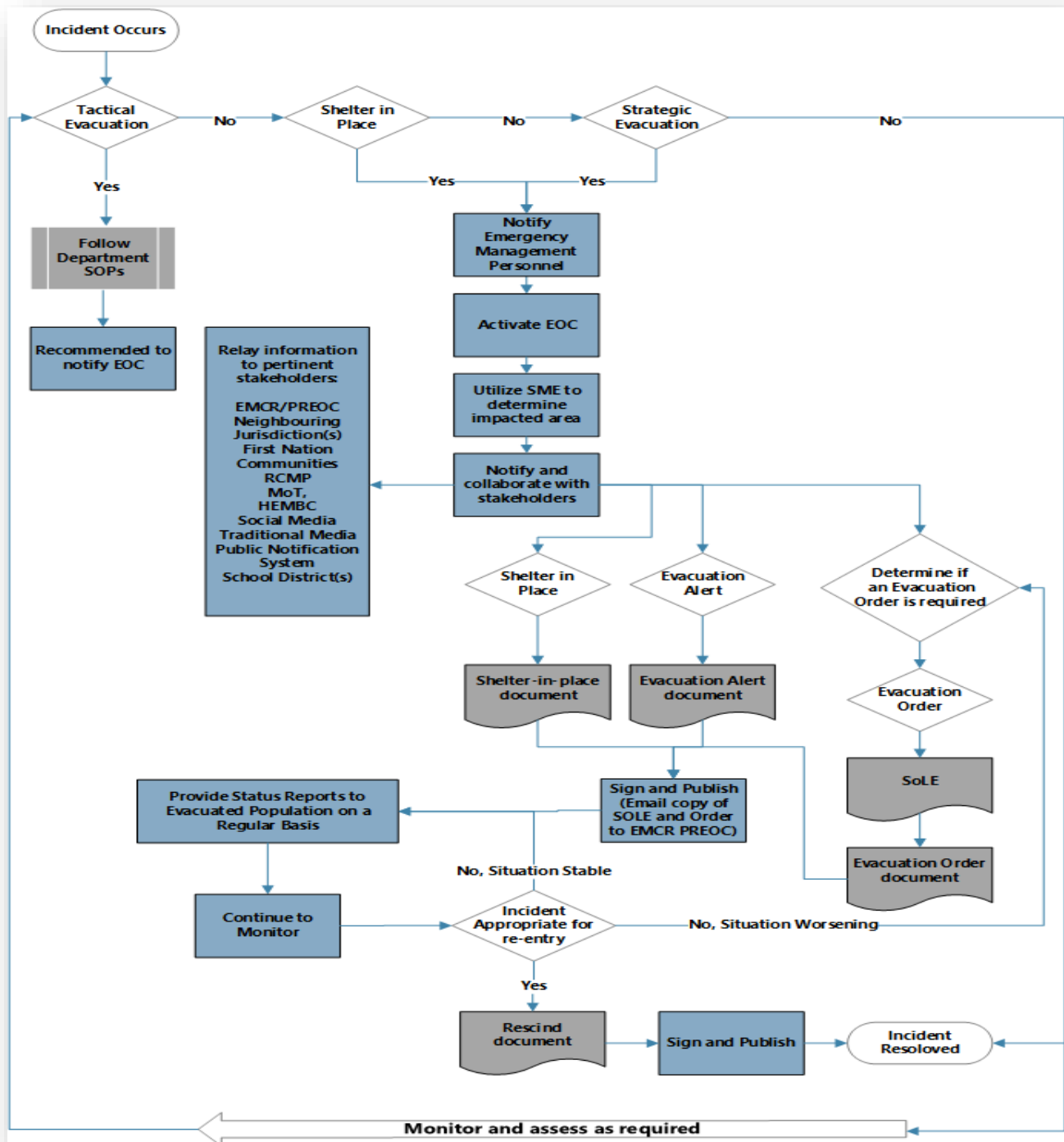


Figure 3 Emergency Management Decision Making Flowchart

ANNEX D. AUTHORITIES AND LEGISLATION

Relevant Legislation	Description
Regional District of Nanaimo Bylaw No. 952	This bylaw permits the RDN to establish extended service of emergency programs under the Emergency Program Act for the Electoral Areas of the RDN. This provides the basis for conducting evacuation planning and managing the development and maintenance of evacuation plans and programs.
Regional District of Nanaimo Bylaw No 1790	This bylaw is the broader bylaw within the RDN that provides powers to the RDN to provide various emergency management services to the RDN and provides an overview of specific avenues for conducting activities during emergencies including declaring a state of emergency, conducting evacuations, and other activities as required by ongoing emergencies.
Emergency Program Act, Section 12(1) and 9(1)	Under this statute, the head of the local authority is permitted to declare a SOLE giving access to the emergency 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"
Fire Services Act, Section 25	<p>25 (1) If an emergency arising from a fire hazard or from risk of explosion causes the fire commissioner to be apprehensive of imminent and serious danger to life or property, or of a panic, the fire commissioner may immediately take the steps he or she thinks advisable to remove the hazard or risk.</p> <p>(2) For the purposes of subsection (1), the fire commissioner may evacuate a building or area, and may call on the police and fire prevention authorities who have jurisdiction to provide assistance.</p>
Public Health Act, Section 28 (1), 29 (2) (a), 31 (1), 31 (2) (b) (ii)	<p>28 (1) If the circumstances described in section 27 [when orders respecting infectious agents and hazardous agents may be made] apply, a medical health officer may order a person to do anything that the medical health officer reasonably believes is necessary for either or both of the following purposes:</p> <ul style="list-style-type: none"> (a) to determine whether an infectious agent or a hazards agent exists, or likely exists; (b) (b) to prevent the transmission of an infectious agent or a hazardous agent. <p>29(2a) A medical health officer may order a person to remain in a specified place, or not enter a place.</p> <p>31(1) If the circumstances described in section 30 [when orders respecting health hazards and contraventions may be made] apply, a health officer may order a person to do anything that the health officer reasonably believes is necessary for any of the following purposes:</p> <ul style="list-style-type: none"> (a) to determine whether a health hazard exists; (b) to prevent or stop a health hazard, or mitigate the harm or prevent further harm from a health hazard;

	<p>(c) to bring the person into compliance with the Act or a regulation made under it;</p> <p>(d) to bring the person into compliance with a term or condition of a license or permit held by that person under this Act.</p> <p>32(2) (b) (ii) A health officer may issue an order under subsection a person who has custody or control of a thing, or control of a condition, that is not in compliance with the Act or a regulation made under it, or a term or condition of the person's license or permit.</p>
<p>Environmental Management Act, Section 91.4, 91.2 (2)(c)</p>	<p>91.4 (1) The government may carry out actions described in section 91.2 (2) <i>[responsible persons — spill response]</i> if an officer considers that:</p> <ul style="list-style-type: none"> (a) a spill has occurred or there is an imminent risk of a spill occurring, (b) action is necessary to address a spill or the risk of a spill or to resolve or mitigate long term effects of a spill; and (c) one or more of the following apply: <ul style="list-style-type: none"> i. there is no responsible person in relation to the spill; ii. an officer has reasonable grounds to believe that government action is required to safeguard the environment, human health or infrastructure; and iii. the responsible person in relation to the spill requests that the government assist with spill response and recovery actions. <p>91.2 (2) (c) identify and evaluate the immediate risks to and impacts on the environment, human health or infrastructure and, as necessary,</p> <ul style="list-style-type: none"> i. advise persons to take protective action in relation to the spill protect infrastructure, and protect, recover and restore the environment.
<p>Oil and Gas Activities Act (OGAA), Section 51</p>	<p>Access restricted or prohibited</p> <p>51 (1) An official, by order, may restrict or prohibit, in a manner prescribed by regulation, access to a public area, including a highway, road, resource road, and railway, if the official is of the opinion that the restriction or prohibition is necessary because of hazard conditions resulting from an oil and gas activity.</p> <ul style="list-style-type: none"> ii. (2) If an official issue's an order under subsection (1), the commission must confirm the order in writing within 24 hours or the order ceases to be effective.
<p>Wildfire Act, Section 11, 13 and 14</p>	<p>(11) 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, the minister by order may designate a specified area as a restricted area for a specified period.</p> <p>Requirement to leave specified area</p> <p>13 (1) If the government is engaged in fire control, an official by order may require all persons in an area specified by the official to leave the area.</p>

	<p>(2) Each of the persons that is the subject of an order under subsection (1) must comply with the order.</p> <p>(3) An order under subsection (1) may be different for different categories of persons.</p> <p>Notice of orders under sections 10 to 13 14 (1) Despite section 63, notice must be given in accordance with this section of an order made under any of sections 10 to 13.</p> <p>(2) The notice required under subsection (1) is sufficiently given to all persons in or near the applicable specified area under sections 10 to 13 if the notice includes a copy of the order or contains or a summary of the order and is:</p> <ul style="list-style-type: none"> (a) posted in or near the specified area, (b) published in or near the area in a manner that the official giving the notice considers will come to the attention of persons in or near the specified area, or (c) broadcast in a manner that the official giving the notice considers will come to the attention of persons in or near the specified area. <p>(3) Without limiting subsection (2), a notice under any of sections 10 to 13 is sufficiently given to any person if the notice includes a copy of the order or contains or a summary of the order and is delivered to the person.</p>
<p>Indian Act, Section 81</p>	<p>81 (1) The council of a band may make by-laws not inconsistent with this Act or with any regulation made by the Governor in Council or the Minister, for any or all of the following purposes, namely:</p> <ul style="list-style-type: none"> (a) to provide for the health of residents on the reserve and to prevent the spreading of contagious and infectious diseases; and <p>the regulation of traffic.</p>

ANNEX E. PROVINCIAL, FEDERAL, AND NGO ROLES & RESPONSIBILITIES

The following section briefly outlines the roles and responsibilities for provincial, federal, and private and non-governmental organizations (NGOs) as they relate to evacuations.

E.1 PROVINCIAL GOVERNMENT

E.1.1 Emergency Management and Climate Readiness (EMCR)

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 national and international 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, upon request;
- Provides assistance with evacuation route planning and re-entry planning, upon request;
- Provides assistance in executing evacuations by way of resource requests or expenditure authorization for critical resources (e.g., transportation services, security, physical blockades, Search and Rescue);
- Provides assistance with communications to evacuees and the general public; and
- Accesses provincial volunteer resources (Search and Rescue, ESS Mobile Support Team, Provincial Emergency Radio Communications Service, Air, Road Rescue) as required.

E.1.2 Ministry of Food and Agriculture

- 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/ECCs, 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; and

- 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.

E.1.3 BC Wildfire Service (BCWS)

For wildfire hazard events:

- Leads the response of all operations to wildfire hazard;
- Provides subject matter expertise to First Nations and local authorities regarding fire behaviour to support Evacuation Alerts, Orders, and Rescinds decisions;
- 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/ECC;
- Maintains consistent and effective communication platforms and structures with EOC/ECC and RCMP; and
- Provides technical expertise where requested.

For flood hazard event, as requested by PECC and/or PREOCs:

- Provides resources, communications and logistical support

E.1.4 Children and Family Development, Ministry of (MCFD)

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

- Liaises with EMCR 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; and
- Upon request, liaises with communities to assess need for local MCFD representation during major evacuations.

E.1.5 Ministry of Transportation & Infrastructure (MoTI) / Transportation Management Centre British Columbia (TMCBC)

MoTI is responsible for ensuring the safe movement of people and goods throughout the established network of public infrastructure built in BC. In respect to provincial highways:

- Works 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;

- Provides assistance strategizing on proposed messaging to the public through DriveBC about alternate routes once an Evacuation Order is in effect;
- Assists 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.;
- May provide rapid support through the Parksville location commercial inspection officers and vehicles upon request;
- Responsible for staffing all checkpoints on provincial highways; and
- Prior to Evacuation Rescind, works closely with EOC/ECC to establish timing of repatriation, and ensuring transportation infrastructure is in a condition to support evacuees returning home.

E.1.6 Ministry of Forests, Lands, Natural Resource Operations and Rural 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. and
- Provides technical advice and specialist expertise, support services, and staff for PECC/PREOCs.

E.1.7 Health Emergency Management BC (HEMBC) / Provincial Health Services Authority / Island Health Authority

- 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/ECC, health authorities work to re-establish key health services; and
- 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).

E.2 FEDERAL GOVERNMENT

E.2.1 Canadian Armed Forces

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; and
- 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.

E.2.2 Royal Canadian Mounted Police

The RCMP are responsible for providing all policing service for the RDN. During evacuations, the following activities fall under the responsibility of the RCMP and will be coordinated within the EOC:

- 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; and
- Supports repatriation upon Evacuation Rescind.

E.3 PRIVATE / NON-GOVERNMENTAL ORGANIZATION

E.3.1 Mosaic Forest Management

Mosaic Forest Management is a timberlands management company that manages private managed and steward Crown tenure forest land within the RDN. While it is unlikely that the only passable egress route is through Mosaic managed land, it is important that Mosaic be contacted if there is any possibility that people may try to use roads traveling through this land, to:

- Ensure the roads are safe and passable;
- Ensure access is provided where needed and not blocked off; and
- Ensure proper directions are provided where possible.

E.3.2 Canadian Red Cross

Upon invitation from local authority and with approval from EMCR for funding, the Canadian Red Cross (CRC) will provide capacity support to local ESS teams and in absence of local ESS fully manage the ESS response.

- Assist in prolonged needs of evacuees;
- Assist with ESS functions following an evacuation period; and
- Support family reunification.

E.3.3 Ground Search and Rescue

Upon request by the RCMP or EOC/ECC will provide support for community notifications of evacuation alerts and orders. Will provide short-term temporary checkpoint support until appropriate contracted resources arrive.

ANNEX F. EVACUATION ZONE ANALYSIS

Table 4: Evacuation Zone Analysis

No.	Total Size (ha)	Estimated Population)	Single Vehicle Travel Time (Min)	Estimated Zone Evacuation Time in Personal Vehicles (Min)	Estimated Zone Evacuation Time Using Bus (Min)
F1	237.75	610	6.7	29.8	17.7
F2	673.49	500	16.6	37.3	27.4
F3	6,303.39	40	34.5	45.4	44.6
F4	1,150.60	409	7.8	26.6	18.5
F5	1,837.01	1,007	25.3	56.9	37.0
F6	4,247.66	493	6.9	27.5	17.7
F7	1,469.26	1,166	21.3	56.4	33.3
F8	331.83	387	3.3	21.6	13.9
F9	3,545.05	894	7.2	36.4	18.7
F10	808.12	815	12.9	40.4	24.2
F11	654.35	398	11.1	29.6	21.7
F12	793.04	818	19.9	47.5	31.3
F13	656.75	197	11.8	26.0	22.1
F14	4,004.04	37	1.2	10.8	10.1
H1	2,298.32	229	12.7	27.6	23.1
H2	3,799.39	99	14.6	26.7	24.8
H3	16,989.29	55	25.7	36.9	35.8

ANNEX G. EVACUATION TEAR AWAY SHEETS

Overview

The following tear away sheets will provide the following information to support evacuation planning:

- Zone Map;
- Primary Use;
- Primary and Secondary Arterial Roads;
- Muster Points, Infrastructure, and Reception Centers;
- Estimated Evacuation Zone Details; and
- Planning Notes.

