

COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

Resort Municipality of Whistler
whistler.ca/emergencyprogram



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List of Acronyms

APP	Mobile Application
BC	British Columbia
BCAS	British Columbia Ambulance Service
BCERMS	British Columbia Emergency Response Management System
CANUTEC	Canadian Transport Emergency Centre
CAO	Chief Administrative Officer
C&DFA	Compensation and Disaster Financial Assistance Regulation
CEMP	Comprehensive Emergency Management Plan
EMBC	Emergency Management British Columbia
EOC	Emergency Operations Centre
EPC	Emergency Program Coordinator
ESS	Emergency Social Services
FOIPPA	Freedom of Information and Protection of Privacy Act
GIS	Geographic Information Systems
HRVA	Hazard, Risk, Vulnerability Assessment
HUSAR	Heavy Urban Search and Rescue
IC	Incident Commander
ICS	Incident Command System
IT	Information Technology
NFPA	National Fire Protection Association
PECC	Provincial Emergency Coordination Centre
PREOC	Provincial Regional Emergency Operations Centre
PSEPC	Public Safety Canada
RCMP	Royal Canadian Mounted Police
RMOW	Resort Municipality of Whistler
UC	Unified Command
VCH	Vancouver Coastal Health
WAG	Whistler Animals Galore
WHCC	Whistler Health Care Centre
WSAR	Whistler Search and Rescue
WAG	Whistler Animals Galore
WFRS	Whistler Fire Rescue Service

List of Terms

All-hazards	The RMOW has adopted an all-hazards approach by recognizing and integrating common emergency management elements across all hazard types, and then supplementing these common elements with hazard specific sub-components to fill gaps only as required. As such, “All-Hazards” does not literally mean preparing to address any and all potential hazards in existence but rather emphasizes the common aspects of all hazards.
Agency	An agency is a division of government with a specific function, or a non-governmental organization (e.g., private contractor, business, etc.) that offers a particular kind of assistance.
Agency Representative(s)	An individual assigned to an incident from an assisting or cooperating agency who has been delegated authority to make decisions on matters affecting that agency's participation at the incident. Agency Representatives report to the Liaison Officer.
The British Columbia Response Management System (BCERMS)	The British Columbia Response Management System is a comprehensive management scheme that ensures a coordinated and organized Provincial response and recovery to any and all emergency incidents. The broad spectrum of components of the BCERMS includes: operations and control management, qualifications, technology, training and publications.
Chain of Command	A series of management positions in order of authority.
Command	The act of directing and / or controlling resources by virtue of explicit legal, agency, or delegated authority. May also refer to the Incident Commander.
Chief	The title for individuals responsible for command of functional sections: Operations, Planning, Logistics, and Finance/Administration. The term Chief is used at the site and EOC.
Critical Infrastructure	Refers to processes, systems, facilities, technologies, networks, assets and services essential to the health, safety, security or economic well-being of people and the effective functioning of government. Disruptions of critical infrastructure could result in catastrophic loss of life, adverse economic effects, and significant harm to public confidence.
Critical Resource	Material, personnel and finances that are in short supply and are needed by more than one incident management team, or local authority.
Emergency Management	The management of emergencies concerning all-hazards, including all activities and risk management measures related to prevention and mitigation, preparedness, response and recovery.
Emergency Operations Centre (EOC)	A designated facility established by a local government or private agency to coordinate the overall jurisdictional response and support to an emergency response.

Function	In BCERMS, function refers to the five major activities (e.g., Command, Operations, Planning, Logistics, and Finance). The term function is also used when describing the activity involved (e.g., the planning function).
Hazard	A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.
Incident Commander	The individual responsible for the management of all incident operations at the incident site.
Incident Command Post	The location at which the primary command functions are executed. The ICP may be collocated or shared with the incident base or other incident facilities.
Incident Command System	A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
Major Emergency	A present or imminent event that requires prompt coordination of actions concerning persons or property to protect the health, safety or welfare of people, or to limit damage to property or the environment.
Mutual Assistance Agreement	A pre-arranged agreement developed between two or more entities to render assistance to the parties of the agreement.
Operational Period	The period of time scheduled for execution of a given set of operational actions as specified in the action plan. Operational Periods can be of various lengths, although usually not over 24 hours.
Partner	Any individual, group, or organization that may assist in the response to a major emergency or disaster.
Prevention/Mitigation	Actions taken to eliminate or reduce the impact of disasters in order to protect lives, property, the environment, and reduce economic disruption. Prevention/mitigation includes structural mitigative measures (e.g. construction of floodways and dykes) and non-structural mitigative measures (e.g. building codes, land-use planning, and insurance incentives). Prevention and mitigation may be considered independently or one may include the other.
Resilience	Resilience is the capacity of a system, community or society exposed to hazards to adapt to disturbances resulting from hazards by persevering, recuperating or changing to reach and maintain an acceptable level of functioning. Resilient capacity is built through a process of empowering citizens, responders, organizations, communities, governments, systems and society to share the responsibility to keep hazards from becoming disasters.
Risk	The combination of the likelihood and the consequence of a specified hazard being realized; refers to the vulnerability, proximity or exposure to hazards, which affects the likelihood of adverse impact.

Risk-based	The concept that sound emergency management decision-making will be based on an understanding and evaluation of hazards, risks and vulnerabilities.
Risk Management	The use of policies, practices and resources to analyze, assess and control risks to health, safety, environment and the economy.
Unified Command	In ICS, Unified Command is a unified team effort which allows all agencies with jurisdictional responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives, strategies and action plans. This is accomplished without losing or abdicating agency authority, responsibility, or accountability.
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards. It is a measure of how well prepared and equipped a community is to minimize the impact of or cope with hazards.

Executive Summary

The Resort Municipality of Whistler (RMOW) is vulnerable to the risks posed by 32 unique hazards identified in the community Hazard, Risk & Vulnerability Assessment Report (2012). The identified hazards are characterized as human caused, technological or natural by nature. The RMOW has the primary responsibility for emergency response within its jurisdictional boundaries and will commit all available resources to save lives, minimize injuries and minimize property destruction. This document, the municipal Comprehensive Emergency Management Plan, herein referred to as the “CEMP” or the “plan”, establishes a management methodology, consistent with the provincial government concept of operations, through which the RMOW will mobilize and manage municipal resources and coordinate emergency management activities in the event of a major emergency or disaster.

The ultimate goal of any emergency response is to return the community to a state of normalcy with minimal impact.

The plan is designed to be utilized as a "tool box," where each department or staff member of the RMOW may apply a specific portion of the plan to their operations during a major emergency or disaster. The plan will establish both general and specific responsibilities during major emergencies or disasters, or at other times when the Emergency Operations Center may be activated. The plan seeks to facilitate compliance with regulatory requirements of Federal, Provincial and Local policy.

In keeping with the federal and provincial emergency management structure, the plan follows an ‘all-hazards approach’ meaning that the same management strategies and emergency response structure are used to respond to any major emergency or disaster within the RMOW, regardless of the cause. This ‘all hazards’ concept increases efficiency by recognizing and integrating common emergency management elements across all hazard types, and then supplements these common elements with hazard specific guides to fill gaps as required. This plan will not, nor can it be expected to address every possible major emergency or disaster situation, therefore it encourages generalized preparedness and empowers RMOW stakeholders with the resources and knowledge they need to prepare.

Emergency events generally progress in stages from local to regional to provincial to federal levels of government response. The type and severity of the emergency primarily determines when, and to what extent, local, regional, provincial and federal government and non-government organizations participate. The CEMP is designed to ensure that all agencies and organizations which may become involved in emergencies are aware of their respective roles and responsibilities during that emergency and participate appropriately in the emergency management structure at the RMOW.

The CEMP makes provisions for the earliest possible coordinated response to an emergency. It provides the reader an understanding of the resources available to the municipal Emergency Operations Center and identifies where additional resources and expertise can be called upon if required.

The goal of the CEMP is to provide guidance and direction to the RMOW, external agencies, support organizations and constituents to achieve the following goals:

1. Outline the RMOW's authority and responsibilities to act in major emergencies and disasters.
2. Provide an understanding of the authorities, working relationships, responsibilities and functions of municipal departments, senior levels of government and various support organizations relative to a major emergency or disaster.
3. Provide guidance for the continuity of municipal government in a major emergency or disaster.
4. Describe actions the community should take to mitigate losses.
5. Optimize the management of response operations including activation of the Emergency Operations Centre, coordination of multi-jurisdiction activity, and mobilization of critical resources.
6. Initiate orderly and controlled evacuations of local residents and visitors to the community, as deemed necessary.
7. Ensure that evacuees are provided with essential services including shelter, food, clothing, first aid, family reunification and emotional support.
8. Expedite the restoration of essential services and critical facilities as soon as practicable.

The CEMP has been prepared to the National Fire Protection Association 1600 Standard for emergency response plans. The CEMP replaces the 2005 RMOW Emergency Plan, the 2005 RMOW Emergency Operations Centre Plan, and the 2008 RMOW Recovery Plan. The information originally found in these three separate documents has been streamlined and updated to create an up-to-date comprehensive plan. The CEMP is not designed as a shelf plan, but rather a readable, working document that is continuously revised through exercises and departmental evaluation.

The CEMP is structured to be flexible to adapt to a broad spectrum of major emergencies and disasters and is supported with the following:

1. Adequate personnel, equipment and expertise; and
2. Training and exercises; and
3. Review of the CEMP on an annual basis; and
4. Familiarity with contents of the CEMP by participating agencies and organizations; and
5. Awareness of resources available from neighboring municipalities and the private sector, supplemented by prearranged agreements; and
6. Review of the CEMP following any incidents or exercises where it is implemented.

Planning and mitigation efforts combined with trained staff and early mobilization of emergency resources will significantly reduce the potential overall impact of a major emergency or disaster.

Whistler's response to and recovery from major emergencies and disasters is domestically important for the British Columbian and Canadian economy. The total estimated end-consumer commercial spending in Whistler is \$1.27 Billion per year. Updated 2012 research has revealed that the annual tax revenue (federal, provincial and municipal) generated by Whistler spending is \$428M per year, or approximately \$1.17M per day. (RMOW, 2013). Given this estimate, Whistler-based tourism export

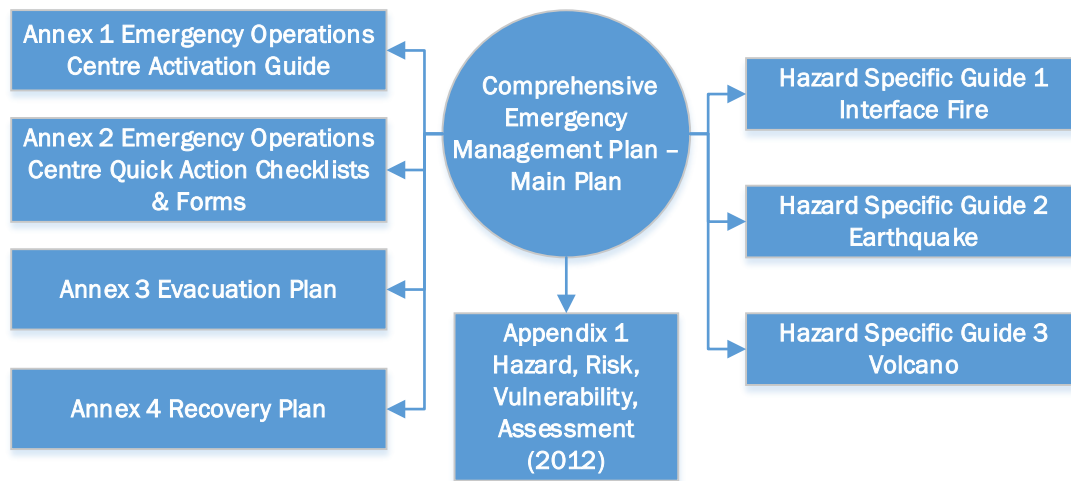
revenues represent 22.5% of all tourism export revenues generated within British Columbia. A major emergency or disaster in Whistler could cause a significant decline in the number of tourists visiting the area and as a result a decrease in the amount of money spent. Therefore Whistler's ability to recover as quickly as possible, and resume tourism operations, has a wide-ranging impact on both the local, provincial and federal economy.

1 PLAN ADMINISTRATION

1.1 Comprehensive Emergency Management Plan (CEMP) Organization

In keeping with the National Fire Protection Association (NFPA) 1600 standard for emergency response plans, the RMOW has adopted a functional approach to the structure of the CEMP meaning it consists of a main plan, emergency functional annexes, hazard specific guides and appendices.

Figure 1 CEMP Organization Diagram



The Main Plan

The main plan, describes the structure and process through an all-hazards planning approach, based on a major emergency or disaster of any magnitude or geographic size. The main plan provides general guidance for primary RMOW resources and outlines the procedures for such major tasks as notification, organizational structure including roles and responsibilities, and Emergency Operations Center (EOC) coordination and staffing. The main plan cites the legal authority for emergency operations.

Emergency Functional Annexes

The emergency functional annexes are plans organized around the performance of a broad task. Each annex focuses on one of the critical emergency functions that the RMOW may perform in response to a major emergency or disaster such as evacuations. The primary audiences for the emergency functional annexes are oriented towards operations; i.e. those who perform the tasks. They do not repeat general information of the main plan. The emergency functional annexes do not address specific major emergencies or disasters, but rather provide a general framework that may be adapted for emergency operations during any type of incident.

Hazard-Specific Guides

Certain hazards or situations present a greater risk or vulnerability for the RMOW and the RMOW should have specific response plans for such incidents. Based on an assessment of potential impacts and likelihood of occurrence, the Hazard, Risk and Vulnerability Assessment (HRVA; 2012; [Appendix 1](#)) assigned a high-hazard rating to five potential hazards. At the recommendation of the CEMP sub-committee hazard-specific guides have been developed for the three high-rated hazards including volcano, earthquake, and interface fire. Hazard-specific guides expand on the framework of the main plan, and provide additional guidance for responding to specific situations. The guides focus on the special planning needs of a particular hazard addressing the essential operational actions that must be accomplished to facilitate the effective response to a specific type of major emergency or disaster.

Appendices

Appendices will be added to each CEMP document and Annexes as needed and may include checklists, legislative documents, forms, maps and resource lists. These documents contain information that staff and responders may need to fulfill responsibilities and perform tasks assigned in the CEMP. They may be attached to the CEMP or referenced as deemed appropriate.

1.2 Authority

The authority for the Resort Municipality of Whistler (RMOW) Comprehensive Emergency Management Plan (CEMP) is derived from law in British Columbia (BC) including; the *Emergency Program Act* (2005); the Local Authority Emergency Management Regulation (2004) and the RMOW Municipal Emergency Measures Bylaw No.1592 (2002). The CEMP is published to fulfill the legislative requirements of the RMOW. This plan shall be approved by Council in accordance with the RMOW Emergency Measures Bylaw No.1592 (2002).

The Emergency Measures By-law provides the authority for the RMOW to establish an emergency program, develop plans, spend funds, take action in response to threats and when required, and declare a State of Local Emergency.

1.3 Applicable Legislation & Policy

The following is a list of legislation that is relevant to the RMOW Emergency Program. This is not exhaustive and there may be other applicable legislation not listed. This legislation and supporting regulations identify the requirements for Local Authorities to establish and maintain an emergency management organization, to develop and implement emergency plans regarding the preparation for, response to, and recovery from emergencies and disasters.

1. Emergency Program Management Regulation, 1994;
2. Compensation & Disaster Financial Assistance Regulation, 1995;
3. Local Authority Emergency Management Regulation, 1995;
4. RMOW Emergency Measurers Bylaw No.1593, 2002

In addition to the legislation and regulations listed above individual hazards may be governed by specific statutes (e.g. Wildfire Act).

1.4 Confidentiality

The CEMP contains both general and confidential information. General information used when preparing the CEMP is available publically. Some specific content in the CEMP is strictly for internal use and will not be contained in the public version of the CEMP; examples include personnel phone lists, and details of critical infrastructure. These exclusions exist as the RMOW is bound by the *Freedom of Information and Protection of Privacy Act (FOIPPA)*. Some pages and sections of the CEMP will be intentionally left blank for confidentiality purposes.

1.5 Maintenance

The RMOW Emergency Program Coordinator is responsible for maintaining the CEMP. This is accomplished through consultation with the Emergency Planning CEMP sub-committee and the Emergency Planning Committee. The plan will undergo revision if there are changes to legislative requirements, changes to the risks the community faces, changes to the structure of the RMOW or as changes are identified by RMOW staff. The reason for the revision should be supplied through a memorandum and the request authorized by the appropriate supervisor. Major revisions will be

presented to the Emergency Planning Committee for final approval. Agreed upon changes will be implemented as soon as reasonably practical.

1.6 Revisions

All changes to the CEMP will be documented in the revision history.

1.6.1 Minor Revisions

Revisions that are considered minor in nature such as spelling, grammar, resource contact information, formatting and typos will be made as required by the Emergency Program Coordinator and summarized and presented to the CEMP sub-committee.

1.6.2 Major Revisions

Revisions that are considered major in nature such as re-organization of information within the document, the addition of sections, the elimination of content or changes in terminology will be presented to the CEMP sub-committee for discussion and approval prior to revision of the CEMP. Major revisions will be presented to the Emergency Planning Committee for final approval.

All requests for additions, deletions or amendments to this plan should be addressed to:

Emergency Program Coordinator
 The Resort Municipality of Whistler
 4325 Blackcomb Way
 Whistler, BC V0N 1B4
 Phone: 604-935-8472
 E-mail: eocwhistler@whistler.ca
 Web: www.whistler.ca/emergencyprogram

Table 1 Revision to Manual

Revision Number	Description of Change	Revised By	Revision Date
Initial Version 1.0	Complete revision of the RMOW 2005 Emergency Plan, 2005 Emergency Operations Centre Plan and 2008 Community Disaster and Recovery Plan.	Emergency Plan Working Group E. Marriner, et al.	
	Renamed the RMOW Comprehensive Emergency Management Plan (CEMP)		

The status of the CEMP shall be described according to the following phrases, which will appear on the cover and title pages.

1.6.3 Plan Status

Draft Plan

Denotes a plan which is in the process of development, is subject to change as a result of internal or external review, and is also still subject to approval by the CEMP sub-committee.

Interim Plan

Denotes a plan that has been extensively reviewed which may or may not have been exercised or evaluated, and which has received approval from the Emergency Planning Committee. Interim Plan is

considered a working document and would be used to respond to an actual major emergency or disaster.

Approved Plan

Denotes a plan which has completed the review process, has likely been exercised and evaluated, and has received all of the necessary approvals. Approved plans should be reviewed annually, and all plan holders notified of any changes and provided with revised pages or electronic files of the plan. The plan shall be approved by Council in accordance with the RMOE Emergency Measures Bylaw No.1592 (2002).

Public and Confidential Versions

The public version of the CEMP will be apparent through the use of the watermark “Public Version” throughout the document. The confidential version of the CEMP will be appropriately marked through the use of the watermark “Confidential” on pages that contain information that requires protection identified under FOIPPA.

1.7 Plan Distribution

The RMOE Emergency Program Coordinator will distribute the CEMP as authorized by the RMOE Emergency Planning Committee. An electronic copy of the CEMP is available to the public through the RMOE website at www.whistler.ca/emergencyprogram and all municipal employees through the RMOE SharePoint website. Printed copies of the CEMP will be limited to select locations and personnel. For ease of navigation and to follow the structure of the plan, it is best viewed in digital formats, such as Adobe.

The plan will be distributed to internal departments and external partners, agencies and organizations. The RMOE Emergency Planning Committee will determine who receives the plan.

Upon receipt of a revision transmittal of the CEMP:

1. Ensure the procedure number is the next in sequence to the previous issue
2. Process the amendments per the transmittal instructions
3. Complete the Revision Record page
4. Notify Emergency Program Coordinator

Please contact the Emergency Program Coordinator immediately should any discrepancy be noted.

Table 2 Internal Plan Distribution List

Plan Number	Copy Type	Assigned to	Date
1-6	Memory Stick & Print	RMOE Primary Emergency Operations Centre at Public Safety Building	
7	Memory Stick & Print	RMOE Secondary Emergency Operations Centre at Public Works Yard	
8	Memory Stick & Print	Fire Hall 1	
9	Memory Stick & Print	Chief Administrative Officer	
10	Memory Stick & Print	General Manager, Infrastructure Services	
11	Memory Stick & Print	General Manager Resort Experience	
12	Memory Stick & Print	General Manager of Corporate and Community Services	
13	Memory Stick & Print	Whistler Fire Rescue Service Fire Chief	
14	Memory Stick & Print	Whistler Royal Canadian Mounted Police	
15	Memory Stick & Print	Emergency Program Coordinator	
16	Print	Emergency Program File #851	

Table 3 External Plan Distribution List

All agencies will be provided information on where to access this CEMP.

Content Type	Assigned to	Date
Electronic PDF	BC Ambulance Service	
Electronic PDF	BC Hydro	
Electronic PDF	BC Transit	
Electronic PDF	BC Wildfire Management Branch Coastal Fire Centre	
Electronic PDF	BC Wildfire Management Branch <ul style="list-style-type: none"> Pemberton Fire Base Squamish Fire Base 	
Electronic PDF	CN Rail	
Electronic PDF	District of Squamish, Emergency Program	
Electronic PDF	Emergency Management British Columbia	
Electronic PDF	Fortis BC	
Electronic PDF	Ministry of Transportation & Infrastructure	
Electronic PDF	Squamish Lillooet Regional District Emergency Program	
Electronic PDF	Sea to Sky School District No. 48	
Electronic PDF	Tourism Whistler	
Electronic PDF	Vancouver Coastal Health Authority <ul style="list-style-type: none"> Emergency Program Whistler Health Care Centre 	
Electronic PDF	Village of Pemberton, Emergency Program	
Electronic PDF	Whistler Blackcomb	
Electronic PDF	Whistler Chamber of Commerce	
Electronic PDF	Whistler Search and Rescue	
Electronic PDF	Whistler Sliding Centre	
Electronic PDF	Whistler Transit	
Electronic PDF	Whistler.ca website	

2 INTRODUCTION

2.1 Scope of This Plan

This plan is designed and intended to address numerous hazards that may affect the RMOW. Through the utilization of an all-hazards planning model, this plan may be used for any type of incident, whether natural, human-caused, or technological. This plan applies to all departments and personnel of the RMOW, although some departments or agencies may have more specific roles and responsibilities within emergency operations.

An all-hazards planning model recognizes that the actions required to respond to any major emergency or disaster are essentially the same, irrespective of the nature of the incident. This allows for one common plan that can be used to respond to different types of incidents thereby permitting an optimization of planning, response and support resources.

A major emergency or disaster may result from an existing emergency or it may be a result of the threat of an impending situation abnormally affecting property or the health, safety and welfare of the community. The nature and magnitude of any specific emergency requires a controlled and coordinated response by first responders and when required, the support of that response by both governmental and private industry, under the direction of the British Columbia Emergency Response Management System (BCERMS).

The following triggers drive the use of the CEMP:

- The event requires coordination of multiple agencies.
- The event requires centralized decision-making to mitigate losses.
- The event requires a coordinated communication strategy.
- The event requires coordination with other levels of government.
- The event requires attention outside the scope of regular business activities.
- The event requires information-gathering and analysis from multiple sources.
- The event is planned and requires active management to ensure public safety should an emergency occur.
- The event requires the activation of the RMOW EOC.

2.2 Emergencies & Major Emergencies

2.2.1 Emergencies

Emergencies are those incidents which the Whistler Fire Rescue Service (WFRS), the RCMP (Royal Canadian Mounted Police), the British Columbia Ambulance Service (BCAS) and RMOW departments routinely respond to on an ongoing, day-to-day basis. These emergencies can be managed in a relatively normal manner and, if required, from an Incident Command Post (ICP) at the site of the incident. The RMOW's first responder resources are adequate and available to deal with the emergency, and it should not be necessary to activate the EOC.

The municipal bylaw defines emergencies as:

"Emergency" means a present or imminent event that:

- i. is caused by accident, fire, explosion or technical failure or by the forces of nature; and
- ii. requires prompt coordination of action or special regulation of persons or property, to protect the health, safety or welfare of people or to limit damage to property;

2.2.2 Major Emergencies and Disasters

Major emergencies and disasters occur when normal deployment of the RMOW's first responder resources require substantial assistance to adequately cope with the size and severity of the situation. The need therefore exists for central coordination of response and recovery activity and executive decision making for obtaining whatever additional support is required. The EOC is activated to support the needs of the emergency. Mutual aid agreements may be implemented and assistance may be required from provincial and/or federal levels of government. The nature and magnitude of the emergency event will determine what aspects of the CEMP are to be utilized and/or whether a declaration of a state of local emergency is required.

The RMOW HRVA identified 32 potential hazards in the RMOW that may require non-routine emergency response and as a result would be considered major emergencies or disasters.

The RMOW Emergency Measures Bylaw no.1593 defines Disasters as:
"Disaster" means a calamity that:

- i. is caused by accident, fire, explosion or technical failure or by the forces of nature; and
- ii. has resulted in serious harm to the health, safety or welfare of people, or in widespread damage to property;

2.3 Use of the CEMP

The CEMP may be used if a major emergency or disaster exists or appears imminent, has occurred, or threatens to occur. The plan may be used at any time that a major emergency or disaster is anticipated or realized;

- partially or completely – the magnitude of the emergency will dictate what actions are required;
- with or without the activation of the EOC;
- with or without a declaration of a state of local emergency; and
- without formally stating that the plan has been activated.

A declaration of a State of Local Emergency is not necessary to implement this plan or the EOC.

The RMOW or a person designated by the RMOW may use the plan if it is thought that an emergency exists or appears imminent or a disaster has occurred or threatens any of the following:

- a. the jurisdictional area for which the local authority has responsibility, or
- b. any other municipality or electoral area if the local authority having responsibility for that other jurisdictional area has requested assistance.
- c. If a Provincial emergency plan has been implemented under section 7 of the *BC Emergency Program Act*, a local emergency plan may be implemented or its implementation may be continued under subsection (1) of this section if and to the extent that the local emergency plan is not in conflict with the Provincial emergency plan.

The plan is intended for use only within the jurisdictional boundaries of the RMOW.

The RMOW may utilize the CEMP to meet requests from other local authorities and/or support a regional emergency event. In addition to using this plan, it is expected that RMOW General Managers and staff will use departmental emergency plans as required.

2.4 Involvement of Municipal Departments and Employees

2.4.1 Municipal Departments

The nature and magnitude of the major emergency or disaster will determine which municipal departments will be called out to actively participate in a response. [Section 8 Roles and Responsibilities](#) provides detailed information on the how RMOW departments may participate.

2.4.2 Municipal Employees

It is a municipal policy that in the event of major emergency or disaster, municipal employees will make themselves available for work as soon as possible subject to this being done safely and after personal and family needs have been met.

What is expected of employees during and after a major emergency or disaster?

Employee is at work:

1. Ensure personal safety.
2. Attend to the safety needs of other employees, residents or any visitors in your immediate area.
3. Decide whether you have to leave work to attend to urgent family matters at home, or alternatively, if you can remain at work.
4. Obtain information on the status of roads and/or road conditions.
5. If you leave work be sure to tell your supervisor (or a suitable alternate if your supervisor is not available) that you are leaving.
6. If you are able to remain at work, immediately report to your supervisor (or a suitable alternate if your supervisor is not available), and as soon as possible, inform family members where you can be contacted.