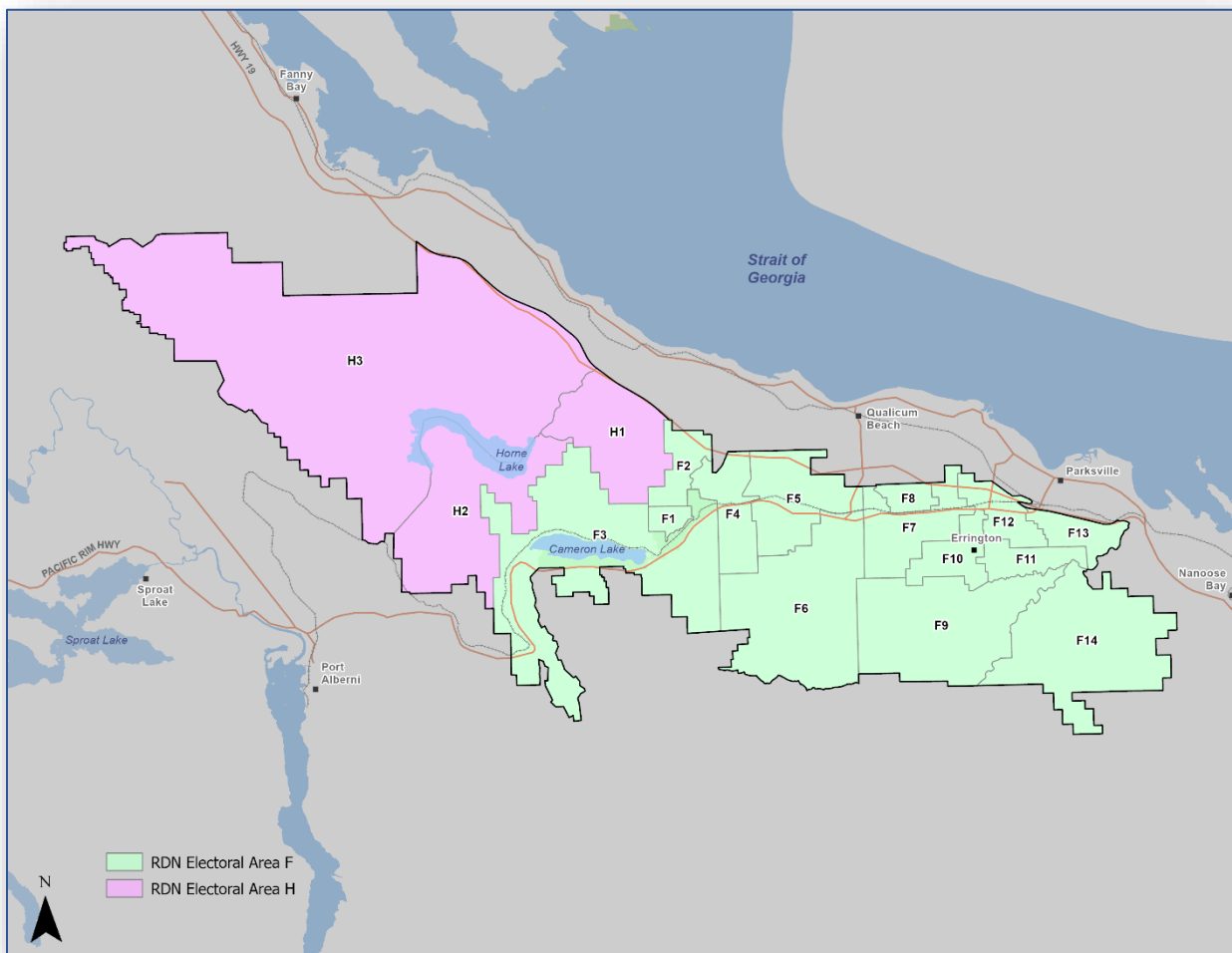


Figure 4 Overview Map

The following notes apply to all the evacuation zones. This is important to interpret the data provided in the tear-away sheets correctly.

Estimated Single Vehicle Travel Time Through Zone

The travel time through the zone is calculated based on a reduced speed of 30km/hour.

Estimated Zone Evacuation Time

The zone evacuation time calculates how long it will take to evacuate the zone based on estimated population, average vehicle capacity, longest expected drive through the zone, road density (average vehicle length plus average vehicle gap), and the time it will take for that road density to pass through the zone at the expected speed of 30 km/hr.

EMCR recommends utilization of the adjacent formula for determining when to conduct an evacuation.

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

Destinations / Reception Centres

The evacuation plan is focused on evacuations within the RDN. Potential evacuation destinations and reception centres may be identified for awareness of each evacuation zone. However, these need to be verified and determined on a case-by-case basis based on the type of emergency and emergency support service (ESS) needs. For detailed information regarding ESS, refer to the RDN ESS Plan (Draft).

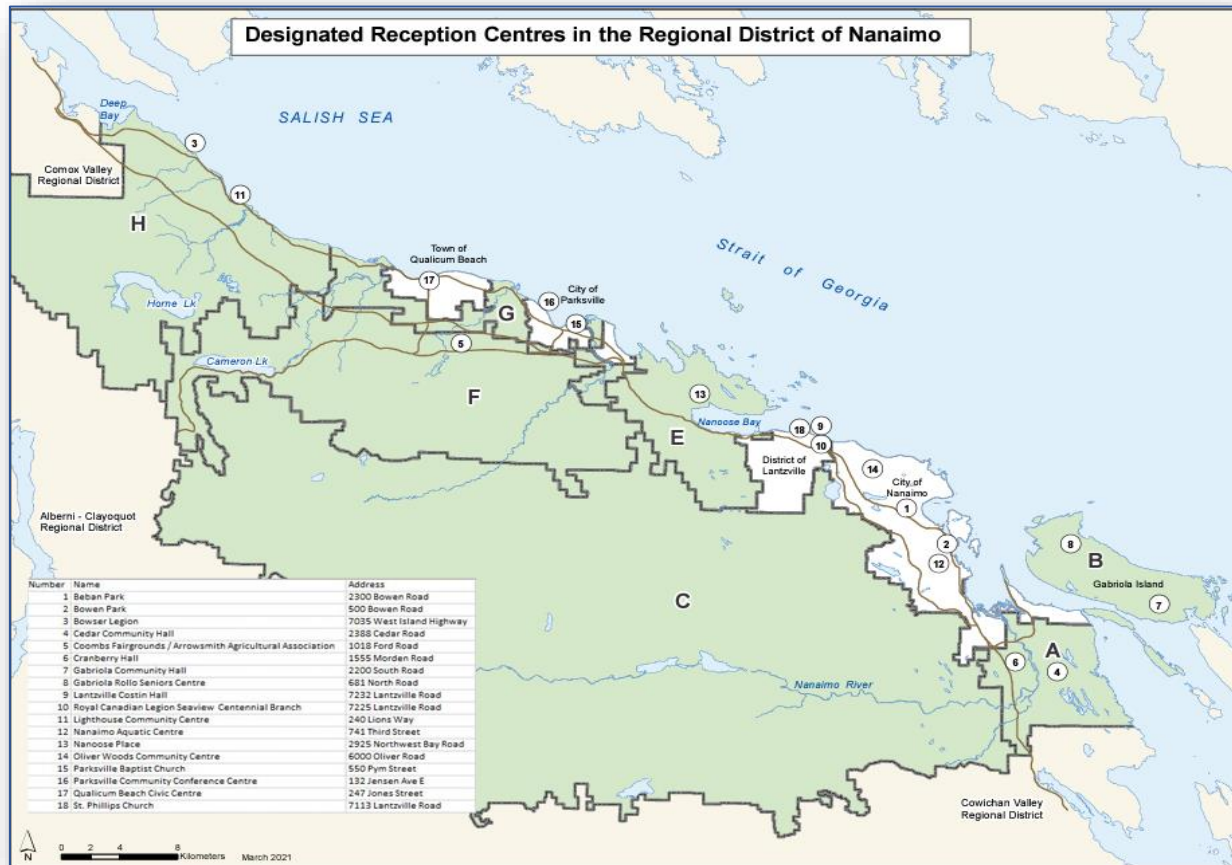
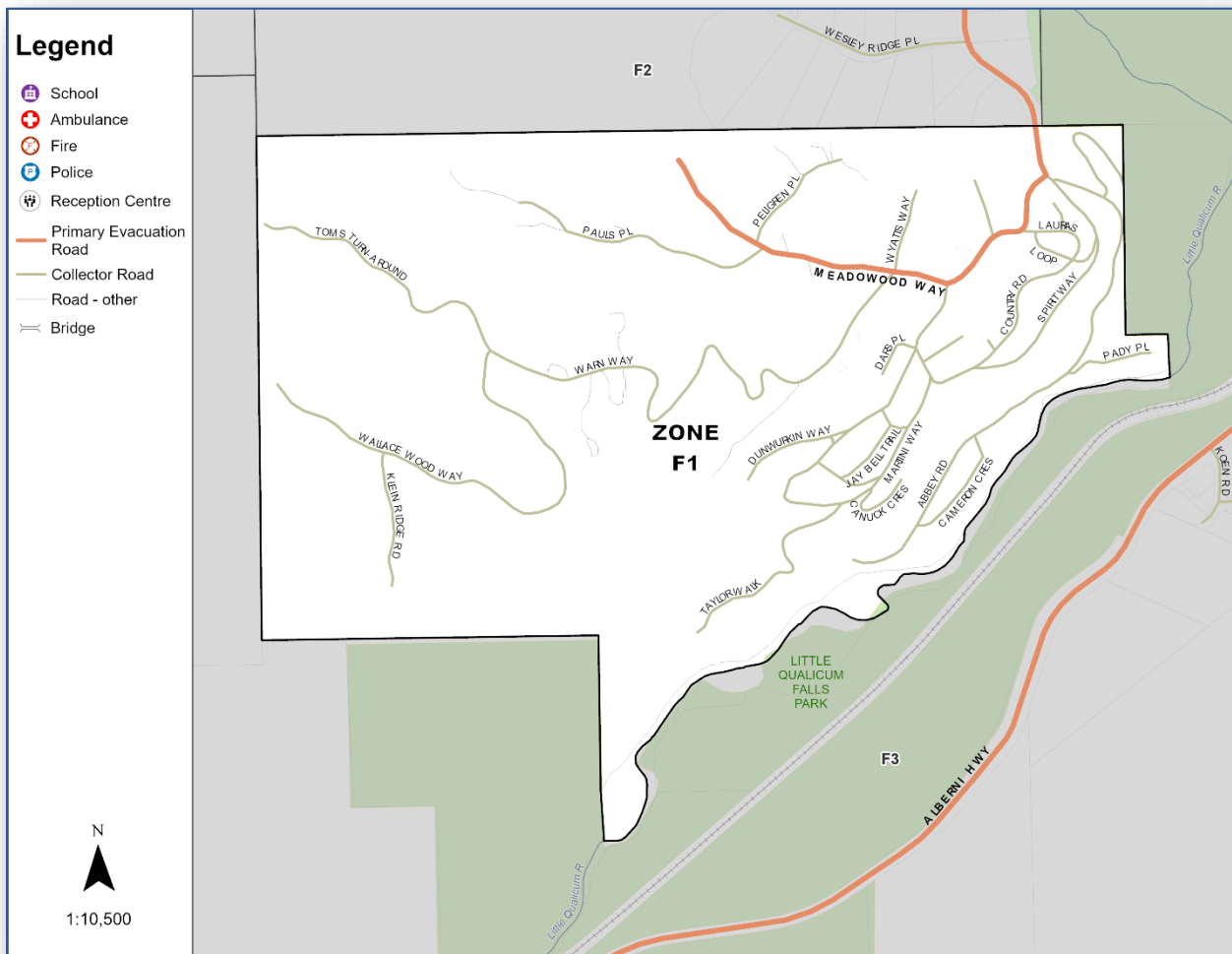


Figure 5 Designated Reception Centres

Muster Points

Limited or no muster points were identified for the evacuation zones. These should be identified based on the type of emergency, the direction of evacuations, and available staffing and resources in the area to implement as required.

G.1 ZONE # - F1 LITTLE QUALICUM RIVER ESTATES



PRIMARY USE

Zone F1 is primarily a rural residential use area.

PRIMARY & SECONDARY ARTERIAL ROADS

The primary road through this zone is Meadowood Way. The Meadowood Way ingress is gated at the access point to this zone. The gate can be opened using a keypad. Local fire departments have access to the gate codes.

KEY CONSIDERATIONS

This zone must evacuate through Zone F2. The EOC should consider phasing of these two zones based upon life safety threats if necessary. This zone has roads which may be difficult for large vehicles to access. If the Transit Department is supporting evacuations within this zone, it is likely that small bus vehicles will be necessary to transfer residents out of the zone to a muster site for transfer to a larger transit vehicle. Within this zone there are several residents who may require support for safe evacuations due to lack of personal transportation. Early coordination with transit may be required.