Employee is at home:

If a major emergency or disaster occurs when employees are at home:

1. Ensure personal safety.
2. Attend to any medical or other needs that family members may have.
3. Help neighbors by attending to any lifesaving needs they may have.
4. Try to telephone your supervisor or the Municipal Hall switchboard to ascertain if and when you may be required to report to work.
5. If contact cannot be made with the Municipality, report for work if possible without jeopardizing personal safety.
6. Tell family or neighbors where you can be contacted prior to leaving for work.
7. Monitor radio and television stations for emergency bulletins and road status.

3 CONCEPT OF EMERGENCY OPERATIONS

The RMOW has adopted BCERMS as its model for managing and coordinating emergency response and recovery efforts. It is based on the Incident Command System (ICS) used by first response agencies. BCERMS is the recommended standard for emergency response and recovery for all levels of government in Canada. BCERMS is used by first responders at the site of an emergency, in the RMOW EOC and in the operations centers of higher levels of government. BCERMS provides a framework for a standardized process for organizing and managing a response to emergencies and disasters.

3.1 BCERMS Levels

BCERMS anticipates response organization at four levels:

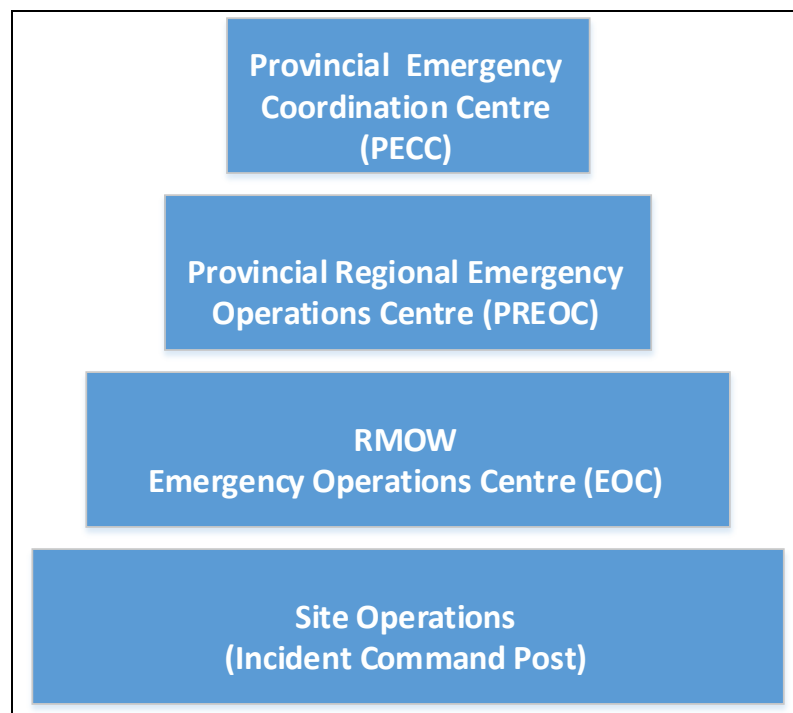
Site – The location where an emergency occurs is called the “site.” This is usually where hazardous conditions demand careful and coordinated action. An Incident Commander (IC) is always present to oversee site activities.

Site Support – An EOC, if required, is activated to oversee and coordinate all non-site activities in support of the IC. This is the focus of the RMOW’s CEMP.

Regional Support – If an emergency is very large, a Provincial Regional Emergency Operations Centre (PREOC) may be established to provide support and coordination to one or more EOCs. An EOC normally turns to the PREOC for support when all other resources are exhausted, or they require coordination that is outside their jurisdiction. The PREOC serving the RMOW is located in Surrey.

Provincial Support – If a PREOC requires support, it requests assistance from the Provincial Emergency Coordination Centre (PECC) in Victoria. If a PREOC is established, the PECC in Victoria is also activated to coordinate provincial operations and resources.

Figure 2 BCERMS Response Levels



3.2 BCERMS Guiding Principles

BCERMS is a management system with a set of policies and guiding principles that apply to all four levels. These guiding principles are described below.

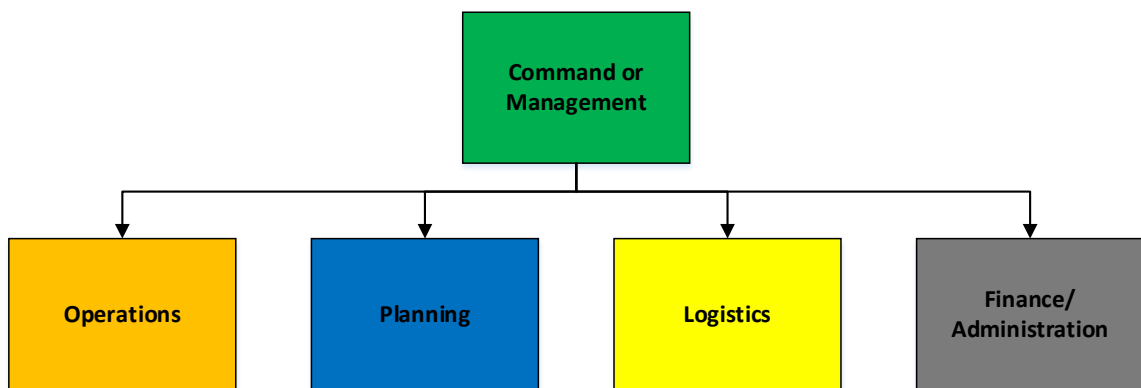
Management Functions

BCERMS adopts the five essential management functions of the ICS:

- Command
- Operations
- Logistics
- Planning
- Finance/Administration

The individual designated as the EOC Director in an EOC has responsibility for all functions. That person may elect to perform all activities, or delegate authority to perform functions to other people in the organization. Delegation does not, however, relieve the EOC Director from overall responsibility.

Figure 3 ICS Management Functions



Management Support

Certain staff functions are required to assist the person in charge during EOC activations. These are referred to as command or management staff. There are three positions:

- Risk Management
- Liaison
- Information

Management by Objectives

The management by objectives feature means that each BCERMS level establishes known objectives to be achieved for a given time frame, known as “operational period.” Management by objectives draws a direct link between policies and actions and calls for four basic steps:

1. Understand agency policy and direction
2. Establish incident objectives
3. Select appropriate strategy
4. Perform tactical direction, such as applying tactics appropriate to the strategy, assigning the right resources, and monitoring performance

Unity and Chain of Command

"Unity of Command" means that every individual has one designated supervisor. "Chain of Command" means that there is an orderly line of authority within the organization. Both concepts apply at the site and the EOC.

Action Plans

All levels of BCERMS develop action plans to guide their activities during pre-impact, response and recovery phases. At the site level, verbal or written incident action plans contain objectives, strategies and tactical assignments for one operational period. At each of the three higher levels, including the EOC, action plans address the policies, priorities and resource requirements that support the level immediately below as well as direction across government in larger emergencies and disasters. Every incident must have oral or written action plans that provide all incident supervisory personnel with direction for future actions. Action plans should include the measurable or observable tasks to be performed. (See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for an EOC Action Plan template EOC 502).

Operational Period

An operational period is a length of time set by command at the site level, and by management at the EOC, to achieve a given set of objectives. The operational period may vary in length and will be determined largely by the dynamics of the emergency situation. An operational period may be designated to a maximum 24 hour period.

Unified Command (UC)

UC allows all agencies who have jurisdictional or functional responsibility for an incident to jointly develop a common set of incident objectives and strategies. This is accomplished without losing or giving up agency authority, responsibility, or accountability. All incidents where UC is applied shall function under a single, coordinated Action Plan. The emergency type and location dictate the composition of the UC.

Span of Control

Maintaining a reasonable span of control is the responsibility of every supervisor at all BCERMS levels. An effective span of control is determined by the ability of each supervisor to monitor the activities of assigned staff and to communicate effectively with them. Every position in the EOC must monitor the number of others reporting to him or her to avoid overload. Acceptable span of control may vary from three to seven, and a ratio of one to five reporting elements is recommended.

Common Terminology

In BCERMS, common terminology is applied to functional elements, position titles, facility designations and resources. The purpose of common terminology is to enable multi-agency, multi-jurisdiction organizations and resources to work together effectively. Common terminology will be used when referring to organizational elements, position titles, resources, and facilities.

BCERMS Response Goals

BCERMS supports a prescribed set of response goals set out in priority as follows:

- Provide for the safety and health of all responders
- Save lives
- Reduce suffering
- Protect public health
- Protect critical infrastructure
- Protect property
- Protect the environment; and
- Reduce economic, social and property losses

BCERMS response goals look beyond government infrastructure and take a more holistic approach which recognizes that not all critical infrastructures may be owned by government. E.g. telecommunications

Figure 4 BCERMS Response Goals



4 EOC ACTIVATION

The EOC is the municipal facility activated prior to, or during, a major emergency or disaster when coordination and resource requirements at the site level cannot be managed through routine procedures. The EOC is largely staffed by municipal personnel representing RMOW departments, and representatives from other agencies and trained volunteers. The EOC supports all response activities at the site and provides overall policy direction to the responders. Specifically, it centralizes information about the emergency; coordinates emergency response among municipal departments and agencies; identifies critical needs, and establishes emergency response priorities. In addition, the EOC provides timely information to the public concerning the major emergency or disaster.

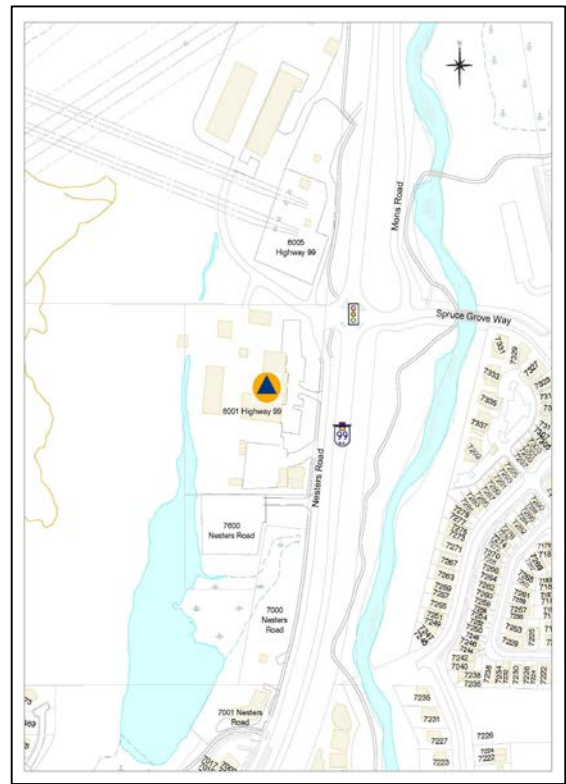
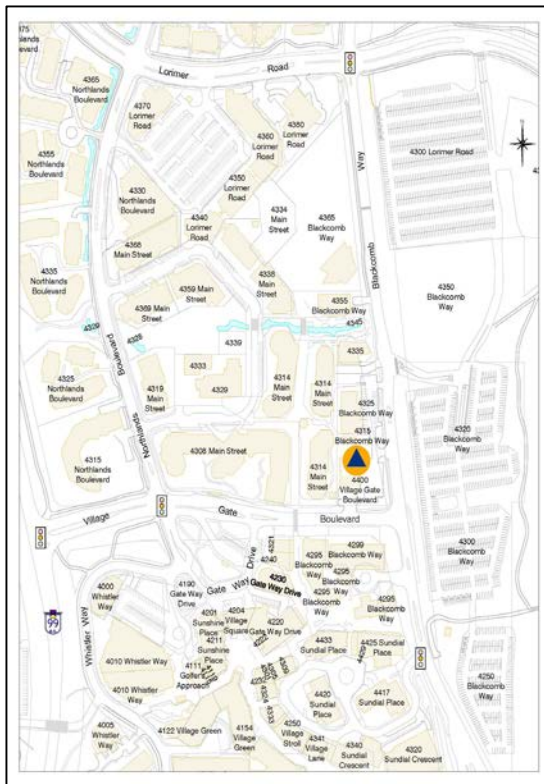
4.1 EOC Locations

The primary EOC is located at:

Municipal Public Safety Building
4325 Blackcomb Way, Whistler, BC

The alternate EOC is located at:

Public Works Yard
8001 Hwy 99, Whistler, BC



4.2 EOC Activation Criteria

The EOC may be activated if any of the following conditions exist:

- Significant number of people at risk
- Additional resource support is required at the site
- Additional authority is required (e.g., Declaration of State of Local Emergency)
- Evacuation has occurred or there is evacuation potential
- Event crosses jurisdictional boundaries (e.g., train derailment, flood, earthquake)
- Multiple sites involved
- Coordination of multiple agencies, beyond what site can adequately handle

- Magnitude and potential duration of event (e.g., forest fire, flood, earthquake)
- Significant property damage – private and/or public
- Significant financial risk to private sector
- Environmental risks
- Major planned event or special event

Note: The EOC may be activated with or without a declaration of state of local emergency; however, it must be activated once a declaration has been made.

4.3 Types of Activation

4.3.1 Pre-empted Activation

A pre-empted activation is a minimal activation of the EOC intended to actively monitor the conditions that could lead to a major emergency or disaster but is not yet a major emergency or disaster. An example of this is severe weather, flood concerns, etc. The EOC may open virtually or physically depending on the nature and complexity of the anticipated event. While a virtual EOC is effective in some instances, face-to-face collaboration between decision-makers is a more effective and efficient form of problem-solving and therefore a physical EOC should be used if possible.

Pre-empted EOC activities would focus on monitoring the conditions and preparing plans and documents should the event materialize. At this time the site would not be asking for assistance or resources. Upon notification that a community has been damaged by severe weather the EOC will go to an Emergency Activation.

4.3.2 Emergency Activation

Emergency activations are for unanticipated events that give little warning and require prompt coordination of action or special regulation of persons or property to protect the safety, health or welfare of people or to limit damage to property.

4.4 Authorization to Activate the EOC

The RMOW Chief Administrative Officer (CAO) will authorize the activation of the EOC. Most likely, the WFRS, RCMP, BCAS and/or Public Works/Engineering dispatch centers will receive the initial reports of a major emergency or disaster from site personnel or an IC. These agencies should follow established procedures detailed in their departmental emergency plans. If it is determined that additional support is required the IC will request activation of the EOC. The IC should seek EOC authorization through their General Manager. The General Manager will then seek authorization through the CAO. If the General Manager is unavailable, the IC may contact the CAO directly. If the CAO is unavailable the IC should contact an alternate General Manager. See [Annex 1 Emergency Operations Centre Activation Guide](#) for a detailed guide on authorizing and activating the RMOW EOC.

The RMOW has developed a mobile application (APP) to assist in the activation of the EOC. Using the APP, authorized personnel can determine the level of EOC activation and notify EOC staff directly from a handheld mobile device.

4.5 Level of Activation

The RMOW recognizes three levels of EOC activation; these mirror the BCERMS activation guidelines. The EOC is staffed to a level that matches the needs of the incident. The size and composition of the EOC may vary according to the requirements of the particular circumstances. It is the responsibility of the EOC Director to determine the level of activation that is required. See [Table 4](#) below for a detailed list of EOC Activation Levels and [Annex 1 Emergency Operations Centre Activation Guide](#) for a detailed flowchart to assist with decision-making. Alternatively, this information is available on the EOC APP.

Table 4 EOC Activation Levels

Activation	Event/Situation
Level 1 <i>Low level Activation</i>	<ul style="list-style-type: none"> • Isolated event • One site with two or more agencies involved • Potential threat of flooding or severe storm, interface fire (examples) • Minimal evacuations • EOC may be ‘virtual’ at own desks
Level 2 <i>Medium Activation</i>	<ul style="list-style-type: none"> • Moderate Event, two or more sites • Several agencies involved • Limited evacuations • Some resources/support required
Level 3 <i>Full Activation</i>	<ul style="list-style-type: none"> • Major event, multiple sites • Regional or Provincial disaster • Multiple agencies involved • Extensive evacuations • Resources/support required

4.6 Notifications to Staff

Once EOC approval has been granted and the Level of Activation has been determined, the CAO or Delegate assumes the role of EOC Director and notifies the appropriate staff using either the RMOW Emergency Operations Centre Contact List, found in [Annex 1 Emergency Operations Centre Activation Guide](#) or the RMOW EOC APP or both.

Level 1 EOC Personnel will be notified and required to attend all EOC activations.

Level 1 EOC Personnel include:

1. CAO
2. All General Managers
3. RCMP, Whistler Detachment Commander
4. WFRS, Fire Chief
5. Manager of Communications
6. Emergency Program Coordinator
7. Manager of Legislative Services

The caller will provide the following information:

- Brief description of the major emergency or disaster
- Identity of who authorized EOC activation
- Where and to whom you are to report
 Inquiry as to estimate time of arrival at EOC

4.7 Deactivation

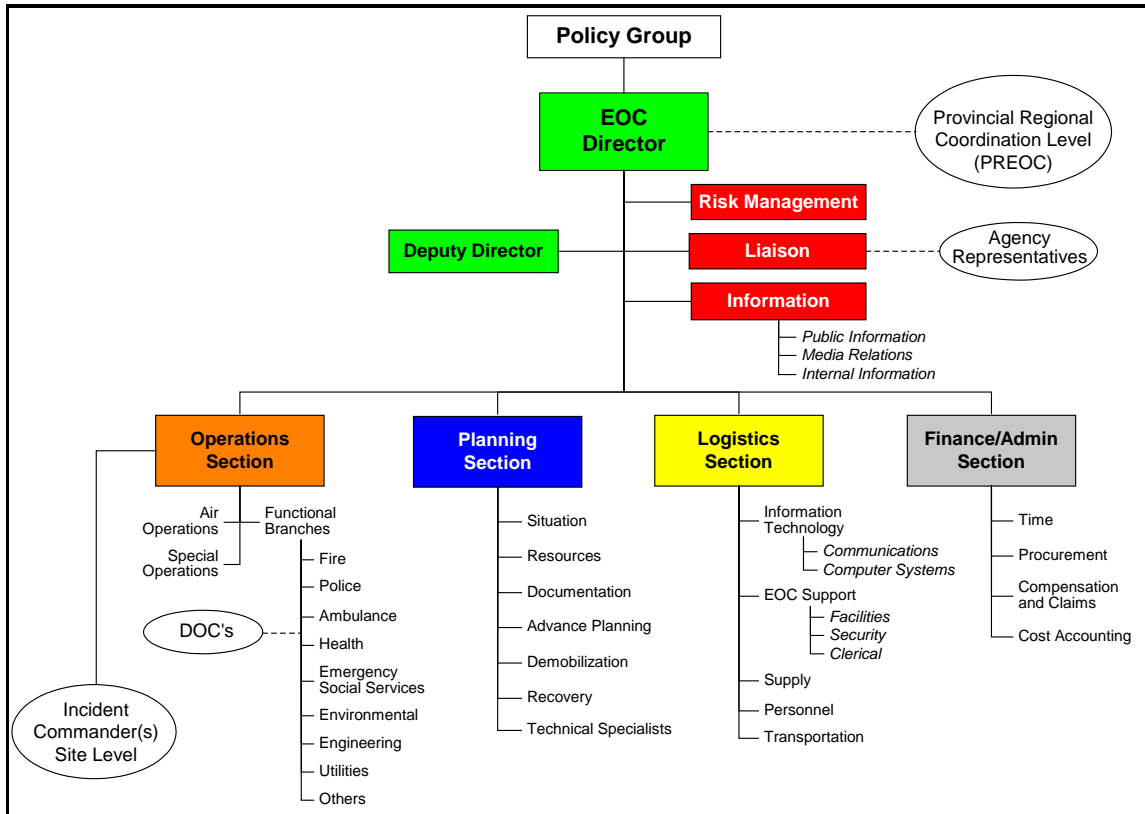
The EOC Director will decide at what point EOC activity can be terminated. The Planning Section’s Demobilization Unit Coordinator supervises and administers the termination process, staying behind if necessary after the EOC is closed. Upon deactivation the EOC should immediately be returned to a state of readiness for future emergencies. A suggested criterion for terminating EOC operations includes:

- Individual EOC functions are no longer required
- State of local emergency is lifted
- Coordination of response activities and/or resources is no longer required
- Event has been contained and emergency personnel have returned to regular duties

5 EOC ORGANIZATION

The EOC operates under the structure of BCERMS, and is comprised of various sections. The EOC structure for a fully developed response organization is shown in Table 5 EOC Organization Chart below. It is important to remember that not every EOC function will be filled in every EOC activation. The situation at hand will dictate the functions to be activated.

Table 5 EOC Organization Chart



5.1 EOC Staffing and Sections

The staff for the EOC may be composed of designated municipal employees, community members, and support agency representatives who have been trained in advance. EOC personnel and agencies may change throughout the course of an emergency. [Table 6 EOC Function Identification and Section 5.2](#) lists brief descriptions of each of the EOC Sections. [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) provides checklists for all EOC Sections, Branches, and Units required to staff the RMOW EOC in a major emergency or disaster.

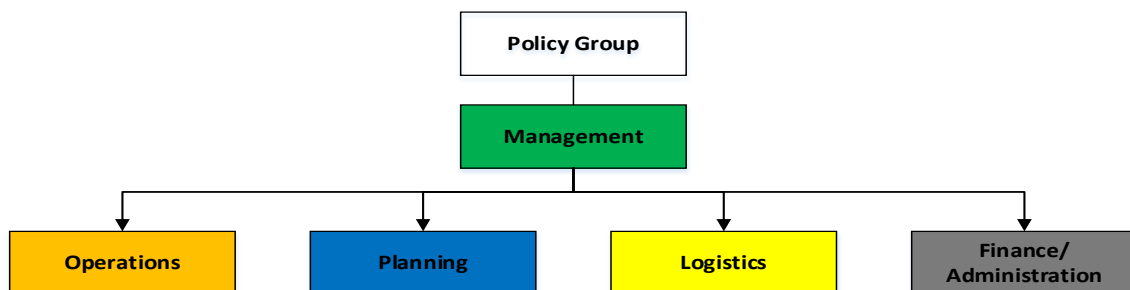
Table 6 EOC Function Identification

EOC Section	Role
Policy Group	The Policy Group supports the EOC’s efforts by providing strategic interpretation of existing policies and developing new policies to guide response and community recovery.
Management	Responsible for overall coordination of the EOC; public information, media relations; agency liaison; and proper risk management procedures, through the joint efforts of RMOW departments, government agencies and private organizations.
Operations	Responsible for establishing communications with the site(s) and coordinating all site support activities through the implementation of an EOC Action Plan.
Planning	Responsible for collecting, evaluating, and disseminating information; developing the EOC Action Plan and Situation Report in coordination with other sections, and maintaining all EOC documentation.
Logistics	Responsible for providing facilities, services, personnel, equipment and materials.
Finance / Administration	Responsible for all EOC financial activities.

5.2 EOC Sections

Following are brief descriptions of each of the EOC Sections:

- Policy Group
- Management
- Operations
- Planning
- Logistics
- Finance and Administration



Following each section description is a list of municipal staff titles who may potentially fulfill roles within the section. Note that all municipal staff may fulfill a variety of EOC positions, depending on their day-to-day municipal role, their status as General Manager, Manager or Supervisor, their experience and expertise in a specific function or area, and their availability in a major emergency or disaster.

5.2.1 Policy Group

The Policy Group does not attend the EOC during major emergency events, but will need to make themselves readily available to come together and consider and approve bylaws, emergency resolutions, or a declaration of a state of local emergency, if necessary. The Policy Group will be utilized as spokespersons to help calm residents during a time of crisis and reassure them that emergency plans and procedures are being implemented to help expedite a quick resolution to the situation.

Responsibilities include:

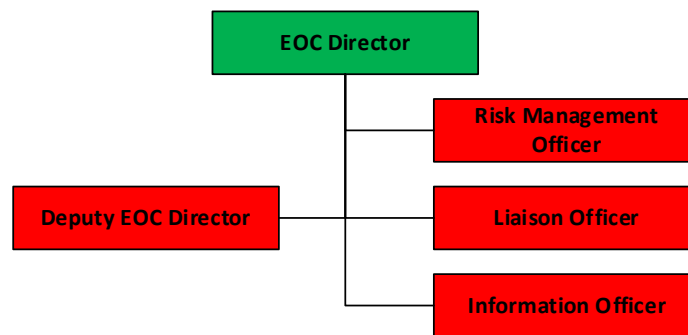
- Declare State of Local Emergency, define parameters, and notify all parties – as required
- Make formal requests to the Province for Provincial or Federal assistance
- Terminate a State of Local Emergency and notify all parties – as required
- Assist with the issuance of emergency public information, in an official spokesperson role; as coordinated through the Information Officer
- Increase expenditure limits to support the needs of the emergency response, as required
- Arrange for maintenance of a log and ensure all decisions are recorded
- Receive briefings from the EOC Director

Municipal representatives:

- Mayor and Council
- CAO
- Additional support staff, as required

5.2.2 EOC Management Section

The Management Section is comprised of an EOC Director, Deputy Director and Officers for Risk Management, Information, and Liaison with other agencies. It is the responsibility of the Management Section to ensure that response priorities are established, and that planning and response activities are coordinated, both within the EOC (i.e., between sections) and between the site(s), the EOC and with other agencies or EOC's (e.g., PREOC).



Responsibilities include:

1. Exercise overall management responsibility for the coordination between emergency response and supporting agencies in the EOC, including the development of an EOC Action Plan to establish priorities for response efforts in the affected area
2. Provide support to local authorities and provincial agencies and ensure all actions are accomplished within priorities established
3. Establish appropriate staffing level for the EOC, and monitor effectiveness of EOC
4. Ensure interagency coordination is accomplished effectively within the EOC
5. Liaise with Policy Group
6. Ensure risk management principles and procedures are applied for all EOC activities

7. Direct, in consultation with the Information Officer, appropriate emergency public information actions using the best methods of dissemination. Approve the issuance of press releases and other public information materials as required

Municipal representatives:

- *CAO or designate (EOC Director) General Manager of Corporate and Community Services (Deputy EOC Director)*
- *General Manager of Infrastructure Services (Deputy EOC Director)*
- *General Manager of Resort Experience (Deputy EOC Director)*
- *Manager of Legislative Services (Risk Management)*
- *Manager of Communications (Information Officer)*
- *Emergency Program Coordinator (Liaison Officer)*
- *Support Staff*

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for the EOC Management Team C Quick Action Checklists.

5.2.3 Operations Section

The Operations Section provides minute-by-minute support to emergency responders in the field. Representatives from WFRS, RCMP, BCAS, Public Works/Engineering, Health, Whistler Search and Rescue (WSAR) and Emergency Social Services (ESS) are in contact with staff in the field to ensure they have the information about the major emergency or disaster; that requests for supplies, equipment, or personnel are processed; and that there is coordination with other involved agencies.

Responsibilities include:

1. Ensure the functions under the Operations Section are carried out according to established EOC priorities
2. Coordinate response operations with emergency responders (e.g., WFRS, RCMP, BCAS, ESS)
3. Maintain communications link between IC (sites), and the EOC for the purpose of coordinating the overall response, resource requests and event status information
4. Acquire mutual aid resources, and coordinate mobilization and transportation of operations resources through the Logistics Section

Suggested Municipal representatives; Sr. Staff from the following departments:

- *WFRS*
- *Infrastructure Services*
- *RCMP*
- *Public Works*
- *ESS*
- *Environmental Stewardship*
- *WSAR*
- *Building Department*

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for the Operations Section Quick Action Checklists.

5.2.4 Planning Section

The Planning Section is responsible for gathering, analyzing and evaluating information and forwarding recommendations on appropriate response options to the EOC Director. This section is responsible for preparing EOC Action Plans and deals primarily with forward planning based on knowledge of the major emergency or disaster. Contingency and recovery planning are also the responsibility of the Planning Section.