Within this zone there is a large number of school aged children who are bussed by SD 69 to and from school. These students may be home between the hours of 3:30pm and 6:00pm without parental support as parents work outside of the region. If an evacuation during this time is necessary, the EOC should anticipate a large number of youth without immediate access to parents needing support to safely evacuate.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

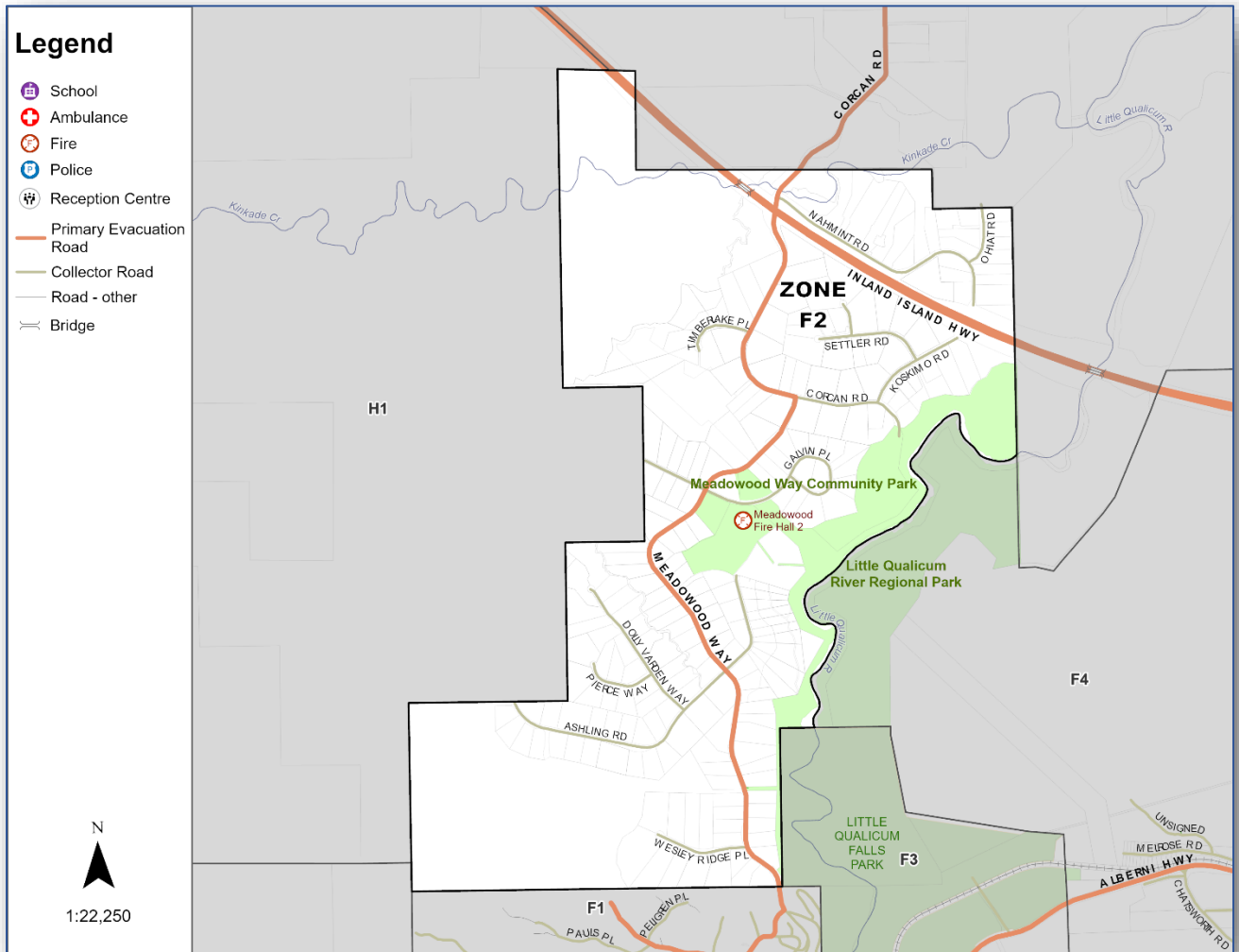
Item	Description
Muster Points	<ul style="list-style-type: none"> H.3 Meadowood Community Park
Critical Infrastructure	<ul style="list-style-type: none"> n/a
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees should travel North along Meadowood Way out of the zone and into Zone F2. Evacuees can either be directed through an industrial road into Zone F4 or along the primary egress via their preferred and normal route along Corcan Road to Highway 19A. The EOC should be aware that residents may be aware of a decommissioned Hwy 19 access point at Nahmint Road in Zone F2. In order to prevent unauthorized access to Hwy 19 the EOC may choose to consider traffic control at Corcan Road and Nahmint Road to prevent this safety concern. South: There is no public road egress travelling South from this zone. West: There is no public road egress travelling West from this zone, however there is a poorly maintained potential egress West from Zone F2 through private land. Depending upon the state of vegetation control along this route, the EOC may be able to coordinate access through private lands into Zone H1. The EOC should assume that access may take significant time to secure and should not be used if there is an urgent life safety concern. East: There is no public road egress travelling East from this zone.
Reception Centre	The closest reception centre(s) to this zone are the Lighthouse Community Centre at 240 Lions Way and Qualicum Civic Centre at 247 Jones St.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
610	6.7	29.8

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.2 ZONE # - F2 MEADOWOOD TO CORCAN AT ISLAND HWY UNDERPASS, INCLUDING NAHMINT AREA



PRIMARY USE

Zone F2 is primarily a rural residential use area.

PRIMARY & SECONDARY ARTERIAL ROADS

The primary road through this zone is Meadowood Way and Corcan Road.

KEY CONSIDERATIONS

Zone F1 must evacuate through this zone. During evacuations the EOC should consider the location of the hazard and determine if phasing is required between the two zones.

Little Qualicum Regional Park: This zone includes the foot access point to Little Qualicum River Regional Park which is connected to the Little Qualicum Falls Provincial Park via a foot path system. Coordination with BC Parks should be considered as a way to inform Regional Park users.

Meadowood Fire Department: Dashwood / Meadowood Fire Department Station 2 is within this zone. Evacuation planning should consider first responder ingress requirements to minimize traffic conflict.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

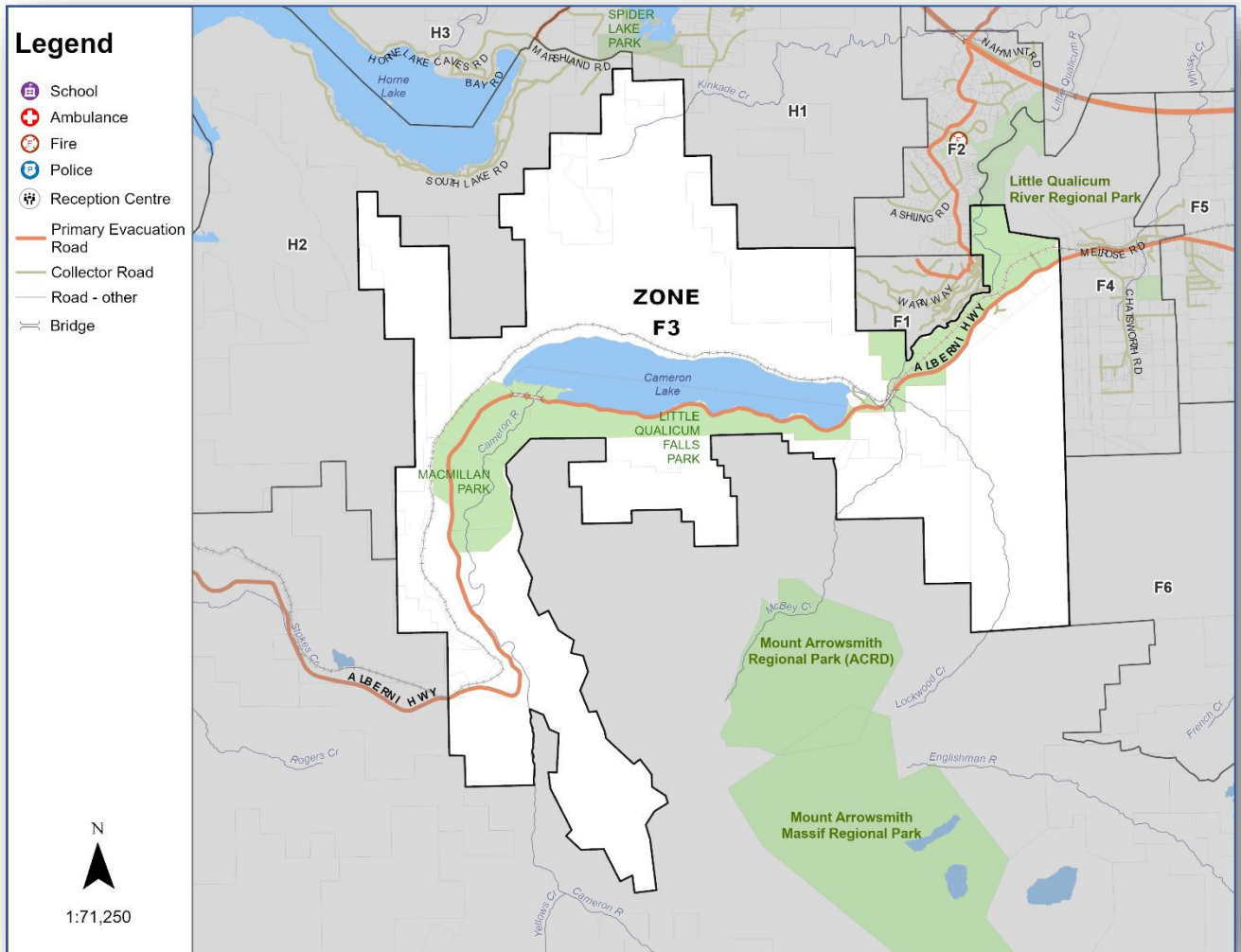
Item	Description
Muster Points	<ul style="list-style-type: none"> H.3 Meadowood Community Park
Critical Infrastructure	<ul style="list-style-type: none"> Dashwood / Meadowood Fire Department Station 2
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees should North along the primary egress via their preferred and normal route along Corcan Road to Highway 19A. The EOC should be aware that residents may be aware of a decommissioned Hwy 19 access point at Nahmint Road in Zone F2. In order to prevent unauthorized access to Hwy 19 the EOC may choose to consider traffic control at Corcan Road and Nahmint Road to prevent this safety concern. South: There is no public road egress travelling South from this zone. West: There is no public road egress travelling West from this zone, however there is a poorly maintained potential egress West from the end of Ashling Road through private land. Depending upon the state of vegetation control along this route, the EOC may be able to coordinate access through private lands into Zone H1. The EOC should assume that access may take significant time to secure and should not be used if there is an urgent life safety concern. East: There is no public road egress travelling East from this zone however there is gated access to FSR Whiskey Creek from the most Eastern end of Corcan Road that travels through the Little Qualicum River Park and into Zone F4.
Reception Centre	The closest reception centre(s) to this zone are the Lighthouse Community Centre at 240 Lions Way and Qualicum Civic Centre at 247 Jones St.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
500	16.6	37.3

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.3 ZONE # - F3 CATHEDRAL GROVE, CAMERON LAKE AND LITTLE QUALICUM RIVER PARK (SOUTH)



PRIMARY USE

Zone F3 is primarily uninhabited with a mix of Parks and Recreation, Forest Use, Crown Tenures, or Residential / Recreational land use.

PRIMARY & SECONDARY ARTERIAL ROADS

The Alberni Highway, also known as Highway 4 is the primary road through this zone. There is an unnamed road on the West end of Cameron Lake that is used by the recreational landowners who have properties on the North side of the Lake. Chalet Road accesses Alberni Highway on the East end of Cameron Lake and is used to access Cameron Lake Resort and recreational properties on the East and North side of Cameron Lake.

KEY CONSIDERATIONS

Little Qualicum Falls Provincial Park: The Little Qualicum Falls Provincial Park contains 96 recreational sites. Early coordination and communication with BC Parks should be considered to ensure notification to campers and staff.

Wesley Ridge, Cameron Lake, MacMillan Park, and Mount Arrowsmith Park Recreation Areas: The zone contains heavily utilized recreational areas. Additionally, this zone contains one of the access points to the frequently hiked ‘CPR Trail’ within the Mount Arrowsmith Regional Park. The EOC should anticipate recreational users within this zone year-round.

Alberni Highway / Highway 4: Most residents within this zone be required to use Highway 4. Traffic control measures where primary egress routes intersect with Highway 4 should be considered wherever possible to reduce traffic conflicts along Highway 4.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

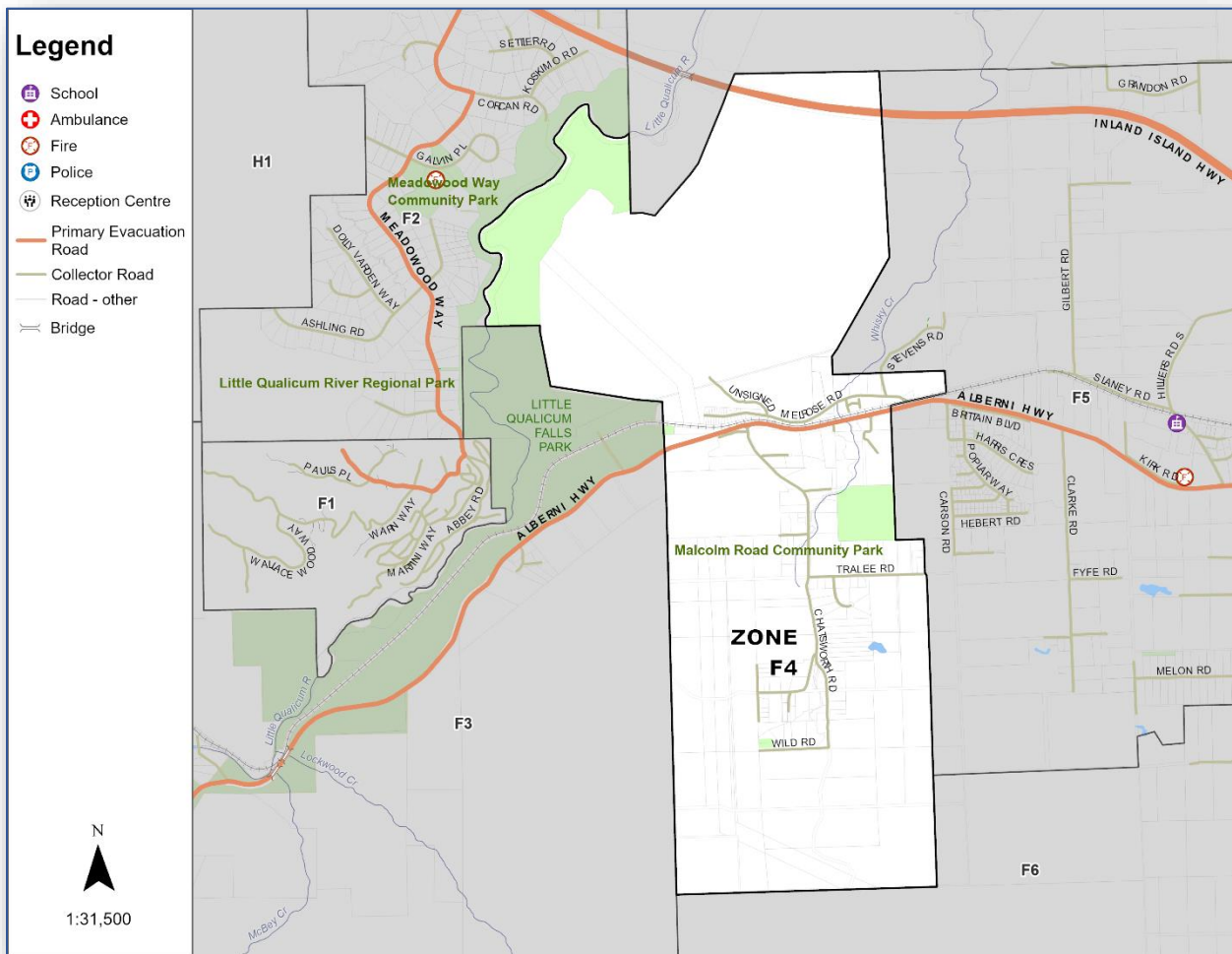
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone. South: There is no public road egress travelling South from this zone. West: Evacuees may travel along the Alberni Highway / Highway 4 toward Port Alberni to evacuate this zone. East: Evacuees may travel along the Alberni Highway / Highway 4 toward Coombs / Qualicum to evacuate this zone.
Reception Centre	The closest reception centre to this zone is the Qualicum Civic Centre at 247 Jones St.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
40	34.5	45.4

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.4 ZONE # - F4 MELROSE ROAD AND CHATSWORTH ROAD.



PRIMARY USE

Zone 4 is mixed use residential and industrial.

PRIMARY & SECONDARY ARTERIAL ROADS

The Alberni Highway or also known as Highway 4 is the primary road through this zone and the secondary roads are Chatsworth Road and Melrose Road.

KEY CONSIDERATIONS

Whiskey Creek Recreation Site and Trails: This zone includes the Whiskey Creek Off-road Riding area and Whiskey Creek Recreation Site. The locations are accessed from Melrose Road and are utilized by recreation off-road vehicle users year-round. This recreation area extends under Highway 19 (Inland Island Highway) and provides access to the zone via Industrial / Forest Service Roads from Qualicum Beach via Claymore Road W.

Whiskey Campground: This zone includes the Whiskey Creek Campground near the south end of Chatsworth Road. The campground has 15 sites and may be occupied year-round.

Alberni Highway / Highway 4: Most residents within this zone be required to use Highway 4. Traffic control measures where primary egress routes intersect with Highway 4 should be considered wherever possible to reduce traffic conflicts along Highway 4.

Industrial and Forest Service Roads: This zone can be accessed by several industrial and / or forest service roads. If evacuating via these roads is considered, coordination is needed with landowners / managers to ensure the gates often present on these roads are open and that safe egress can be secured. Consider coordinating with GSAR to leverage their mobile mapping capability if possible, during a strategic evacuation.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

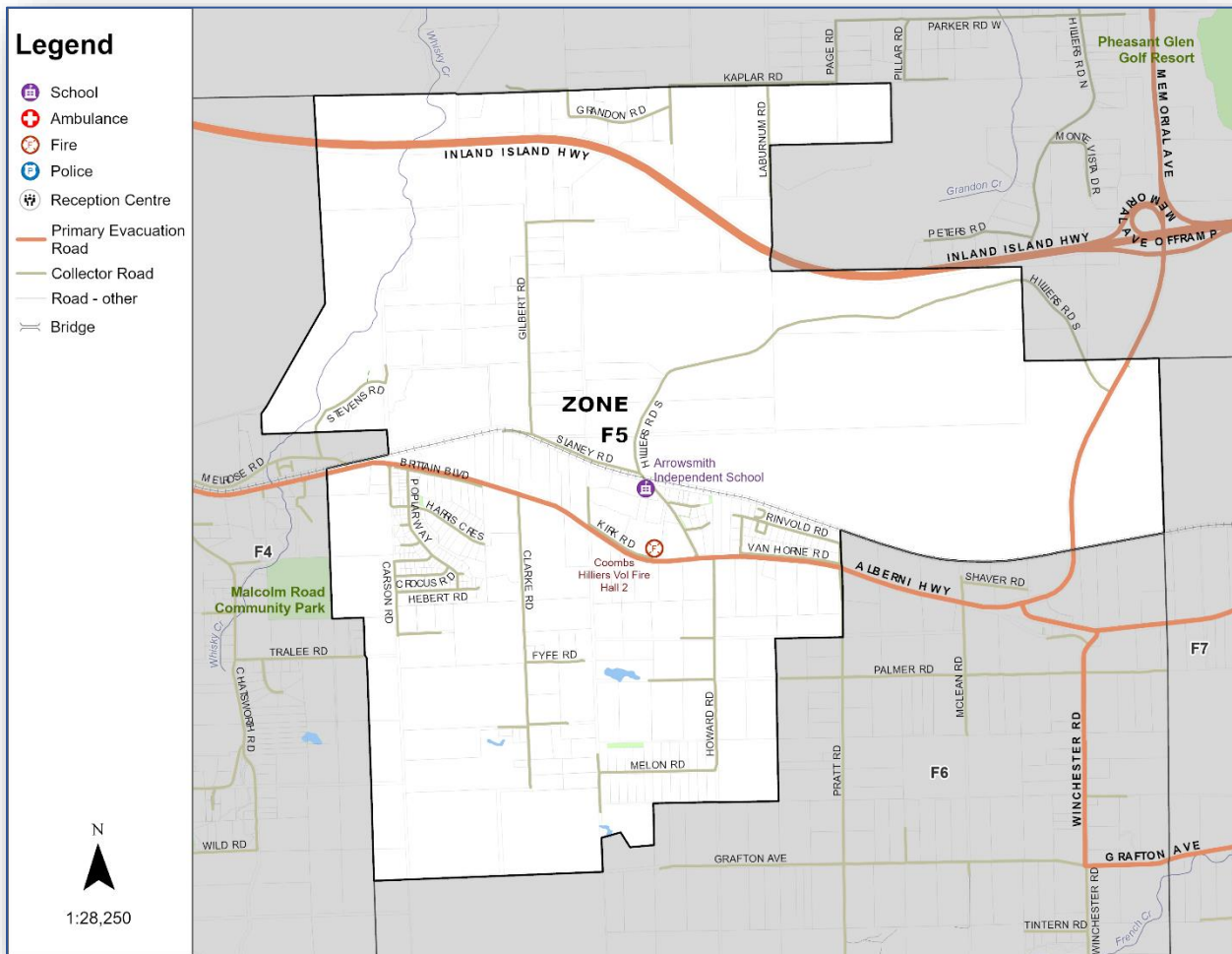
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone however the FSR Whiskey Creek travels through the Little Qualicum River Regional Park and connects to Corcan Road in Zone F2. The EOC should assume that this road is normally gated on either side of the river. Additionally, FSR Whiskey Creek also connects North to Qualicum Beach via Claymore Road W. South: There is no public road egress travelling South from this zone. West: Evacuees may travel along the Alberni Highway / Highway 4 toward Port Alberni to evacuate this zone. East: Evacuees may travel along the Alberni Highway / Highway 4 toward Coombs / Qualicum to evacuate this zone.
Reception Centre	The closest reception centre(s) to this zone are the Qualicum Civic Centre at 247 Jones St and the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
409	7.8	26.6

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.5 ZONE # - F5 HILLIERS



PRIMARY USE

Zone 5 is mixed use residential and agricultural.

PRIMARY & SECONDARY ARTERIAL ROADS

The Albern Highway or also known as Highway 4 is the primary road through this zone and the secondary roads are Carson Road, Poplar Way, Clarke Road, Howard Road, Pratt Road, Gilbert Road, and Hilliers Road. Although Highway 19 runs through this zone, there is no access to Highway 19 from this zone.

KEY CONSIDERATIONS

Coombs-Hilliers Fire Department: Coombs-Hilliers Fire Department Station 2 is within this zone.

Evacuation planning should consider first responder ingress requirements to minimize traffic conflict.

Albern Highway / Highway 4: Most residents within this zone be required to use Highway 4. Traffic control measures where primary egress routes intersect with Highway 4 should be considered wherever possible to reduce traffic conflicts along Highway 4.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

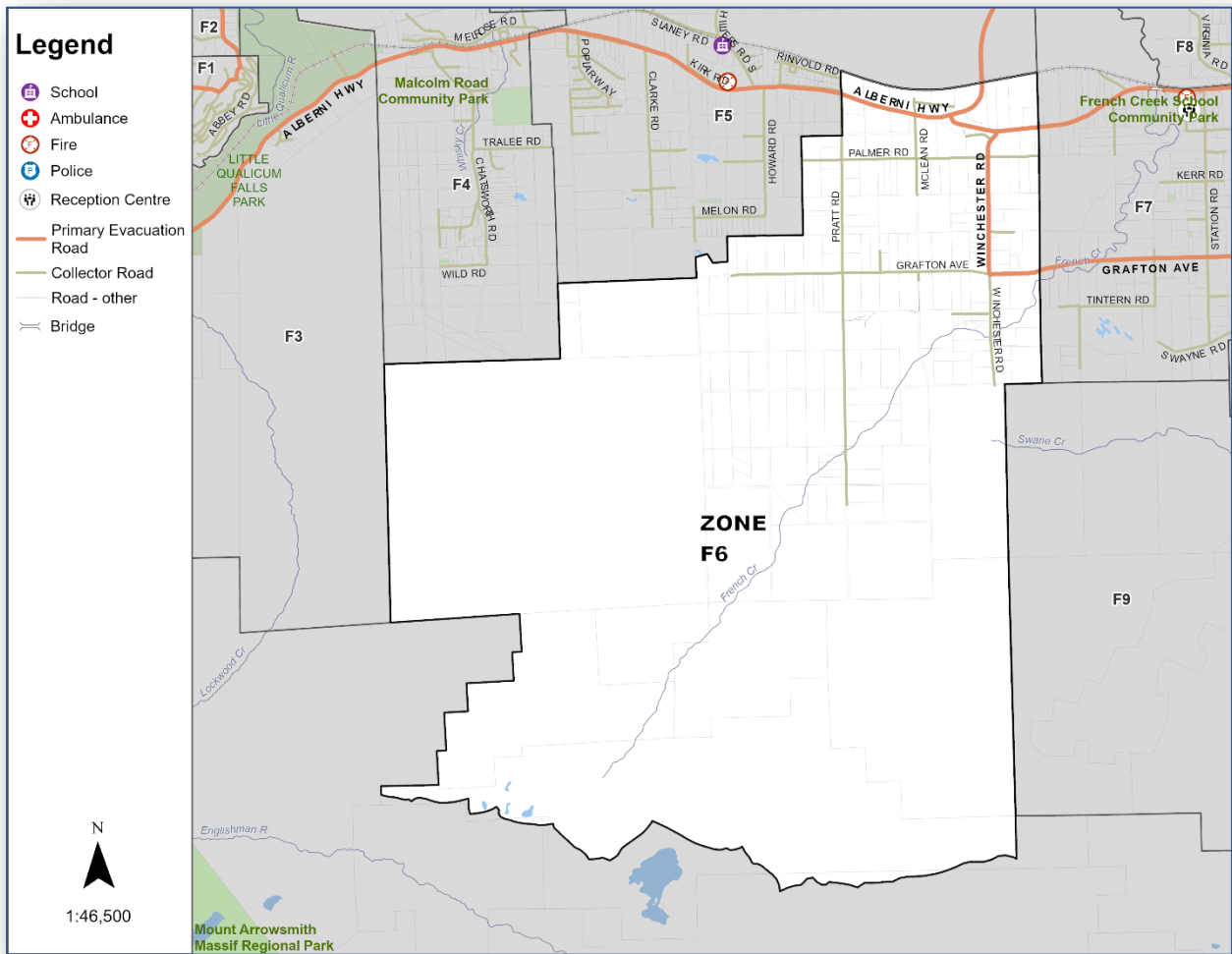
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4 Coombs-Hilliers Fire Department Station 2
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone. South: From the north side of Alberni Highway / Highway 4, residents can travel south along Gilbert Road to Slaney Road. Travelling East on Slaney Road will connect to Hilliers Road S to Alberni Highway / Highway 4 where they can go either West or East depending upon their final destination. From the South side of Alberni Highway / Highway 4, residents can travel South to Grafton Road and then East on Grafton Road. There are several possible routes from Grafton Road to Highway 4A. From there, residents can be directed West or East, depending upon their final destination. There is no public road access South from Clarke Road, Carson Road or Howard Road. West: Evacuees may travel along the Alberni Highway / Highway 4 toward Port Alberni to evacuate this zone. On the north side of Alberni Highway / Highway 4, Hilliers Rd S connects to Highway 4 at the most easterly and westerly ends of Hilliers Road S so can be used to traverse East to West as needed. East: Evacuees may travel along the Alberni Highway / Highway 4 toward Coombs / Qualicum to evacuate this zone. Depending upon their location, residents may travel South to connect to Grafton Road then East on Grafton Road to evacuate this zone. On the north side of Alberni Highway / Highway 4, Hilliers Rd S connects to Highway 4 at the most easterly and westerly ends of Hilliers Road S so can be used to traverse East to West as needed.
Reception Centre	The closest reception centre(s) to this zone are the Qualicum Civic Centre at 247 Jones St and the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
1007	25.3	56.9

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.6 ZONE # - F6 GRAFTON AND WINCHESTER



PRIMARY USE

Zone 6 is mixed use with residential, agricultural, commercial, and forest use.

PRIMARY & SECONDARY ARTERIAL ROADS

The primary roads in this zone are Alberni Highway / Highway 4 and Highway 4A. The secondary roads include Winchester Road, Pratt Road, Palmer Road, and Grafton Avenue.

KEY CONSIDERATIONS

Alberni Highway / Highway 4 or Highway 4A: Most residents within this zone be required to use Highway 4 or 4A. Traffic control measures where primary egress routes intersect with Highway 4 / or 4A should be considered wherever possible to reduce traffic conflicts along Highway 4 / or 4A.

Coombs Country Campground: This is a 34 acre RV Park with 100 sites and is open year round.

Coombs Rodeo Grounds: The rodeo grounds are managed by the Coombs Hilliers Recreational Community Organization and hold events which may result in additional evacuees within this zone. There is infrastructure here that may be suitable for livestock or hobby animals.