Responsibilities include:

1. Collect, analyze and display situation information, including mapping, situation reports, and action plans
2. Prepare specialized plans, including advance planning, demobilization and recovery planning
3. Provide technical expertise as required
4. Ensure the functions of the Planning Section are carried out according to established EOC priorities
5. Maintain EOC Documentation

Suggested Municipal representatives; Sr. Staff from the following departments:

- *Resort Experience*
- *Corporate and Community Services*
- *Infrastructure Services*

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for the Planning Section Quick Action Checklists.

5.2.5 Logistics Section

The Logistics Section is tasked with locating and acquiring all the necessary personnel, equipment and material items needed by the RMOW to deal with the major emergency or disaster, both to the site, and in support of the EOC. This may include the provision of communications services, human resources, transportation or other necessary materials.

Responsibilities include:

1. Ensure the functions of the Logistics Section are carried out according to established EOC priorities
2. Ensure the provision of telecommunications services and Information Technology (IT); locate and acquire equipment, supplies, personnel, facilities, and transportation as well as arrange for food, lodging and other support services, as required, for both the EOC and site requirements
3. Coordinate centralized purchasing/procurement procedures
4. Ensure critical resources are allocated according to EOC action plans and priorities

Suggested Municipal representatives:

- *Resort Experience*
- *Human Resources*
- *IT*
- *Infrastructure Services – Stores; Fleet Maintenance*
- *Recreation - Facilities*

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for the Logistics Section Quick Action Checklists.

5.2.6 Finance and Administration Section

The Finance/Admin Section is established to coordinate and oversee the financial management aspects of the RMOW's emergency efforts. The Finance Section is commonly referred to as the "Payers" of the EOC and includes such activities as cost tracking, analysis and reporting, procurement contract administration and overseeing purchasing processes, including overall expenditure management.

Responsibilities include:

1. Ensure the functions of the Finance/Admin Section are carried out according to established EOC priorities
2. Ensure that the EOC Management Team is fully aware of all financial commitments and constraints

3. Ensure that generally acceptable financial management, accounting, and procurement policies are followed by personnel during response and recovery
4. Maintain financial records throughout the event or disaster and provide periodic expenditure updates to the EOC director
5. Ensure on-duty time for all personnel is recorded
6. Determine spending limits; set or approve extraordinary limits
7. Negotiate new contracts, in coordination with Logistics (Purchasing) needs
8. Process WorkSafe BC claims resulting from the emergency response, as well as travel and expense claims
9. Maintain and submit recovery documentation and Disaster Financial Assistance paperwork

Suggested Municipal representatives:

- *Financial Services*
- *Human Resources – Personnel Tracking*

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for the Finance Section Quick Action Checklists.

6 EOC ACTIVITIES

This section of the CEMP will provide a brief overview of the key activities and actions conducted at the EOC. See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for forms relating to specific EOC activities.

6.1 Obtain Task Number

Task numbers are the primary tracking mechanism used by EMBC to track emergency response expenditures.

Emergency response task numbers serve three functions:

- Identifying that a situation qualifies as a major emergency or disaster under the Emergency Program Act
- Tracking financial aspects of a unique incident or regional event
- Identifying EMBC's commitment to provide third party liability protection and worker's compensation coverage for all registered volunteers.

Task numbers are hazard-specific (for example, a local authority that is managing both a wildland urban interface fire situation as well as a flood situation would have two task numbers).

PROVINCIAL EMERGENCY COORDINATION CENTRE 1-800-663-3456

6.2 Briefings

Briefings provide EOC staff, external agencies and the media with vital information they need to function effectively and efficiently. Information shared at a briefing can help clarify and validate situations so that appropriate decisions can be made. Within an EOC context it is important to differentiate between briefings and planning meetings. Unlike planning meetings, briefings must be kept short. If there is need for further discussion, planning meetings or individual working groups should be set up to address the issue. Briefings are commonly conducted for general information exchange, situation/status reporting, and shift changes.

EOC briefings can be held to:

- Orientate personnel to the EOC facility and equipment
- Review policies and operational guidelines
- Establish priorities and objectives
- Keep staff informed as to the current situation

EOC Management Team briefings should be facilitated by the EOC Director, or Designate at predetermined times. A briefing agenda should be prepared by the Planning Section and approved by the EOC Director, which outlines the briefing format and objectives for the meeting. The agenda is distributed to EOC Management Team members in advance of the meeting.

In the initial stages of EOC activation EOC Management Team briefings should be held every two hours or as required to support response operations. The frequency of briefings may reduce as time goes on and extended operations continue. In these circumstances, EOC Management Team briefings should be conducted at least 2–3 times in a 12–hour period.

EOC Management Team members should come prepared to the briefings by preparing in advance information on:

1. Current situation (relevant to their section/role)
2. Unmet needs
3. Future activities, and

4. Public information requirements

Minutes from the briefings should be documented, approved by the EOC Director and distributed to the EOC Management Team. Section Chiefs are then responsible for briefing their staff on the outcome of the EOC Management Team meetings, addressing all action items assigned to their section.

6.3 Operational Periods

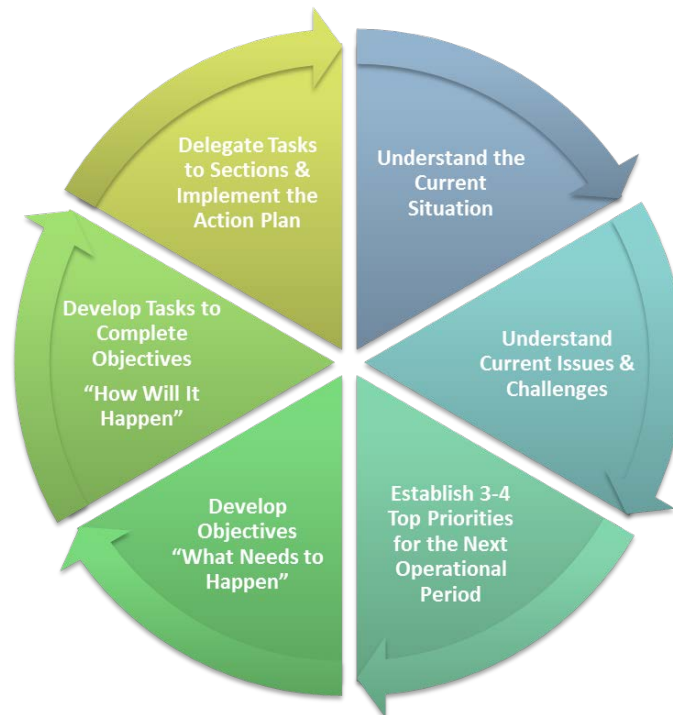
An operational period is the length of time set by the EOC Management Team to achieve the objectives of the EOC Action Plan. The operational period may vary in length and will be determined largely by the dynamics of the emergency event. The first operational period may be as short as two hours but as the event continues an operational period is usually 8-12 hours. It should not exceed 24 hours.

OPERATIONAL PERIOD DEFINED	
•	Length of time to achieve the objectives of the EOC Action Plan
•	Determined by EOC Director
•	Initially 1- 2 hours for critical/life safety issues
•	Ongoing length varies depending on objectives/priorities
•	Commonly 8-12 hours in length, not to exceed 24 hours
•	Sequentially numbered & time period identified

6.4 EOC Action Planning

EOC Action Plans address the policies and priorities that support site activity and are an essential and required element in achieving progress in response to the emergency event. See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for a Guide to Preparing EOC Action Plans and Conducting EOC Action Plan Meetings.

Figure 5 Action Planning Process



Action Planning and BCERMS

EOC Action Plan Priorities should always take the BCERMS goals into consideration. For example, objectives that are established to save lives and reduce suffering should always be listed and implemented before protecting economic and social losses.

Action Plan Components

The EOC Action Plan consists of some of the following:

1. EOC objectives
2. Tasks and task assignments
3. Distribution list
4. Approval and Signatures



Action Plan Approval

The EOC Director and Planning Section are responsible for developing and approving the EOC Action Plan for each operational period. This is done in consultation with the EOC Management Team at an EOC Action Plan Meeting.

Action Plan Implementation and Evaluation:

Once approved, the EOC Management Team will assume responsibility for implementing their respective portions of the Action Plan. This includes monitoring and evaluating progress of the plan.

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for Section Status Reports, an EOC Action Plan Agenda and an EOC Action Plan Template.

6.5 Personnel Identification

In conjunction with application of common terminology within BCERMS, it is essential to have a common identification system for facilities and personnel filing positions. There are specific colors for each EOC function and these colors should be used by all agencies that work in the RMOW EOC. EOC identification should include vests and name tags. These identifiers do not preclude any personnel from wearing their agency’s insignia or uniform. See [Annex 1 Emergency Operations Centre Activation Guide](#) for details on where EOC vests can be found.

6.6 Situation Reporting

Situation Reports:

Situation reports serve as a snapshot of the current situation of the overall EOC. Situation reports are a function most commonly managed through the EOC Planning Section. Situation reports are typically developed near the end of each operational period or at the request of the EOC Director. All personnel must forward incident situation information to the Situation Unit in the Planning Section. Collecting situation data may involve a number of sources, including the Operations Section, Logistics Section, Information Officer, and Liaison Officer. Situation information is also received from other EOCs and BCERMS levels. Following analysis, the Planning Section supports operational decisions and summarizes situation information for the EOC Director’s approval. Once approved, the Situation Report is distributed to EOC Section Chiefs and other levels in the BCERMS structure. See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for a Situation Report Template.

Section Chiefs are responsible for providing the EOC Director with periodic verbal or written updates to the Situation Report. The EOC Director should then take steps to brief all the staff on the collective situation. A short conference may be most appropriate.

EOC Event Board:

The EOC Planning Sections Situation Unit is responsible for establishing and maintaining the EOC Event Board. The Situation Unit should receive timely written updates from the EOC Operations Chief who identifies and authorizes new incident information (from the site) that can be added to the event board. The event board should include the following information:

- Incident number
- Time of incident (in 24-hr time)
- Incident details
- Action taken (including any resources deployed)
- Follow-up required (identifies any further action that may be needed)

The event board should be situated so that all EOC staff can access it and be kept apprised of the progress of the emergency event

EOC Situation Map:

The EOC Planning Section's Situation Unit is responsible for plotting important information into a map of the RMOW. This map becomes a visual representation of the emergency event. Information can be plotted manually onto a large hard copy of an RMOW map, or it can be plotted electronically through RMOW's Geographic Information System (GIS) mapping capabilities. Similar to the event board, the situation map must be accessible to all EOC staff in order for them to stay current on the emergency event.

Information to be plotted on the situation map includes:

- Emergency site(s)
- Incident Command Post
- Perimeter points
- Evacuation areas and routes
- Staging areas for resources
- Evacuation receiving points (i.e., ESS Reception Centres)
- Weather and wind direction
- Other key details as required

6.7 PREOC Coordination Calls

During EOC activations, the PREOC may organize coordination calls between the RMOW, PREOC, key ministries and agencies, technical specialists (weather, seismic), critical infrastructure owners and providers, and others as required. The purpose of the calls are to share operational information between relevant agencies. These calls are for operational purposes only, and are not meant for public information. The calls typically occur two times a day but can be more or less given the requirements of the emergency.

6.8 Declaration of State of Local Emergency

During a major emergency or disaster the RMOW, through the EOC, may declare a state of local emergency to enable to RMOW to exercise the emergency powers listed in the *Emergency Program Act*. These short-term emergency measures will allow the RMOW and partner agencies to effectively respond to the major emergency or disaster.

Emergency powers available to the RMOW through the *Emergency Program Act* are as follows:

1. Acquire or use any land or personal property considered necessary to prevent, respond to or alleviate the effects of an emergency or disaster;
2. Authorize or require any person to render assistance of a type that the person is qualified to provide or that otherwise is or may be required to prevent, respond to or alleviate the effects of an emergency or disaster;
3. Control or prohibit travel to or from any area of British Columbia;
4. Provide for the restoration of essential facilities and the distribution of essential supplies and provide, maintain and coordinate emergency medical, welfare and other essential services in any part of British Columbia;
5. Cause the evacuation of persons and the removal of livestock, animals and personal property from any area of British Columbia that is or may be affected by an emergency or a disaster and make arrangements for the adequate care and protection of those persons, livestock, animals and personal property;
6. Authorize the entry into any building or on any land, without warrant, by any person in the course of implementing an emergency plan or program or if otherwise considered by the minister to be necessary to prevent, respond to or alleviate the effects of an emergency or disaster;
7. Cause the demolition or removal of any trees, structures or crops if the demolition or removal is considered by the minister to be necessary or appropriate in order to prevent, respond to or alleviate the effects of an emergency or disaster;
8. Construct works considered by the minister to be necessary or appropriate to prevent, respond to or alleviate the effects of an emergency or disaster;
9. Procure, fix prices for or ration food, clothing, fuel, equipment, medical supplies or other essential supplies and the use of any property, services, resources or equipment within any part of British Columbia for the duration of the state of emergency.

The emergency powers are written from the provincial perspective. They are applicable to the RMOW within the RMOW's jurisdictional boundary only. The Minister, as part of the provincial oversight, may order the RMOW to refrain or desist from using any one or more of the emergency powers listed above. These powers infringe on civil liberties of citizens and should only be drawn upon the RMOW when no other options are available to protect the community.

The RMOW will not declare a state of local emergency unless access to the powers of the emergency program act are required. A declaration is not required, and therefore will not be declared, to implement part or all of the RMOW CEMP, to gain liability protection under the *emergency program act*; to issue evacuation alerts; to recover eligible response costs EMBC, or to qualify for eligible disaster financial assistance under the *Emergency Program Act*.

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for a Declaring a Local State of Emergency Flowchart, and a Declaring a Local State of Emergency Order Template.