Industrial and Forest Service Roads: This zone may be accessed by industrial and / or forest service roads. If evacuating South is considered, coordination is needed with landowners / managers to ensure the gates often present on these roads are open and that safe egress can be secured. Consider coordinating with GSAR to leverage their mobile mapping capability if possible, during a strategic evacuation.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

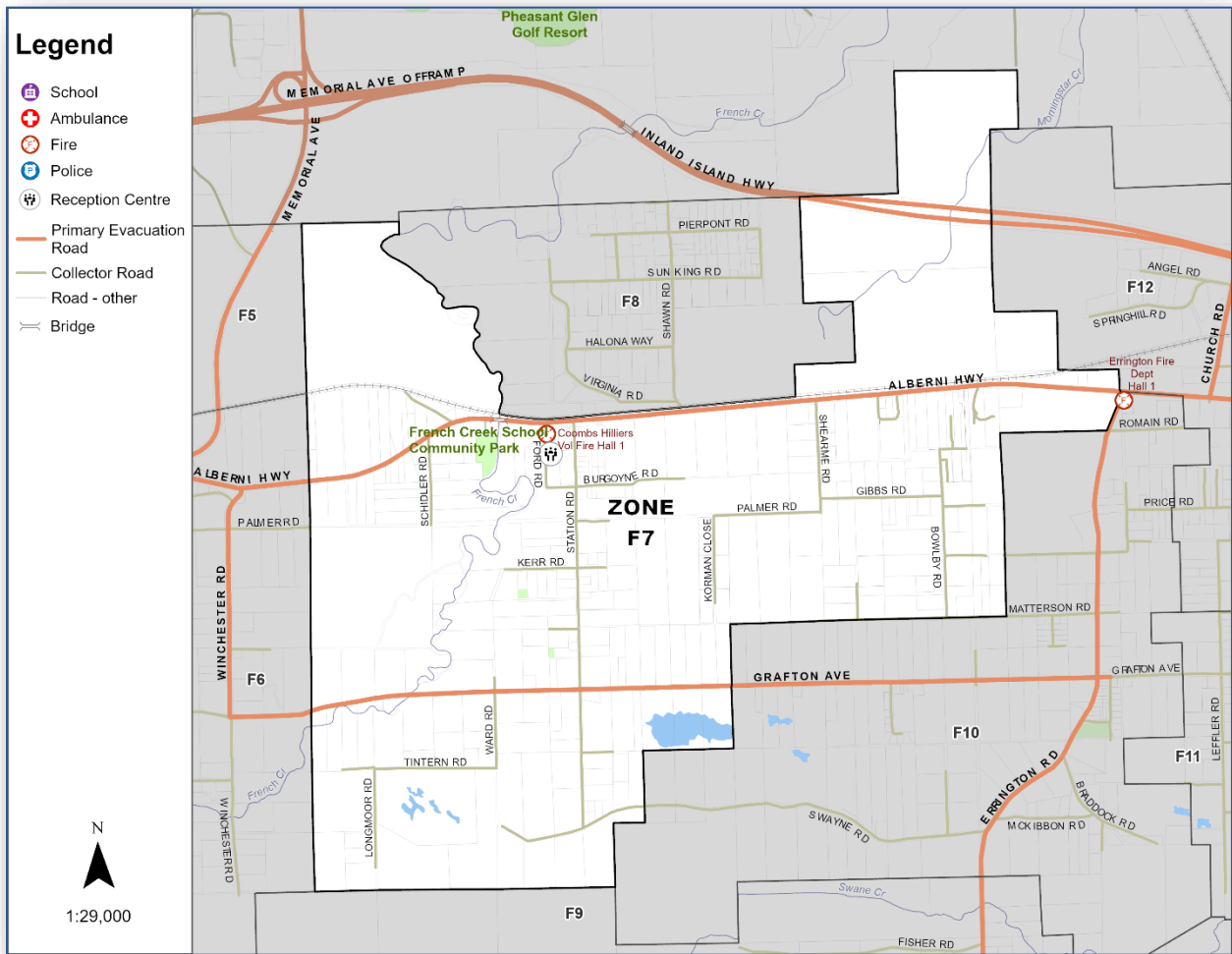
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees may travel along Alberni Highway / Highway 4 toward Qualicum Beach to evacuate this zone. South: There is no public road egress travelling South from this zone. There may be access from Grafton Main through Mosaic Forest Management Lands. West: Evacuees may travel along the Alberni Highway / Highway 4 toward Port Alberni to evacuate this zone. East: Evacuees may travel along the Alberni Highway / Highway 4 toward Qualicum to evacuate this zone. Depending upon their location, residents may travel to connect to Grafton or Palmer Road then to evacuate this zone.
Reception Centre	The closest reception centre(s) to this zone are the Qualicum Civic Centre at 247 Jones St and the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
493	6.9	27.5

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.7 ZONE # - F7 COOMBS



PRIMARY USE

Zone 7 is mixed use with residential, agricultural, and commercial use.

PRIMARY & SECONDARY ARTERIAL ROADS

The primary roads through this zone are Alberni Highway/Highway 4A and Grafton Avenue. The secondary roads are Station Road, and Shearman Road.

KEY CONSIDERATIONS

Coombs-Hilliers Fire Department: Coombs-Hilliers Fire Department Station 1 is within this zone.

Evacuation planning should consider first responder ingress requirements to minimize traffic conflict.

Alberni Highway / Highway 4A: Most residents within this zone be required to use Highway 4A. Traffic control measures where primary egress routes intersect with Highway 4A should be considered wherever possible to reduce traffic conflicts along Highway 4A.

Coombs Fairgrounds / Arrowsmith Agricultural Association: The Coombs Fairgrounds / Arrowsmith Agricultural Association is a designated Reception Centre and is within this zone. This site may also be used to muster livestock and hobby animals if necessary.

Coombs Market: The Coombs Market and surrounding area receives significant numbers of daily visitors during its open season. The EOC should anticipate large numbers of people at this site and coordinate with the management as soon as possible during an evacuation of this zone.

1700 Block of Alberni Highway / Highway 4A: Along the 1700 block of Alberni Highway / Highway 4A there are several densely populated properties. The EOC should anticipate high numbers of evacuees if that portion of Alberni Highway / Highway 4A requires evacuating. Transportation support may be required.

Agriculture: There are several agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

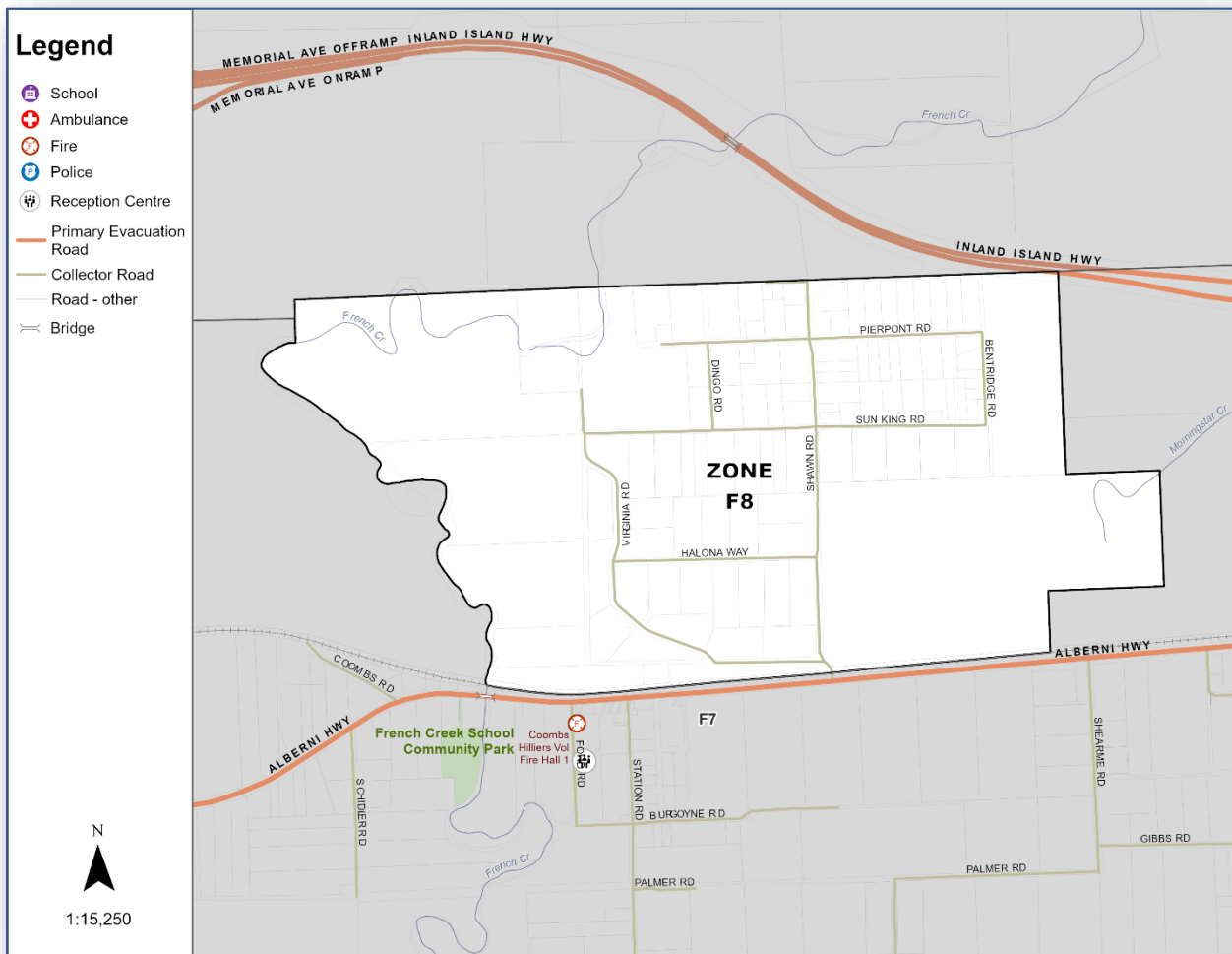
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4A Coombs-Hilliers Fire Department Station 1
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone. South: There is no public road egress travelling South from Longmoor Road from this zone, however residents who can travel South on Station Road can connect to Grafton Avenue or Swayne Road and travel East into Zone 10 where they can connect to Errington Road. West: Evacuees may travel along the Alberni Highway / Highway 4A toward Alberni Highway / Highway 4 evacuate this zone. Evacuees may travel West along Grafton Avenue to one of the many egress roads off of Grafton Avenue depending upon their final destination. East: Evacuees may travel along the Alberni Highway / Highway 4A toward Parksville to evacuate this zone. Depending upon their location, residents may instead travel to Grafton Avenue to evacuate this zone.
Reception Centre	The closest reception centre(s) to this zone are the Qualicum Civic Centre at 247 Jones St and the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
1166	21.3	56.1

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.8 ZONE # - F8 VIRGINIA ESTATES



PRIMARY USE

Zone 8 is mixed use residential and agricultural.

PRIMARY & SECONDARY ARTERIAL ROADS

The secondary roads within this zone are Shawn Road, Sun King Road, and Virginia Road.

KEY CONSIDERATIONS

Agriculture: There are several agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

Virginia Road: This development is only accessed by Virginia Road. The EOC should consider the need for traffic control where this zone intersects with Alberni Highway / Highway 4A.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

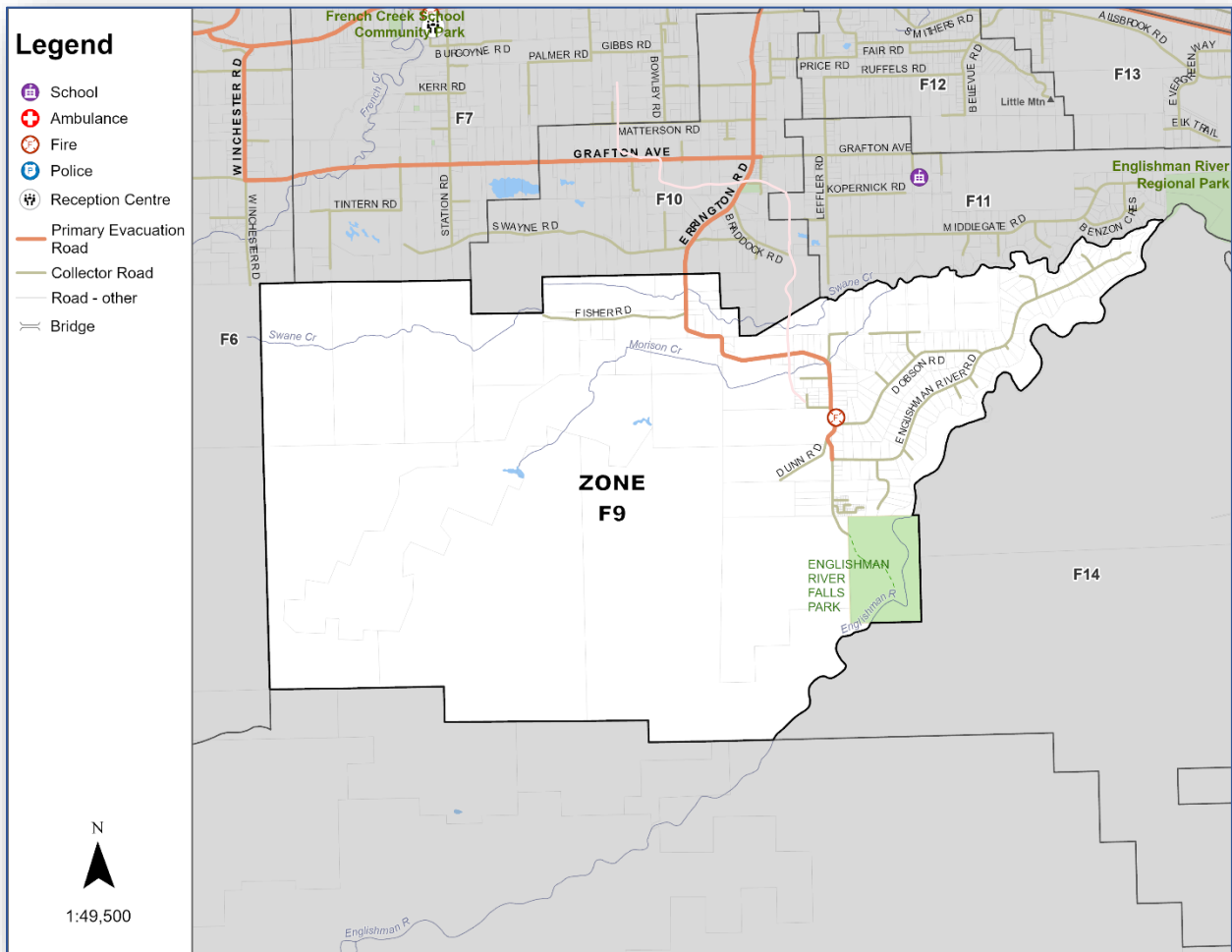
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4A
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone. South: Evacuees should travel South along Shawn Road which merges with Virginia Road to intersect with Alberni Highway / Highway 4A. West: There is no public road egress travelling West from this zone. East: There is no public road egress travelling East from this zone.
Reception Centre	The closest reception centre(s) to this zone are the Qualicum Civic Centre at 247 Jones St and the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
387	3.3	21.6

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.9 ZONE # - F9 ENGLISHMAN RIVER RD AND PARK, FISHER RD



PRIMARY USE

Zone F9 is primarily a rural residential use area. This zone encompasses the Englishman River Falls Provincial Park.

PRIMARY & SECONDARY ARTERIAL ROADS

Errington Road is the primary ingress and egress for this zone. Within the eastern section of the zone, Englishman River Road contains over 2km of road with rural properties that are only serviced by Englishman River Road as the single egress point.

KEY CONSIDERATIONS

Errington Road: This road is the primary egress for this zone. Should a complete evacuation of this zone be required, the EOC should anticipate evacuees traveling through Zone F10 until they can safely connect to Alberni Highway / Highway 4A. Depending upon the hazard, the EOC should implement a phased

approach of zone F9, F10, and F11 if it is safe to do so. Traffic control at key intersections along Errington Road should be considered.

Agriculture: There are several agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

2100 Block of Errington Road: There are multi-dwelling properties within the 2100 block of Errington Road. The EOC should anticipate high numbers of evacuees if that portion of Errington Road requires evacuating. Transportation support may be required.

Englishman River Falls Provincial Park: The Englishman River Falls Provincial Park contains 107 recreational sites. Early coordination and communication with BC Parks should be considered to ensure notification to campers and staff.

Errington Fire Department: Errington Fire Department’s First Station 2 is within this zone. Evacuation planning should consider first responder ingress requirements to minimize traffic conflict.

HammerFest Mountain Biking and Recreational Area: The zone contains a heavily utilized recreational area known as HammerFest. HammerFest is adjacent to the Englishman River Falls Provincial Park and is utilized year-round.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

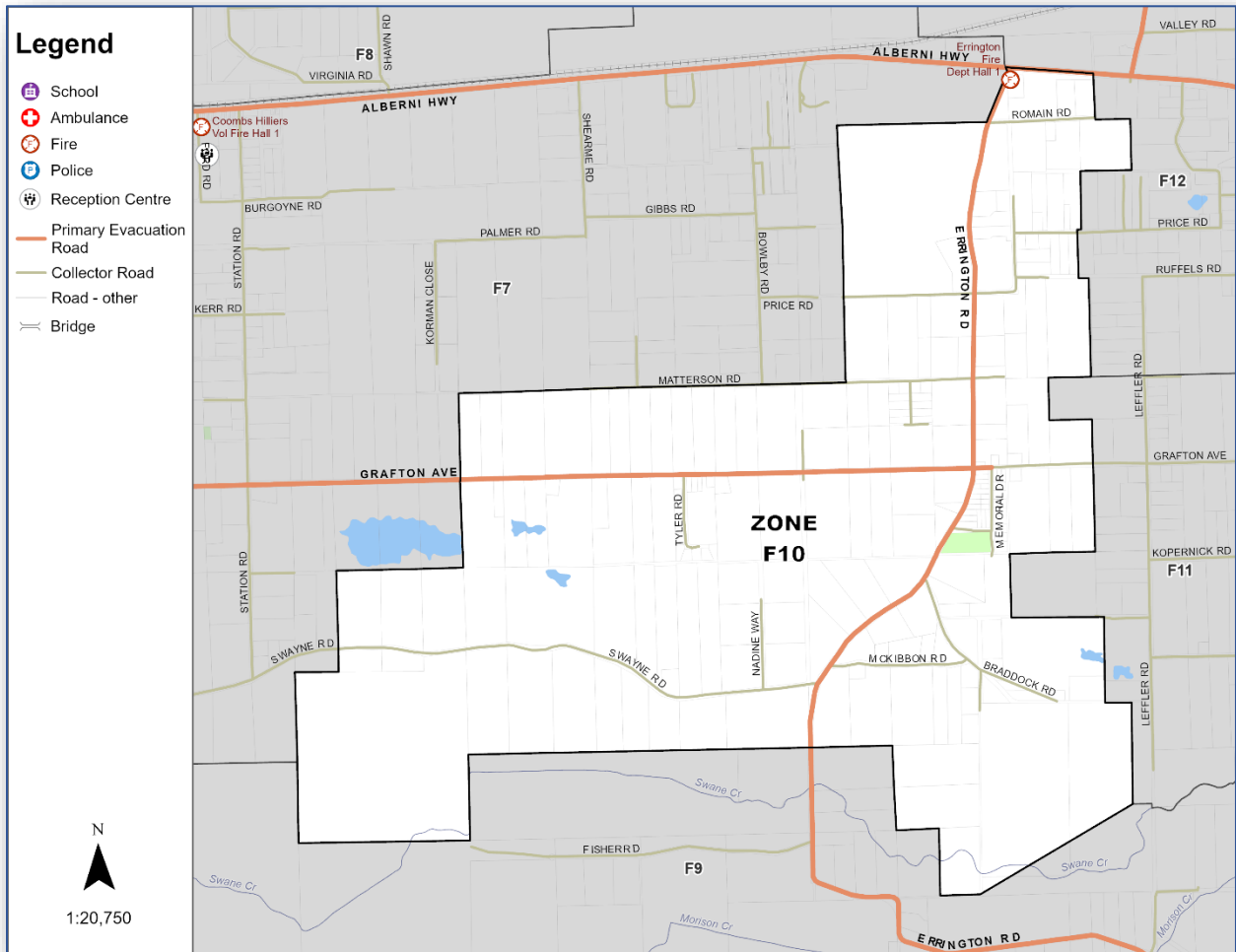
Item	Description
Critical Infrastructure	<ul style="list-style-type: none"> Englishman River Falls Provincial Park Errington Fire Department Fire Station 1
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees should travel North along Errington Road out of the zone into Zone 10 where they can either be directed West or East along Hwy 4A. South: There is no public road egress travelling South from this zone. West: Englishman River Road evacuees can either be directed West until Dobson Road to connect to Errington Road or remain on Englishman River Road until Errington Road. East: There is no public road egress travelling East on Englishman River Road.
Reception Centre	The closest reception centre(s) to this zone are the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road or the Parksville Baptist Church at 550 Pym Street.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
894	7.2	36.4

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.10 ZONE # - F10 ERRINGTON: GRAFTON RD, ERRINGTON RD, SWAYNE RD



PRIMARY USE

Zone 10 is mixed use residential and commercial properties.

PRIMARY & SECONDARY ARTERIAL ROADS

The primary road in this zone is Errington Road. The secondary Roads are Swayne Road, Grafton Avenue, and Matternson Road.

KEY CONSIDERATIONS

Errington Road: This road is the primary egress for this zone. Should a complete evacuation of this zone be required, the EOC should anticipate evacuees traveling through Zone F10 until they can safely connect to Alberni Highway / Highway 4A. Depending upon the hazard, the EOC should implement a phased approach of zone F9, F10, and F11 if it is safe to do so. Traffic control at key intersections along Errington Road should be considered.

Errington Fire Department: Errington Fire Department’s First Station 1 is within this zone. Evacuation planning should consider first responder ingress requirements to minimize traffic conflict.

Alberni Highway / Highway 4A: Most residents within this zone be required to use Highway 4A. Traffic control measures where primary egress routes intersect with Highway 4A should be considered wherever possible to reduce traffic conflicts along Highway 4A.

Agriculture: There are agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

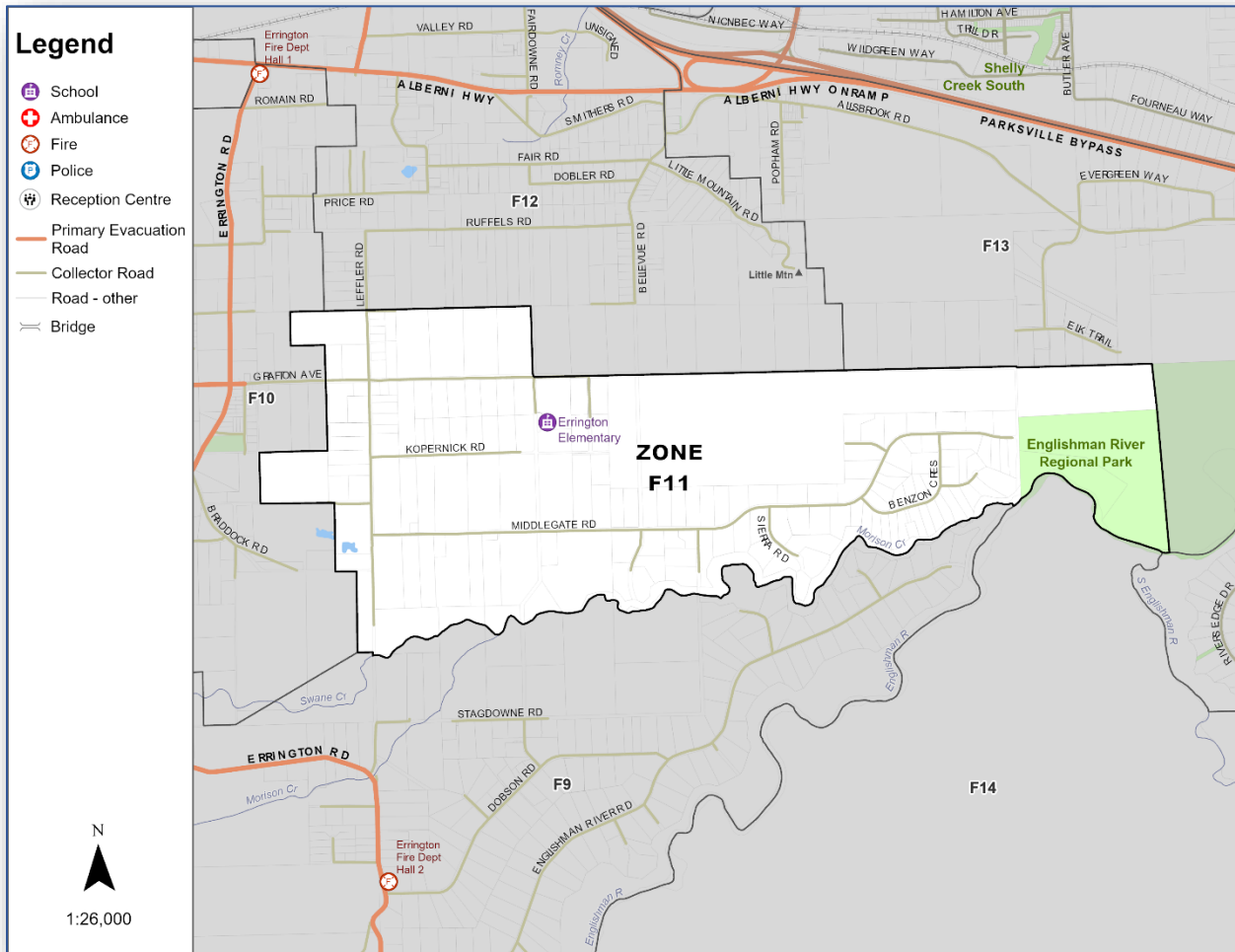
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4A Errington Fire Department Station 1
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees may travel North on Errington Road until Alberni Highway / Highway 4A where they can travel West or East depending upon their final destination. South: There is no public road egress travelling South from this zone. West: Evacuees may travel along the Grafton Avenue or Swayne Road into Zone 7 evacuate this zone. East: Evacuees may travel East along Grafton Avenue to Leffler Road, then travel North on Leffler Road to Ruffles Road and then to Bellevue Road which will connect at the Northern end to Alberni Highway / Highway 4A. Evacuees may travel East on Price Road which will intersect with Alberni Highway / Highway 4A to the East of this zone.
Reception Centre	The closest reception centre(s) to this zone are the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road or the Parksville Baptist Church at 550 Pym Street.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
815	12.9	40.4

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.11 ZONE # - F12 ERRINGTON ELEMENTARY, MIDDLEGATE RD, ENGLISHMAN RIVER PARK



PRIMARY USE

Zone 11 is primarily residential use with a large recreational area within it.

PRIMARY & SECONDARY ARTERIAL ROADS

The secondary roads within this zone are Middlegate Road, Grafton Avenue, and Leffler Road.

KEY CONSIDERATIONS

Errington Road: This road is the primary egress for this zone. Should a complete evacuation of this zone be required, the EOC should anticipate evacuees traveling through Zone F10 until they can safely connect to Alberni Highway / Highway 4A. Depending upon the hazard, the EOC should implement a phased approach of zone F9, F10, and F11 if it is safe to do so. Traffic control at key intersections along Errington Road should be considered.

Errington School: Although the School District is responsible for safely evacuating students, the EOC should notify the School District as early as possible during an evacuation of this zone to ensure coordination wherever possible.

Englishman River Regional Park: There is a parking area and access point into the trails of Englishman River Regional Park at the end of Middlegate Road. The EOC should anticipate recreational users of the park and trail system within this zone. There is an additional parking area at the Top Bridge Community Park that links to the Englishman River Regional Park trail system.

Agriculture: There are several agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Errington School
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees may travel to Leffler Road, then travel North on Leffler Road to Ruffles Road and then to Bellevue Road which will connect at the Northern end to Alberni Highway / Highway 4A. South: There is no public road egress travelling South from this zone. West: Evacuees may travel along Grafton Avenue to evacuate this zone.. East: There is no public road egress travelling East from this zone
Reception Centre	The closest reception centre(s) to this zone are the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road or the Parksville Baptist Church at 550 Pym Street.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
398	11.1	29.6

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

KEY CONSIDERATIONS

Church Road Industrial Area: There is a significant industrial footprint that accesses Church Road, The EOC should anticipate a significant increase in the number of people requiring evacuations during weekday business hours.

Little Mountain: The EOC should anticipate recreational users of the Little Mountain Lookout and trail system within this zone.

North Island Wildlife Recovery Centre: The North Island Wildlife Recovery Centre is within this zone. The EOC should provide the centre with as much information as possible during an evacuation of this zone.

Agriculture: There are several agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

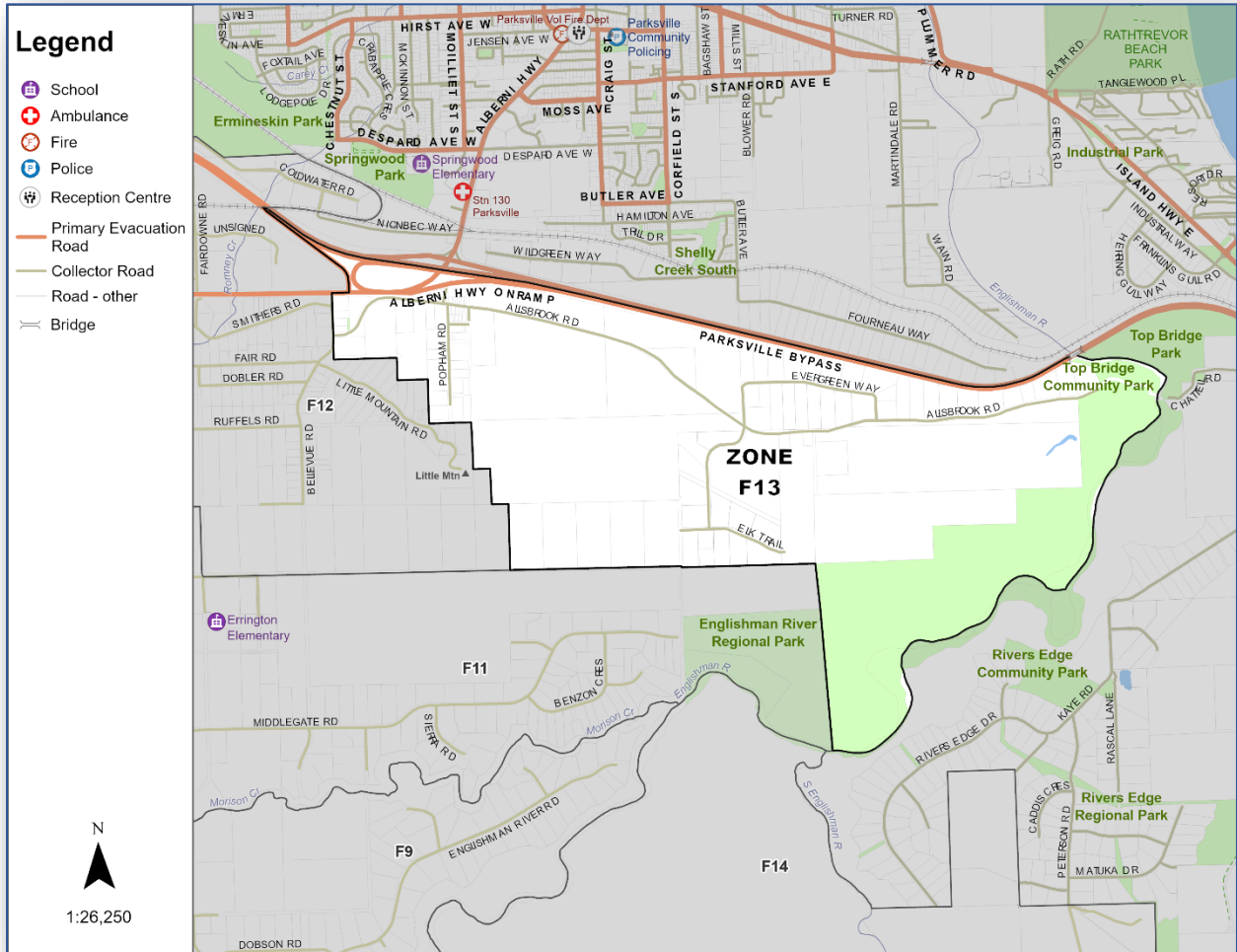
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Alberni Highway / Highway 4A Church Road Transfer Station School District 69 Maintenance and Bus Depot
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees may use Church Road to evacuate to the North of this zone. South: Evacuees may travel South on Leffler Road to evacuate this zone. West: Evacuees may travel along the Alberni Highway / Highway 4A toward Port Alberni to evacuate this zone. Evacuees may also travel South on Leffler Road to Grafton Road to evacuate to the West of this zone. East: Evacuees may travel along the Alberni Highway / Highway 4A toward Parksville to evacuate this zone.
Reception Centre	The closest reception centre(s) to this zone are the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road or the Parksville Baptist Church at 550 Pym Street.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
818	19.9	47.5

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.13 ZONE # - F13 ALSBROOK RD, TOP BRIDGE AND ENGLISHMAN RIVER PARKS



PRIMARY USE

Zone 13 is mixed use with residential, agricultural, commercial, and some park lands.