6.8.1 Process for Declaring a State of Local Emergency

Once the EOC determines that emergency conditions warrant use of one more of the emergency powers, the Policy Group should be advised through a briefing. The briefing to the Policy Group should include a recommendation that they issue a declaration, as well as the nature, extent, probability of loss, resources at risk, and geographic area. If time allows, consultation should occur between the RMOW and the Director at the PREOC as well as neighboring jurisdictions that could be impacted (Squamish Lillooet Regional District, District of Squamish, etc.).

A declaration of a state of local emergency has to be initiated by either an RMOW bylaw or order. If time permits, Council will meet to establish a bylaw or resolution that authorizes a declaration of a state of local emergency. If there is not time to establish a bylaw or resolution an order can be used to make the declaration. An order is the most common mechanism used, since most emergencies do not allow sufficient time to complete the procedures required to establish a bylaw or resolution. An order can only be issued by the Mayor (or designate). The Mayor (or designate) must use best efforts to obtain consent of the other members of Council.

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for a Declaring a Local State of Emergency Flowchart, and a Declaring a Local State of Emergency Order Template.

Declaration Components

Regardless of whether the declaration is by resolution, bylaw, or order, the declaration must identify the nature of the emergency; and the geographic boundaries (preferably shown on an attached map) within which the declaration will apply. It is recommended the RMOW ensures the geographic area identified in the declaration will allow for the potential expansion of the footprint of the emergency event. This will minimize the need for issuing multiple declarations to accommodate events that may continually change in scope. To ensure the validity of the local declaration, an emergency order should include the date of the local declaration and the signature of the Mayor (or designate).

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for a Declaring a Local State of Emergency Order Template with a Delegation of Emergency Powers Matrix.

In addition to the order, the local declaration should include a delegation document authorizing selected persons or agencies to exercise the emergency powers on behalf of Mayor and Council. A written document must be provided to indicate the details, including the conditions or limitations, of the delegation of powers.

The EOC Director must monitor the implementation of these powers very closely for any possible misuse.

After the Declaration

As soon as practical after issuing a declaration the following must occur:

- The RMOW must forward a signed copy of the completed declaration documents to the Minister. This can be carried out through the PREOC. The PREOC will ensure the Minister is informed, as required by legislation. Verbal contact with the PREOC should be made to ensure receipt of documents.
- The RMOW must publish the details of the declaration to the population in the affected area. It is recommended, if time allows, that maps are included in the publication.
- The Mayor (or designate) must convene a meeting of the local authority to assist in directing response activities.

6.8.2 Extending the Declaration of State of Local Emergency

A local declaration expires seven days from the date it is signed unless it is extended. The seven day period is determined by the Interpretation Act Section 25(5) which states that “the first day must be excluded and the last day included.” For example, if the RMOW declares a state of local emergency on a Friday at any time between 0001hr and 2359hr, this local declaration will remain in effect until the following Friday at midnight. When necessary, the RMOW may seek the approval of the Minister to extend the term of the declaration beyond the seven day period. A completed Extension Request form should be submitted to the PREOC. The RMOW should submit the request for extension as soon as it determines emergency powers to be required beyond the current expiry date.

The Minister will issue an approval of the extension as appropriate. Each extension is valid for a seven day period and further extensions may be requested. The RMOW must then publish the details of the extension to the affected population.

It must be noted that the RMOW cannot use the extension process to change the area under declaration or the description of the nature of the event. An extension request only changes the expiry date of a current local declaration - it does not allow for a change in the area under declaration or a change in the nature of the event. In these cases a new declaration of a state of local emergency must be issued.

6.8.3 Cancelling the Declaration of State Local Emergency

A declaration of state of local emergency is canceled when:

- The Minister cancels it;
- It is superseded by a Provincial State of Emergency; or
- It is cancelled by a bylaw, resolution, or order.

Once it is apparent to the RMOW that extraordinary powers are no longer required and that the declaration may be cancelled, they should advise the Mayor (or delegate) as soon as possible. The method of cancelling the local declaration is not dependent on how it was initially authorized. This means that a local declaration made through a bylaw or resolution can be cancelled by the Mayor via an Order or a local declaration made via order can be cancelled made through a bylaw or resolution. Notification of cancellation of a declaration must be submitted to the Minister through the PREOC.

The RMOW must publish the details of the termination to the population of the affected area.

6.8.4 Limitations of a State of Local Emergency

A state of local emergency is only justified during an emergency or disaster as defined by the Emergency Program Act and is limited to the jurisdictional boundaries of the RMOW or to any specifically described area by the RMOW within these boundaries. When the application of emergency powers is required outside of the jurisdiction of the local authority, two options may be considered: the neighboring jurisdiction may declare a state of local emergency; or in the case of a major impact across jurisdictions a provincial state of emergency may be considered for the entire geographic area.

6.9 Resource Requests

Resource requests normally flow from site responders to their Dispatch Centres. Once Dispatch has exhausted the normal cadre of resources and/or available mutual aid, the request will be forwarded from the requesting site agency personnel to the IC. The IC will then forward the request on to the EOC Operations Chief who will then try to fill the resource request through the various branches' resource inventories or through mutual aid. If they are not available, then the request is forwarded to the EOC's Logistic Section to try to fulfill. Under BCERMS, the RMOW is responsible for using local resources to fill immediate needs to the greatest extent possible, including any mutual aid that may be available. If locally available resources are insufficient for operational needs, the RMOW may request assistance through the PREOC. See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#), EOC Form 514.

POTENTIAL SOURCES OF RESOURCES
<p><i>The following are possible means of acquiring resources. These avenues should be attempted in the following order:</i></p> <ul style="list-style-type: none"> • Internal to department • Municipal resources including departments • Municipal procurement or purchasing contract • Regional mutual aid • Rental or purchase from retail* • Rental or purchase or otherwise acquired from industry* • Resource request from Emergency Management BC <p><i>*May be eligible for cost-recovery from Emergency Management BC. Refer to Disaster Financial Assistance Guidelines</i></p>

6.10 General Information

General information may be exchanged among members of a response organization at any given level. BCERMS encourages lateral information flow between functions. In addition, a representative of a function at one level may wish to exchange information with a similar function one level above or below them. Verifying general information is an important step before taking action.

The EOC should consider using standard three-part “round-trip” memorandum forms for all internal communications. These communications must be clearly marked with an originator’s message number, originating date and time, and identify the originator’s name and functional position. The same information is required when replying to an internal memorandum. See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for “Communication Forms” and “Message Numbering” forms.

6.11 Documentation

All EOC activities require some form of documentation and record keeping. Accurately documenting all actions taken during emergencies is extremely important. This includes a documented record of all decisions, directions, actions taken, and resources deployed. There are prepared forms for each EOC Section responsibility. The forms requiring completion are dependent on the agencies involved and the scope and impact of the emergency.

See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#) for forms relating to specific EOC activities.

6.12 Transfer of Responsibilities (Shift Changes)

When a staff member transfers their responsibilities to another, a simple but formal transfer briefing will be required. Shifts, therefore, should be no longer than 8 – 12 hours and should overlap by 15 minutes or so to prevent a staff position from being inadequately relieved. A transfer briefing should summarize the activities of the past shift, identify, “open” incidents or activities, and if time permits, be accompanied by a short written summary of the same information for later use.

6.13 Emergency Procurement and Expenditure Limits

When a major emergency or disaster exists, procurement of required goods, services, and supplies are allowed under Community Charter SS 173(3). Goods, services, and supplies shall be acquired by the most expedient and economical means available. EOC staff members should possess the same level spending authority that they have on a day-to-day basis as per the *RMOW Administrative Procedure D-1 2006 Procurement*. The Policy Group may increase expenditure limits to support the needs of the emergency response, as required. Expenditures made under SS 173(3) must be reported to Council at a regular meeting, and the financial plan amended to include the expenditure and funding source for the expenditures as soon as is practically possible.

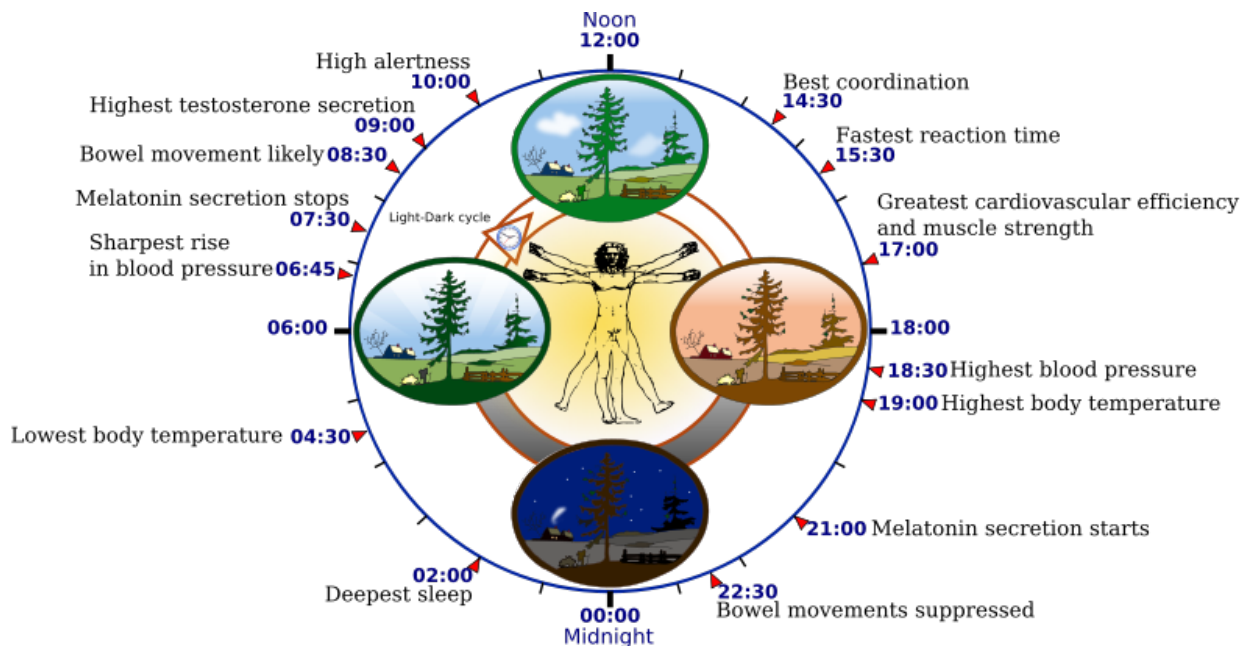
6.14 Worker Care

6.14.1 Staff Rest

The climate of the EOC can be very busy. Time must be allowed for staff rest, meals and general rehabilitation. Fatigue can contribute to poor decision making, memory loss, increased impulsiveness and overall poor judgment. The diagram below depicts the circadian patterns typical of someone who rises early in morning, eats lunch around noon, and sleeps at night (10 p.m.)

Activities at the EOC that require all staff members to attend, other than during their shift, should be infrequent. They interrupt necessary rest time and can preclude such necessary events as site visits and media interviews.

Figure 6 Staff Rest



6.14.2 Labor Relations

Rules and regulations regarding safety and overtime, and other labor relations issues, are not suspended on account of the major emergency or disaster. The RMOW and RMOW employees are entitled to the same rights as they are afforded during their normal course of employment as listed in the *RMOW Employee Handbook* or established collective agreements.

6.15 Worker Care Centers

For long duration emergency events, the EOC is responsible for ensuring that Worker Care Centers are established to provide workers with food, rest, first aid and emotional support. This is the responsibility of the Logistics Section.

6.16 Recovery

Near the end of emergency response operations, the EOC will make the transition to relief and recovery operations. This may require re-evaluating which EOC functions are required and which agencies and personnel are best suited to staff the functions, as appropriate. The Recovery Unit in the EOC is responsible for overseeing the transition from response to recovery. Planning recovery operations during the response will speed recovery time and reduce losses. It should therefore be started as early as possible.

Long term recovery efforts, four weeks to several years following an event, will likely include:

- Debris management
- Hazard mitigation
- Reconstruction of permanent housing
- Reconstruction of commercial facilities
- Reconstruction of transportation systems
- Rehabilitation of environment
- Implementation of long-term economic recovery
- Programs to support psycho-social and emotional support for evacuees or those affected

7 EOC FACILITIES

7.1 Maintenance and Set-up

The RMOW Emergency Program Coordinator is responsible for ensuring that the EOC is ready for use on short notice by establishing a regular maintenance and testing schedule.

The EOC contains information display materials, communications, equipment, forms, documents, and supplies required to ensure efficient operations and effective management on a 24-hour basis. The EOC will be initially set-up by the Logistics Section (if available to do so), or by the first people to arrive at the facility. A floor plan, illustrating the general layout of the EOC, is available on the next page of this document and in [Annex 1 Emergency Operations Centre Activation Guide](#). Specific requirements may cause a deviation from the described layout.

The primary EOC in the Public Safety Building is supported by a back-up generator. In the event of loss of power the generator will automatically start and supply power. Other support systems may be required to allow for continuous operations apart from normal public utilities and services. Building Services is responsible for maintaining the Public Safety Building generator and tests the generator regularly.

7.2 EOC Equipment and Supplies

EOC Activation Cabinet

1. Check-in List
2. EOC Activation Folder (includes management team EOC Vests)
3. Layout Plan
4. Access FOBs (8x)
5. EOC Quick Reference Guide (8x)
6. EOC Maps
7. CEMP(6x copies)

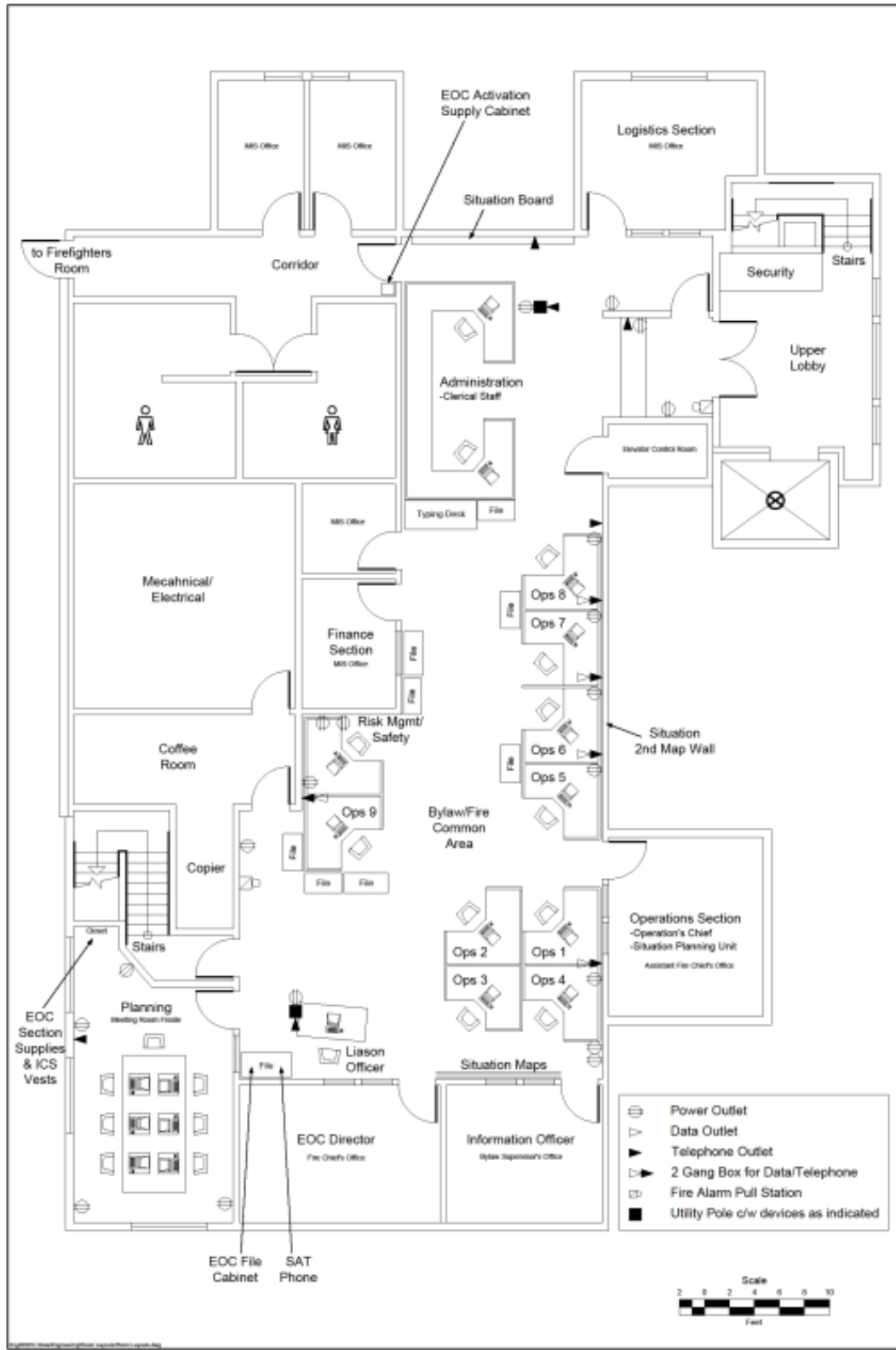
EOC File Cabinet

1. RMOW CEMP
2. RMOW Civic Address Books 2013 (2x)
3. Bound Notebooks (10x)
4. Blue Book - Equipment Rental Rate Guide
5. External Emergency Plans:
 - A. CN Rail
 - B. Fortis BC
 - C. BC Hydro
 - D. SLRD
6. Whistler Blackcomb

EOC Storage Closet

1. EOC Phones
2. EOC Computer Equipment
3. EOC Vests
4. Planning Supplies

Figure 7 EOC Floor Plan



7.3 Communications

The RMOW's IT Department is responsible for ensuring adequate telecommunications and cellular capability in the EOC at all times.

7.3.1 EOC Telephone Directory

The EOC's IT Branch Coordinator will maintain and publish a list of telephone numbers of EOC Staff, as well as other important external numbers, in an EOC Telephone Directory. The directory should only be circulated to those involved in the EOC and response operations, not to the media or the public.

7.3.2 EOC Section Phones

EOC phone station locations have a sign on the wall indicating the exact location and phone number for each EOC Station. Specific phone jacks are identified by the large yellow numbers located on each jack on the wall below the sign. A teleconference bridge is available in the EOC meeting room to allow several agencies to participate in a briefing or conference call simultaneously.

See [Annex 1 Emergency Operations Centre Activation Guide](#) for a list of EOC Phone Numbers including the teleconference bridge access codes.

7.3.3 Public Information Call Centers:

Another important consideration is to assign a telephone number as a Public Information Call Center, which is managed by the Information Officer. Several phones and operators can be assigned to the call centre if necessary. The Information Officer should regularly brief the operators so that consistent information approved by the EOC Management Team is provided to the public. If a toll-free number cannot be established, collect calls should be accepted.

7.3.4 Satellite Phones

The EOC may need to utilize satellite communication capability. Satellite phones provide the capability to rapidly transfer a wide variety of voice as well as data information between the site, EOC, PREOC, and other external support agencies. The intent of satellite link should be to provide disaster-resistant communications between all levels of BCERMS. The RMOW has a satellite phone dedicated to the EOC.

See [Annex 1 Emergency Operations Centre Activation Guide](#) for Satellite Phone information.

7.3.5 VHF Radio

RMOW's WFRS, Bylaw Service, Public Works/Engineering, Park Operations, RCMP and BCAS all utilize portable radio systems on a day-to-day basis. The RMOW has a Combined Events Radio Channel that can be used simultaneously by WFRS, RCMP and BCAS during an emergency. During a major emergency or disaster, this radio system will ensure the efficient transfer of important information between site personnel. It should be noted that this is a simplex channel and therefore is only effective when the users are in close proximity to one another.

EOC operations are supported by emergency communications volunteers who may be able to provide equipment and expertise in the event of a major emergency or disaster. Additional radio communication resources may be requested through EMBC.

See [Annex 1 Emergency Operations Centre Activation Guide](#) for a list of radio channels in the RMOW.

7.3.6 Emergency Radio

The Whistler Emergency Radio Team provides backup emergency communications to the RMOW should regular communication lines fail. An inventory of emergency radio equipment is stored in the

Public Safety Building. In addition to backup communications within the Municipality, the Emergency Radio Team can provide communications links to the PREOC and to other municipalities (e.g. to request mutual aid or share critical information) when other forms of communication are unavailable. See [Annex 1 Emergency Operations Centre Activation Guide](#) for the Emergency Radio Team Callout List.

Radio Communication Terminology

Standard protocols and terminology will be used at all levels. Plain-English for all communication will be used to reduce the confusion that can be created when radio codes are used. Standard terminology shall be established and used to transmit information, including strategic operations, situation reports, logistics, tactical operations and emergency notifications of imminent safety concerns. The EOC communications systems should provide reserve capacity for unusually complex situations where effective communications could become critical.

Radio Communication Forms

A standard three-part “round-trip” memorandum form should be used for all internal written communications. These communications must be clearly marked with an originator’s message number, originating date and time, and identify the originator’s name and functional position. In replying to an internal message form, the same information should be provided (using bottom reply box of the same form). See [Annex 1 Emergency Operations Centre Activation Guide](#) for information on where forms are stored in the EOC.

Radio Message Numbering

Message numbers provide an identification and reference, consisting of three-letter originator’s code followed by three sequential digits starting with 001. The numbers continue until 999 are reached, and then the sequence is re-started at 001. If an originator should exceed 999 messages in a single day, numbers should continue into four digits (1000, 1001, etc.) rather than restart at 001.

Radio Message Precedence:

An extensive amount of radio communications and messages will be handled in the EOC. In order to quickly identify the significance of a particular message it is important for the originator to apply a level of precedence appropriate for the circumstances. Similar to resource and information requests, the following system of precedence levels should be applied:

All messages should be processed through the applicable Section Chief to ensure consistent message format and appropriate use of precedence level is applied.

- Emergency** Any message having life and death urgency

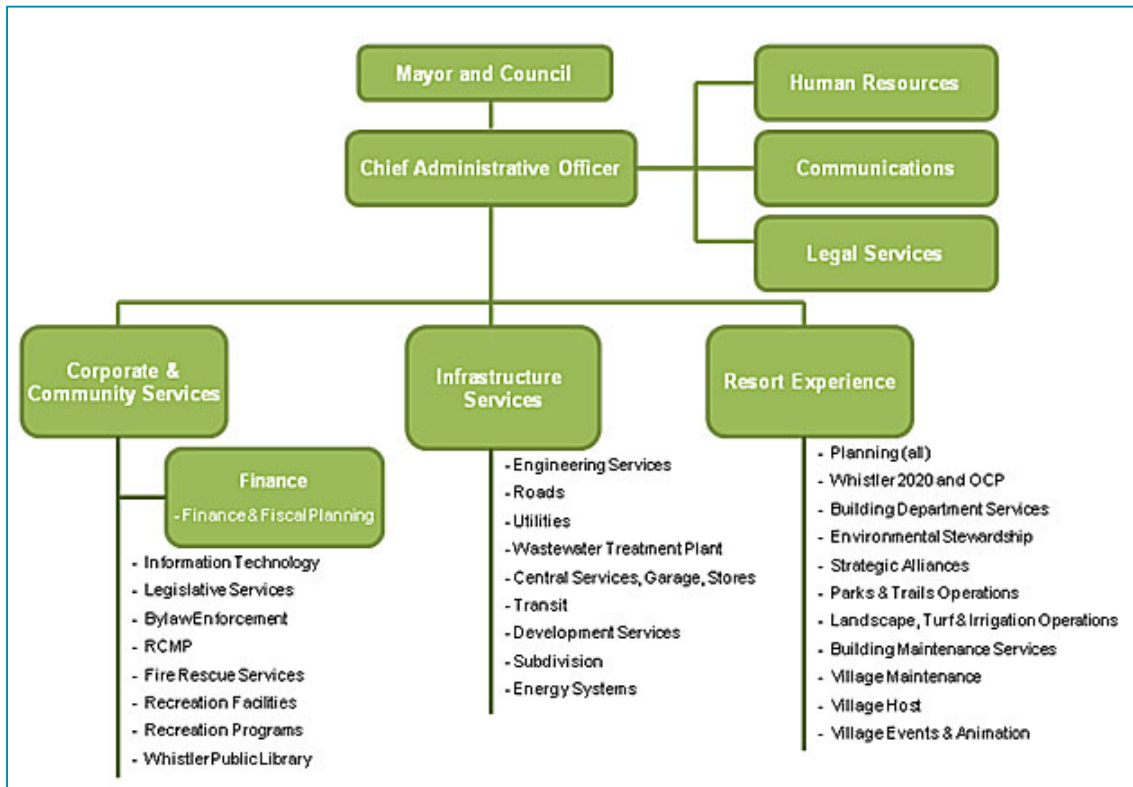
- Priority** Important message/request with a specific time limit

- Routine** Regular message traffic

8 RMOW DEPARTMENT RESPONSIBILITIES

Following are brief descriptions of the RMOW’s major departments in the context of their potential emergency operations responsibilities. The “emergency responsibilities” refer to activities a department may be called upon to deal with. Departments not assigned specific functions will provide assistance to other departments and agencies as required.

Figure 8 RMOW Corporate Structure



8.1 Mayor and Council

During emergency events, Mayor and Council need to make themselves readily available to come together and consider and approve bylaws, emergency resolutions, or a declaration of a state of local emergency, if necessary. Mayor and Council will be utilized as spokespersons to help calm residents during a time a crisis and reassure them that emergency plans and procedures are being implemented to help expedite a quick resolution to the situation.

Emergency Responsibilities:

- If required, Declare State of Local Emergency, define parameters, and notify all parties
- Make formal requests to the Province for Provincial or Federal assistance
- Declare termination of State of Local Emergency and notify all parties
- Assist with the issuance of emergency public information, in an official spokesperson role; as coordinated through the Information Officer
- Receive briefings from the EOC Director
- Increase expenditure limits to support the needs of the emergency response, as required

Potential EOC Assignments:

- Policy Group (work out of Municipal Hall and receive updates from the EOC Director)
- Spokesperson for municipality (Mayor or designate)

8.2 Chief Administrative Officer's Office

The CAO's office serves a coordinating managerial role to assure the continued operation of municipal government services.

8.2.1 Chief Administrative Officer

The CAO will liaise with all municipal departments to ensure municipal bylaw, policies and strategic direction are adhered to. The CAO will assume the role of EOC Director during activations and will be responsible for keeping the Policy Group informed on the emergent situation.