PRIMARY & SECONDARY ARTERIAL ROADS

The secondary roads within this zone are Allsbrook Road and Bellevue Road.

KEY CONSIDERATIONS

Allsbrook Commercial Area: There are several businesses within this zone. The EOC should anticipate a significant increase in the number of people requiring evacuations during weekday business hours.

BC Wildfire Service Coastal Fire Centre: The fire centre is accessed off of Allsbrook Road in this zone. Evacuation planning should consider fire service ingress / egress requirements to minimize traffic conflict.

Agriculture: There are several agriculture producers and hobby farms within this zone. The EOC should consider early communication with livestock owners and the Ministry of Agriculture through EMCR regarding individual support available for livestock owners.

Englishman River Regional Park: The Englishman River Regional Park is within this zone. The EOC should anticipate recreational users of the park and trail system within this zone. There are parking locations at the end of Middlegate Road and at the Top Bridge Community Park that link to the Englishman River Regional Park trail system.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

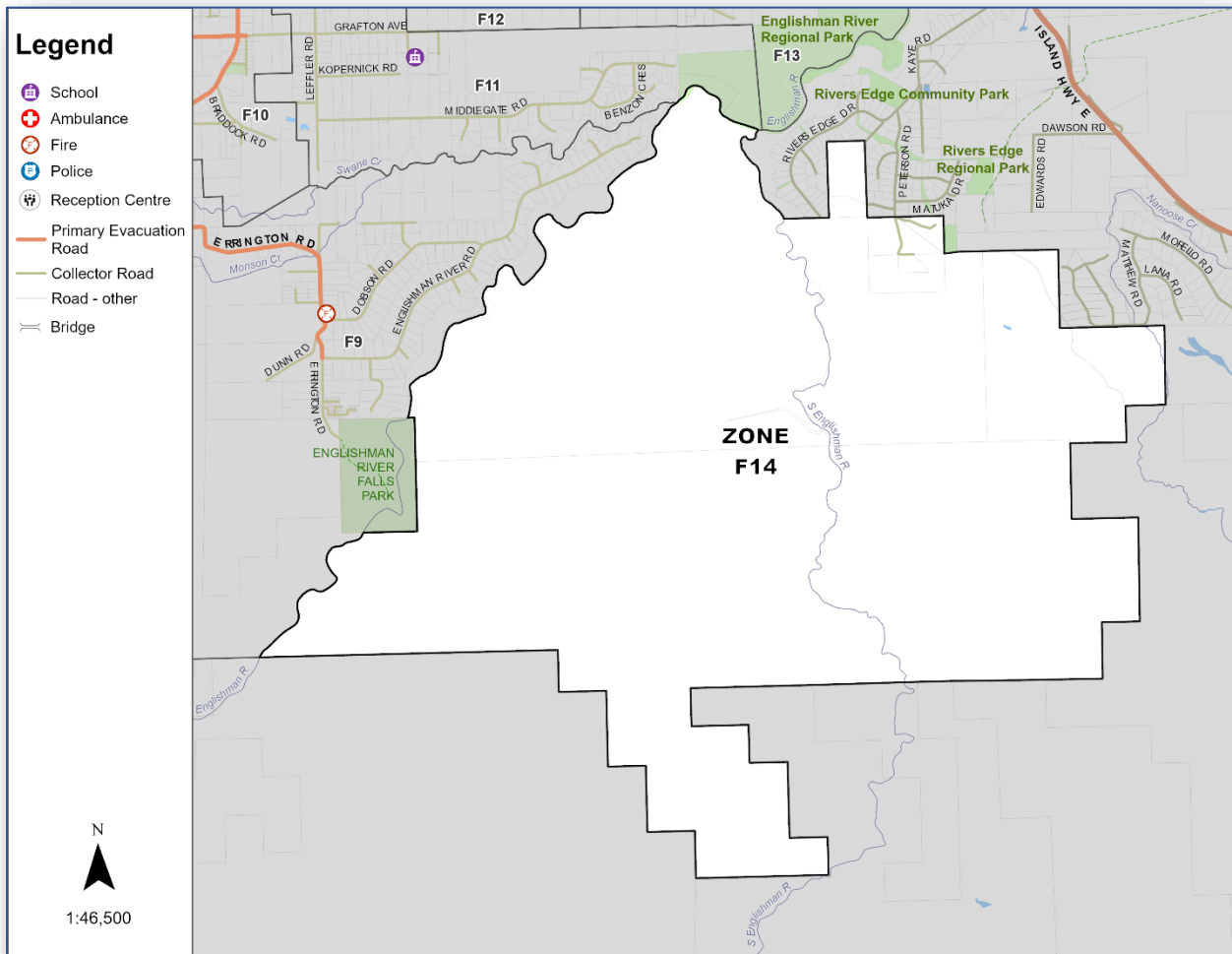
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> Parksville BC Hydro Substation BC Wildfire Service’s Coastal Fire Centre
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone. South: There is no public road egress travelling South from this zone. West: Evacuees may travel along Allsbrook Road to the Alberni Highway / Highway 4A to evacuate this zone. East: There is no public road egress travelling East from this zone.
Reception Centre	The closest reception centre(s) to this zone are the Coombs Fairgrounds / Arrowsmith Agricultural Association at 1018 Ford Road or the Parksville Baptist Church at 550 Pym Street.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
197	11.8	29.6

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.14 ZONE # - F14 MOSAIC LAND SOUTH OF RIVERS EDGE DR



PRIMARY USE

This zone is primarily forested land that borders Englishman River Regional Park to the North. It is the most Southeastern portion of Electoral Area F. There is a small rural residential development within this zone which must be accessed by road through the Nanoose Fire Protection Area.

PRIMARY & SECONDARY ARTERIAL ROADS

This zone is predominantly accessed by industrial roads. Peterson Road is the primary egress for the small rural residential development. The residential development is along Toad Road and Sleepy Hollow Pl, both of which connect to Peterson Road which connects to Kaye Road to the North.

KEY CONSIDERATIONS

Industrial and Forest Service Roads: This zone can be accessed by several industrial and / or forest service roads. If evacuating South is considered, coordination is needed with landowners / managers to ensure the

gates often present on these roads are open and that safe egress can be secured. Consider coordinating with GSAR to leverage their mobile mapping capability if possible, during a strategic evacuation.

Nanoose Fire Department: Residents within this zone are within the Nanoose Bay Fire Department fire protection area. If a hazard impacts the residential area of this zone, it is likely to also impact areas within Electoral Area C and or E. The EOC should ensure communication is clear to limit confusion for residents.

INFRASTRUCTURE & EVACUATION DIRECTIONS

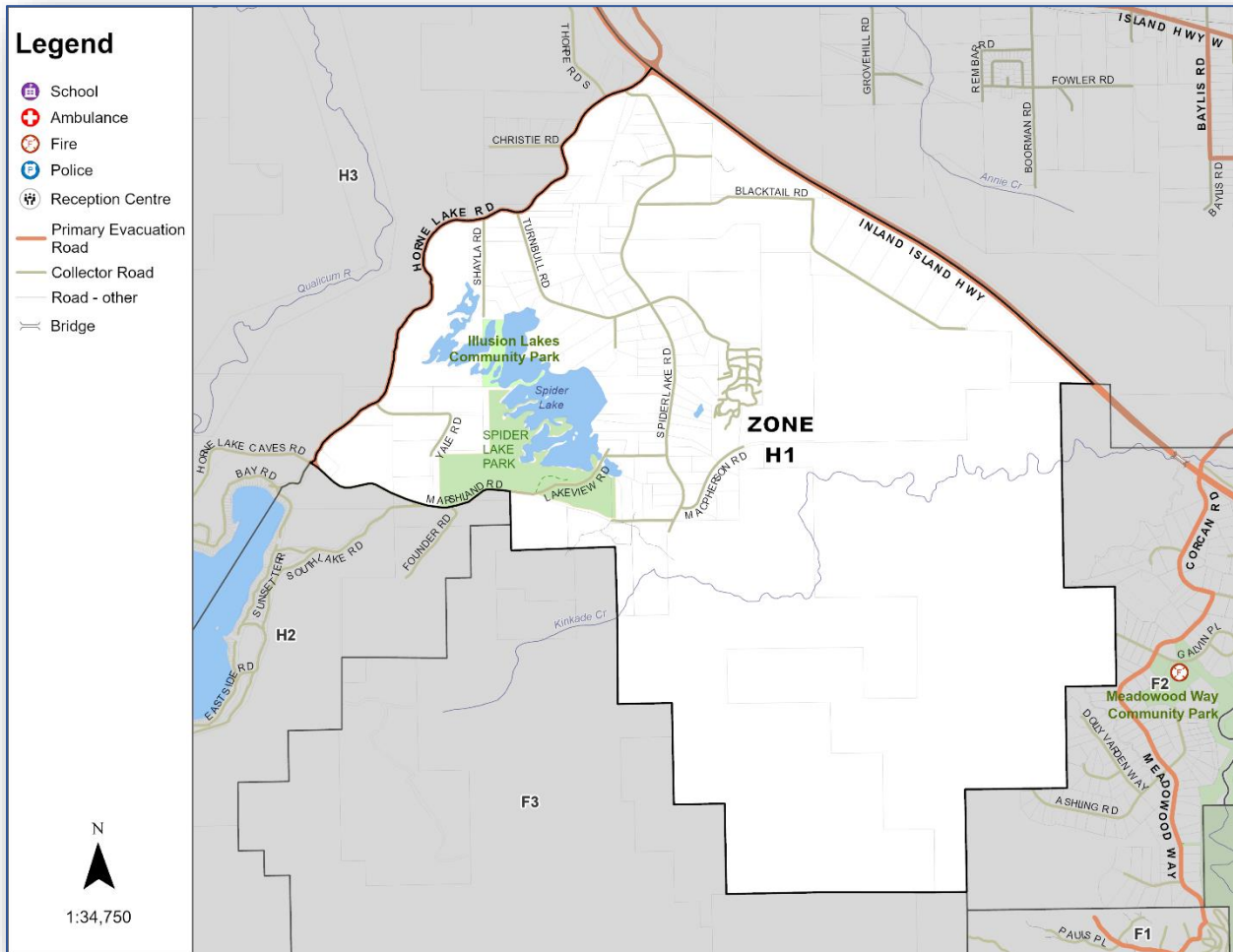
Item	Description
Critical Infrastructure	<ul style="list-style-type: none"> n/a
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees should travel North along Peterson Road out of the zone into Electoral Area E to Kaye Road where they can be directed along Hwy 19 or Hwy 19A, depending upon the reception centre location. South: There is no public road egress travelling South from this zone. West: Evacuees on Sleepy Hollow Pl or Toad Rd should be directed West until Peterson Road where they should travel North. The western boundary of this zone follows waterways that limit western egress. East: There is no public road egress travelling East out of this zone.
Reception Centre	The closest reception centre to this zone is Nanoose Place at 2925 Northwest Bay Road.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
37	1.2	12

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.15 ZONE # - H1 SPIDER LAKE COMMUNITY & PARK, BLACKTAIL RD



PRIMARY USE

Zone H1 is mixed use of residential, agriculture, and recreational land use.

PRIMARY & SECONDARY ARTERIAL ROADS

The primary road in this zone is Horn Lake Road and the secondary roads are Spider Lake Road and Turnbull Road.

KEY CONSIDERATIONS

Spider Lake Springs Resort: This private RV resort has 310 sites and is not open to the general public.

Pineridge RV Park: This RV resort has 12 RV sites and a small farm market with hobby animals.

Spider Lake Provincial Park: Although there are no overnight sites at the Spider Lake Provincial Park the EOC should anticipate a large number of recreational users at this site during the summer.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

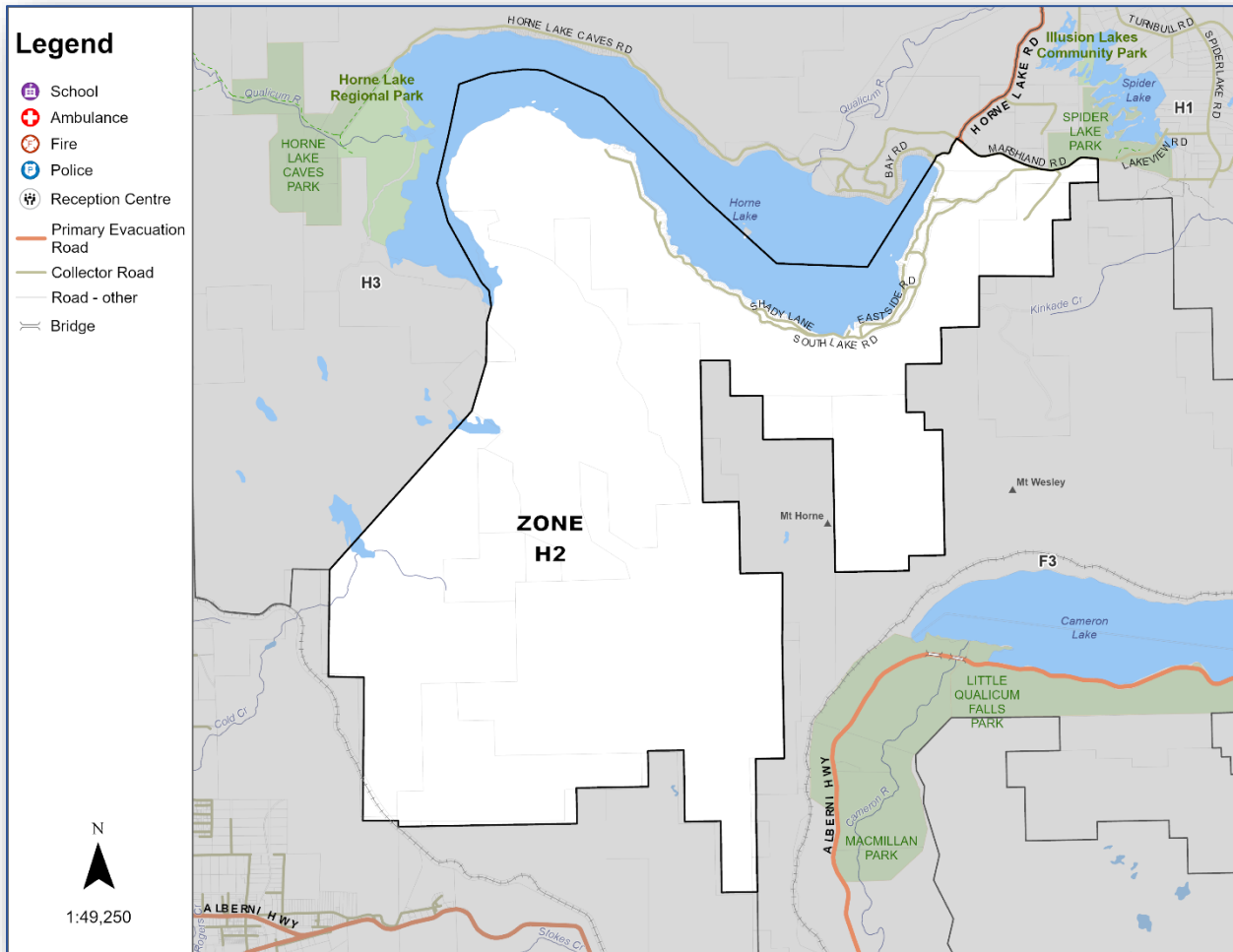
Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> n/a
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees can travel along Spider Lake Road in a northward direction until Horne Lake Road. South: There is no public road egress travelling South from this zone. West: Evacuees can travel along Marshland Road to evacuate to the West from this zone. Marshland Road intercepts Horne Lake Road. East: There is no public road egress travelling East from this zone.
Reception Centre	The closest reception centre to this zone is the Lighthouse Community Centre at 240 Lions Way. Depending upon the location of the hazard, many of these residents associate the Comox Valley as their major centre closest to their home. The EOC should consider engaging with the CVRD to meet the needs of evacuees if they cannot be met within the RDN.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
229	12.7	27.6

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

G.16 ZONE # - H2 SOUTH HORNE LAKE AREA



PRIMARY USE

Zone H2 is primarily recreational use.

PRIMARY & SECONDARY ARTERIAL ROADS

The secondary road within this zone is S Lake Road.

KEY CONSIDERATIONS

Horne Lake Community: There is a robust communication system within the Horne Lake Community through the Horne Lake Community channels. The EOC may consider sharing information related to evacuations with the Horne Lake Community as a way to reach residents within this zone.

Recreational Users: This zone has several lake front recreation properties. The EOC should anticipate an increase in the number of evacuees during the summer season.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

Item	Description
Muster Points	<ul style="list-style-type: none"> n/a
Critical Infrastructure	<ul style="list-style-type: none"> n/a
Evacuation Direction	<ul style="list-style-type: none"> North: Evacuees can travel on Horne Lake Road at the East end of the lake to evacuate to the North of this zone. South: There is no public road egress travelling South from this zone. West: There is no public road egress travelling West from this zone. East: Evacuees can travel along S Lake Road until it connects to Spider Lake Road to evacuate to the East of this zone. .
Reception Centre	The closest reception centre to this zone is the Lighthouse Community Centre at 240 Lions Way. Depending upon the location of the hazard, many of these residents associate the Comox Valley as their major centre closest to their home. The EOC should consider engaging with the CVRD to meet the needs of evacuees if they cannot be met within the RDN.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
99	14.6	26.7

All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

Horne Lake Caves Provincial Park: The Horne Lake Caves Provincial Park has a trail system and both guided and self-discovery caves. The EOC should anticipate a significant number of recreational users within this area.

Horne Lake Community: There is a robust communication system within the Horne Lake Community through the Horne Lake Community channels. The EOC may consider sharing information related to evacuations with the Horne Lake Community as a way to reach residents within this zone.

Recreational Users: This zone has several lake front recreation properties. The EOC should anticipate an increase in the number of evacuees during the summer season.

Industrial and Forest Service Roads: This zone may be accessed by several industrial and / or forest service roads. If evacuating using these roads is considered, coordination is needed with landowners / managers to ensure the gates often present on these roads are open and that safe egress can be secured. Consider coordinating with GSAR to leverage their mobile mapping capability if possible, during a strategic evacuation.

INFRASTRUCTURE & EVACUATION DIRECTIONS

The information provided below is general guidance. Reception Centres and evacuation routes will be dictated based on the nature of the emergency. Always refer to official RDN sources of information for evacuation-related instructions.

Item	Description
Muster Points	<ul style="list-style-type: none"> H.1 Horne Lake Regional Park H.2 Horne Lake Caves Provincial Park
Critical Infrastructure	<ul style="list-style-type: none"> n/a
Evacuation Direction	<ul style="list-style-type: none"> North: There is no public road egress travelling North from this zone. South: There is no public road egress travelling South from this zone. West: There is no public road egress travelling West from this zone. There is a network of Industrial and Forest Service Roads that could enable evacuation to the West of this zone. East: Evacuees may travel along Horne Lake Road toward the Inland Island Highway / Highway 19 to evacuate to the East of this zone.
Reception Centre	The closest reception centre to this zone is the Lighthouse Community Centre at 240 Lions Way. Depending upon the location of the hazard, many of these residents associate the Comox Valley as their major centre closest to their home. The EOC should consider engaging with the CVRD to meet the needs of evacuees if they cannot be met within the RDN.

ESTIMATED TIME TO EVACUATE THIS ZONE IN MINUTES:

Estimated Population	Estimated Single Vehicle Travel Time Through Zone in Minutes	Estimated Zone Evacuation Time in Minutes
55	25.7	36.9

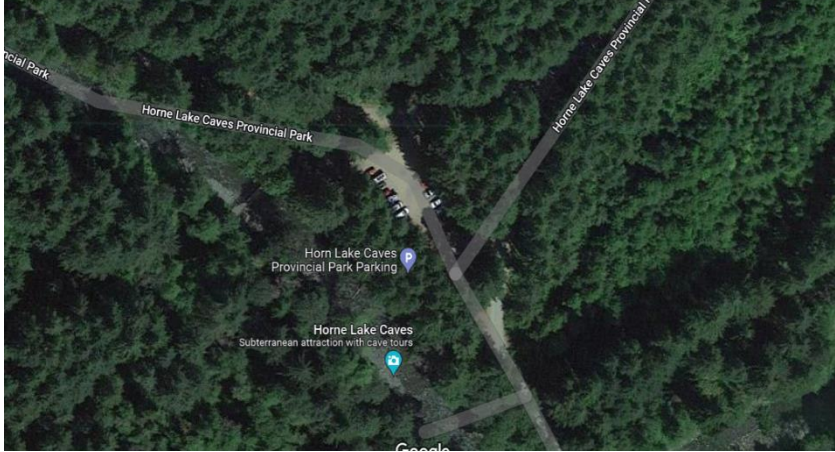
All times are approximate and for planning purposes only. They do not include advance time required to develop and distribute information to the public. Evacuations are dynamic and times are influenced by factors that may not be apparent during planning activities. The EOC should rely on the subject matter experts available during an evacuation for guidance.

ANNEX H. MUSTER SITE LOCATIONS

H.1 HORNE LAKE REGIONAL PARK

<p>Name: Horne Lake Regional Park Parking Lot</p>	
<p>Location: North of Horne Lake Electoral Area H</p>	
<p>Coordinates: 49.35101147552487, - 124.74118236013273</p>	
<p>Primary Use: Personal Vehicle Staging</p>	
<p>Single vehicle travel time to Caves Road Parking Lot: 2 minutes</p>	
<p>Description: This is the primary vehicle parking for tourist destination Horne Lake Regional Park. This is a central location for a muster site on the north side of Horne Lake in Electoral Area H. Inhabitants and those evacuating may be directed to muster here to await instruction from first responders or the EOC prior to evacuation through industrial roads. More than 15 vehicles may fit in this parking lot.</p>	

H.2 HORNE LAKE CAVES PROVINCIAL PARK

<p>Name: Horn Lake Caves Provincial Park Parking Lot</p>	
<p>Location: North of Horne Lake Electoral Area H</p>	
<p>Coordinates: 49.34459790977425, - 124.75028125216339</p>	
<p>Primary Use: Personal Vehicle Staging</p>	
<p>Single vehicle travel time to Horne Lake Provincial Park: 2 minutes</p>	
<p>Description: This is the primary vehicle parking for tourist destination Horn Lake Caves. This is a central location for a muster site on the north side of Horne Lake in Electoral Area H. Inhabitants and those evacuating may be directed to muster here to await instruction from first responders or the EOC prior to evacuation through industrial roads. Approximately 15 full-sized SUV vehicles may fit in this parking lot.</p>	

H.3 MEADOWOOD ELECTORAL AREA F

<p>Name: Meadowood Community Park</p>	
<p>Location: Meadowood Way and Galvin Place</p>	
<p>Coordinates: 49.327986809802134, - 124.56119344664843</p>	
<p>Primary Use: Personal Vehicle Staging, Resource Staging, or Transfer to Public Transit</p>	
<p>Description: The Meadowood Community Park offers a large space for the Meadowood neighborhoods to congregate prior to evacuation. This is a central location for the community and offers an easily accessible path by Galvin Place. With the growing population in Meadowood this muster site offers convenient space capacity. During urgent life safety considerations, positive traffic control may effectively direct the column of vehicles into the round about at Galvin Place in order to reduce congestion caused by the stop sign at the intersection of Corcan Road and Meadowood Way. This site may be an appropriate muster station for the safe transition of residents to large public transit buses during an evacuation.</p>	

ANNEX I. EVACUATION ORDER TEMPLATES

The following evacuation order templates have been included here for quick reference. For additional support templates please reference the Evacuation Operational Guide for First Nations and Local Authorities in British Columbia.

- Evacuation Alert
- Evacuation Order
- Evacuation Rescind

EVACUATION ALERT

[DESCRIPTOR OF AREA]

[DATE (mm/dd/yyyy) AND TIME (24-hr clock)]

An Evacuation Alert has been issued by [Local Authority/First Nation] at the Emergency Operation Center (EOC)

[Briefly describe event and potential risk]

Because of the potential danger to life and health, the [Local Authority/First Nation] has issued an **Evacuation Alert** for the following areas:

[Geographic description including boundaries and properties potentially impacted]

An Evacuation Alert has been issued to prepare you to evacuate your premises or property should it be found necessary. Residents will be given as much advance notice as possible prior to evacuation; however, you may receive limited notice due to changing conditions.

[Provide map or description of potential evacuation route and map of evacuation alert area]

WHAT YOU SHOULD DO:

- Locate all family members and designate a meeting area outside of the evacuation area, should an Evacuation Order be called while separated.
- Pack essential items such as government-issued ID, medications, eyeglasses, valuable papers (e.g. insurance, credit, and mortgage information), immediate care needs for dependents and, if time and space permits, keepsakes for quick departure.
- Prepare to move disabled persons, children and/or neighbours, if assistance is needed.
- Prepare to take pets with you and move livestock to a safe area (if possible).
- Arrange transportation for all your household members. Fill the gas tanks of personal vehicles. If transportation assistance is needed, call [contact number].
- Arrange accommodations for all members of the residence, if possible.
- Wait for an Evacuation Order to be issued before evacuating. Monitor [news/radio/online source] for information on evacuation orders and location of Reception Centers.

Further information will be issued at [date/time/meeting location], or visit [website/social media page] for more information.

[Signature of Board/Chair or designate, Mayor or Designate, Chief or Designate]

[Name of Local Authority/First Nation]

EVACUATION ORDER [DESCRIPTOR OF AREA]

[DATE (mm/dd/yyyy) AND TIME (24-hr clock)]

Pursuant to [Section 12 (1) of the *BC Emergency Program Act* / Band Council] an **Evacuation Order** has been issued by [Local Authority/First Nation] due to immediate danger to life safety caused by: [briefly describe event].

Members of the [local police department and other agencies] and other applicable agencies will be expediting this action.

The Evacuation Order is in effect for the following areas:

[Geographic description including boundaries and properties impacted. Include map of evacuation area and evacuation route]

YOU MUST LEAVE THE AREA IMMEDIATELY

WHAT YOU SHOULD DO:

- Follow the travel route provided and register at: [ESS Reception Center address and name of facility].
- If you need transportation assistance from the area, advise the person providing this notice or call [contact number].
- Shut off all gas and electrical appliances, other than refrigerators and freezers/
- Close all windows and doors.
- Close gates (latch) but do not lock.
- Gather your family and, if you have room, take a neighbour or someone needing transportation. Do not use more vehicles than you have to.
- Take critical items (medicine, purse, wallet, and keys) only if they are immediately available.
- Take pets in pet kennels or on leash.
- Do not use the telephone unless you need emergency service.

Further information will be issued at [date/time/meeting location], or visit [website/social media page] for more information.

[Signature of Board/Chair or designate, Mayor or Designate, Chief or Designate]
[Name of Local Authority/First Nation]

EVACUATION RESCIND

[DESCRIPTOR OF AREA]

[DATE (mm/dd/yyyy) AND TIME (24-hr clock)]

The Evacuation Order, pursuant to [Section 12 (1) of the *BC Emergency Program Act* / Band Council] issued at [date/time] to the area(s) [geographic location] has been rescinded.

[Indicate if an Evacuation Alert remains in effect]

An Evacuation Order may be reissued; however, if that is deemed necessary, the Evacuation Order process will re-commence.

WHAT YOU SHOULD DO:

- Fill the gas tank of personal vehicles.
- Bring a minimum of three days of food and essential supplies (e.g. medications, pet supplies) with you as local grocery stores may not yet have adequate stock.
- If your animals or livestock have been relocated, call [contact number] to coordinate their safe return.

Further information contact: [Local Authority/First Nation contact number].

[Signature of Board/Chair or designate, Mayor or Designate, Chief or Designate]

[Name of Local Authority/First Nation]