Emergency Responsibilities:

- Activate the EOC, if not already activated (See [Annex 1 Emergency Operations Centre Activation Guide](#))
- Assume the role of EOC Director at the EOC (See [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#))
- Ensure the Policy Group, General Managers and EOC staff have been notified (See [Annex 1 Emergency Operations Centre Activation Guide](#) for contact information)
- Ensure EMBC has been notified and a task number has been assigned (See [Section 6.1](#))
- Advise the Policy Group on policies and procedures, as appropriate
- Ensure communication links are established between the EOC and Incident Command Post(s)
- Recommend to the Policy Group the need to declare a state of local emergency
- Ensure approved information on the emergency event is being issued to the public in a timely manner
- Ensure continuity of municipal government operations

Potential EOC Assignments:

- EOC Director

8.2.2 Communications

Utilizing a number of communications vehicles, the Communications Department facilitates the accurate and timely communication of information to internal and external stakeholders.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations
- Provide public information pertaining to the emergency situation
- Coordinate media relations, including coordination of media centers
- Coordination of information, between Information Officers, Public Information Call Centers, media and other outlets
- Identify Information Officers for each emergency site and notify the EOC and all emergency site agencies and the media of the designated Information Officer(s)
- Provide information to ICs, the EOC, first responders, municipal switchboards and the media
- Manage Public Information Call Centers and provide information to the Call Centre (if activated)
- Arrange for provision of Information Officers to ESS Reception Centers (if required)
- Ensure that information on the RMOW's web site is maintained and current
- Ensure that appropriate support staff are available to assist with operating the Information centers
- Pre-format media releases and instructions to the public where possible to reduce the chance of releasing incorrect information
- Monitor published and broadcast information and take immediate action to correct any misinformation

Potential EOC Assignments:

- Information Officer (internal, external, and public information)
- As otherwise directed by the EOC Director

8.2.3 Human Resources

Human Resources will plan and coordinate the deployment of staff during a major emergency or disaster. Human Resources is also responsible for maintaining employee records, ensuring occupational health and safety guidelines are met, coordinating WorkSafeBC claims, and ensuring staff payroll is coordinated.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations
- Prepare emergency related policies and procedures related to the emergency mobilization and deployment of staff, volunteers and contractors
- Maintain employee records and skills inventory
- Develop a plan and coordinate deployment of municipal staff to support emergency response and recovery efforts
- Assist other municipal departments in call out, deployment and record keeping of staff
- Ensure occupational health and safety guidelines are observed and adhered to, regardless of the extent of the emergency situation
- Coordinate WorkSafeBC claims for staff and volunteers
- Ensure continuity of municipal staff's compensation and salary administration. Process the Municipality's payroll, as per usual
- Ensure continuity of municipal staff's health and benefit plans
- Liaise with applicable Unions on matters pertaining to employees and human resources services
- Coordinate critical incident stress response services to ensure a healthy environment for all municipal staff and volunteers

Potential EOC Assignments:

- Finance Section - Compensation & Claims (HR); Time Unit Coordinator
- Logistics Section – Personnel Unit; Supply Unit
- As otherwise directed by the EOC Director

8.3 Corporate and Community Services Division

During emergency events, Corporate and Community Services will provide trained staff and equipment to support response and recovery efforts. This includes first responders from RCMP and Fire as well as support staff to the EOC. Corporate and Community services will work with community partners to provide care and shelter to people displaced by a major emergency or disaster through ESS.

8.3.1 Whistler Fire Rescue Service

The WFRS is the lead agency for all operations involving fire suppression, rescue, motor vehicle accidents, incidents involving high angle, still water, and ice rescues, and basic hazardous materials within the RMOW boundaries. In the event of EOC activation, WFRS will ensure that a WFRS representative reports to the EOC to assume the role of Operations Fire Branch Coordinator as necessary and available.

Emergency Responsibilities:

- Participate in IC and UC at emergency site(s), as required
- Provide staff to support EOC activations and the Fire Branch of the Operations Section
- Provide fire suppression operations and the rescue of people trapped by fire, wreckage and debris and coordinate specialized resources for Heavy Urban Search and Rescue (HUSAR). Note: At this time the WFRS does not have HUSAR capabilities
- Provide basic hazmat response to incidents involving hazardous materials until another authority with greater expertise is available to deploy specialized resources and direct operations. Help identify the product, contact Canadian Transport Emergency Response (CANUTEC) [613-996-6666

or ***666 on a cellular phone**], establish a perimeter and assist with any evacuations that may be necessary

- Provide hazmat response to the Whistler Sliding Centre, Meadow Park Sports Centre, Olympic Plaza and the Waste Water Treatment Plant, as required
- Provide First Responder Medical Aid response in conjunction with other responders
- Provide water rescue response to incidents in the still water environment and coordinate specialized resources for incidents in the swift water environment
- Coordinate WFRS operations from the EOC
- Activate mutual aid as required
- Oversee the evacuation of people and animals from buildings when potential life safety is at risk
- Provide equipment and staff to assist with water pumping operations

Potential EOC Assignments:

- EOC Deputy Director (as required)
- EOC Liaison Officer (as required)
- EOC Operations Section – Fire Branch
- As otherwise directed by the IC/UC or EOC Director

8.3.2 RCMP

RCMP responds to emergencies on a daily basis in conjunction with other duties. In the event of a major emergency or disaster Senior Officers activate specific Policies and Procedures for efficient, effective response and coordinated control. By nature of the federal government organization and provincial policing structure, the RCMP also has access to a broad range of resources (e.g., air support, emergency response teams, telecommunications, and personnel). An RCMP member will likely assume the role of IC for incidents where the Police are the lead agency. This includes: major crimes; plane crash; civil disobedience and terrorism.

Upon activation of the RMOW's EOC, a senior RCMP member will report to the EOC and assume the role of Operations RCMP Branch Coordinator. Additional RCMP personnel may be called upon to support the EOC Planning Section in the event an evacuation plan is required. Whistler's RCMP will also likely assume the role of EOC Operations Chief during events requiring police as the lead agency.

Emergency Responsibilities:

- Participate in IC and UC at emergency site(s)
- Provide staff to support EOC activations and the RCMP Branch of the Operations Section
- Identify, establish and control access and egress routes for emergency vehicles at site(s)
- Assess site situation and determine additional resources as required
- Establish and maintain perimeters around site(s)
- Identify, establish and control evacuation routes in cooperation with WFRS, BCAS, and Public Works/Engineering
- Coordinate and facilitate evacuation notifications
- Upon activation of RMOW's EOC, provide a senior RCMP staff member to assume role of Operations RCMP Branch Coordinator, and support other EOC functions as needed
- Coordinate search and rescue operations, overseeing the role of WSAR team
- Oversee crime prevention/control at all site(s)
- Assist coroner with identification and care of human remains

Potential EOC Assignments:

- EOC Operations Section – RCMP Branch; WSAR Branch
- EOC Planning Section - Evacuations
- As otherwise directed by the IC/UC or EOC Director

8.3.3 Finance and Fiscal Planning

The Finance Department is responsible for advising the EOC Director on all matters of a financial nature to facilitate the most effective emergency response. Financial services will manage all ordinary and extraordinary costs associated with a response to and recovery from a major emergency or disaster and will ensure appropriate tracking of all incurred expenses.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations
- Ensure that records of expenses are maintained for future claim purposes
- Commence provision of emergency financial services, including:
 - Emergency payroll
 - Emergency procurement
 - Emergency banking
 - Emergency financial record keeping
 - Emergency claims management
- Oversee process of Disaster Financial Assistance, as part of the response and recovery stages of the emergency/disaster
- Recommend spending limits and financial tracking procedures to EOC Director
- Provide periodic expenditure updates to the EOC Director
- Develop a plan to coordinate funds donated to support emergency victims
- Liaise with provincial finance staff for guidance and direction on applying for cost recovery and reimbursement of emergency expenditures
- Provide information to the public on applying for disaster financial assistance and coordinate claims with EMBC

Potential EOC Assignments:

- EOC Finance and Administration Section Chief and other F/A Section support
- EOC Logistics - Purchasing/Procurement
- As otherwise directed by the EOC Director

8.3.4 Information Technology (IT)

IT is responsible for maintaining the phone (landline) system, information network (computer) system and cell phones for all municipal departments and the EOC. The IT department will also set-up IT equipment in the EOC.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations
- Ensure that the EOC is operational with working landlines and IT systems
- Ensure RMOW's phone system and information network is maintained and operational before, during and after an emergency event
- Ensure GIS mapping system is operational and accessible to EOC staff
- Staff RMOW's help desk, supporting the communication and information system needs of municipal and EOC staff
- Ensure connectivity with all information system users before, during and after an emergency event
- Manage and maintain all RMOW servers and software programs
- Assign and/or reassign, on priority basis, desktops and laptops to RMOW staff
- Restore important information and data disrupted and/or lost during emergency response and recovery efforts

Potential EOC Assignments:

- EOC Logistics – IT Branch

8.3.5 Legislative Services

During a major emergency or disaster the Legislative Services Department will coordinate information to and from the Policy Group on behalf of the EOC Director and EOC Management Team.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations
- Work with the EOC Director to ensure that appropriate information is shared with the Policy Group
- Liaise with the EOC Director to determine the needs of the Policy Group and to facilitate any meetings or other actions required to ensure the ongoing function of the local government
- Assist the EOC Director in the preparation of a “Declaration of a State of Local Emergency,” and coordinate approval with the Policy Group, as required
- Assist in the interpretation and, if necessary, the preparation of Bylaws
- Provide information on applicable municipal bylaws and regulations that come into question during response and recovery efforts
- Provide information and guidance on existing lease agreements, corporate records, litigation, and insurance claims
- Ensure that municipal switchboard is staffed appropriately and that approved information on the emergency event has been provided to staff for issuing to the public, as needed
- Liaise with municipal lawyers
- Ensure maintenance, recovery and preservation of municipal corporate records, both statutory and operational

Potential EOC Assignments:

- EOC Planning Section – Documentation Unit, Advanced Planning
- EOC Management Staff – Risk Management Officer
- As otherwise directed by the EOC Director

8.3.6 Bylaw Services

During emergency events, Bylaw Services will provide staff, vehicles and equipment to support response and recovery efforts, as directed by GM of Corporate and Community Services, CAO, Fire Chief, RCMP Officer-in-Charge and/or by the EOC Director. Bylaw Services has a departmental emergency plan that outlines their roles and responsibilities during a major emergency or disaster.

Emergency Responsibilities:

- Upon notification of an emergency event, ensure that appropriate emergency response agencies have been advised
- Upon request, support emergency response at the emergency site by providing Bylaw staff, vehicles, equipment and communications capability
- Provide staff to support EOC activations and operations
- Establish communications with Bylaw personnel and reassign duties as appropriate to match the needs of the emergency event
- Coordinate the removal of parked cars to clear roadways
- Coordinate Animal Control with ESS and Whistler Animals Galore (WAG) for the care of domestic animals now lost and/or impacted by the emergency event

Potential EOC Assignments:

- Logistics
- Operations
- As otherwise directed by the EOC Director

8.3.7 Recreation

In a major emergency or disaster, the Recreation Department will provide recreation facilities that can support emergency activities (e.g., ESS reception centres) and to provide trained staff that can support emergency response and recovery efforts.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Upon request, support emergency response operations by providing recreation staff, vehicles, communications (ex. radios) and equipment (ex. first aid equipment)
- Provide emergency first aid treatment
- Coordinate and oversee the management of essential recreation facilities and sites
- Communicate the restoration needs of essential recreation and ESS facilities to the EOC
- Establish a program to assist in the care of children of EOC and emergency response staff, as required
- Provide support as required to ESS

Potential EOC Assignments:

- Logistics
- Operations – ESS Branch
- As otherwise directed by the EOC Director

Emergency Social Services:

Emergency Social Services (ESS) is a municipal program that is supported by trained volunteers. ESS provides short-term (72 hours) essential services to people affected by a major emergency or disaster. These services include: shelter, food, essential clothing needs, family reunification, emotional support, first aid and referrals to pet care. The primary role of ESS is to care for the needs of people evacuated as a result of an emergency situation.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Establish ESS reception centres, group lodging centres and volunteer centres, as required
- Request, through the EOC, mobile support, as required
- Coordinate and provide ESS services for evacuees, persons impacted by the emergency and emergency workers
- Obtain and coordinate ESS resources and supplies, as required

Potential EOC Assignments:

- Operations – ESS Branch
- As otherwise directed by the EOC Director

8.3.8 Whistler Library

The library is a place in the community that is easily recognized both physically and as a place of comfort and security; a place where one will receive the help they seek. With this in mind, the Whistler Library should resume library services to normal as soon as possible following a major emergency or disaster. The Whistler Library may be used as an information centre in addition to regular library services (internet, etc.). Library staff may be asked to staff call centres as required.

Emergency Responsibilities:

- Implement Library emergency response and recovery plans to protect staff, patrons and facilities
- Potentially provide resources to the municipality in terms of staff, facilities, communications support or other services; these may include:
 - Staff may be designated for call centre(s) established by the EOC Information Officer

- Provide facilities to coordinate the provision of information to the public (in cooperation with Information Officer and ESS), e.g., through use of facilities as information centres and/or call-centres, and internet computers at library locations
- Implement business recovery plans to facilitate returning library services to normal as soon as possible
- Coordinate with the EOC Information Officer to convey information to the public, as required
- Coordinate with the EOC to promote special activities for the affected population, as required

Potential EOC Assignments:

- Support staff to Information Officer
- Support staff to Logistics Section (Facilities, personnel)
- As otherwise directed by the EOC Director

8.4 Infrastructure Services

The Infrastructure Services Department is responsible for roads, waterworks, sewers, solid waste services, flood protection, sanitation, fleet management, transportation system (with the exception of Highway 99 which is the responsibility of the Ministry of Highways), and the emergency program. Upon activation of the EOC, senior staff from Infrastructure Services will report to the EOC to fulfill the role of Liaison Officer, Operations Public Works/Engineering Branch Coordinator and support the Planning and Logistics Sections as required. Infrastructure Services will also assume the role of EOC Operations Chief during events requiring Public Works and Engineering as the lead agency.

Infrastructure Services have developed plans for the following functional areas:

- Utilities – Water Emergency Response Plan
- Central Services – Public Works Yard Plan
- Emergency Flood Response Plan
- Waste Water Treatment Plant Emergency Response Plan

8.4.1 Roads

The Roads Department is responsible for maintaining RMOW's road network and storm water system, and for undertaking preventative measures to protect the community from flood damage. During emergency events the Roads Department will continue daily operations, maintain, construct, and repair roads and maintain flood control measures, in an emergency response capacity. Roads will provide equipment and personnel for emergency operations as required. Roads will provide direction and support on traffic management matters in co-ordination with emergency services and engineering. In the event of a flood, the roads department is the lead response agency and will coordinate flood protection operations.

Emergency Responsibilities:

- Depending on the nature of the emergency, provide an Incident Commander (IC), if required
- In the event of a flood, implement the Emergency Flood Response Plan
- If not the lead agency, support site activity and rescue operations, as required
- Provide staff to support EOC activations and operations
- Assist the EOC Logistics Section with the supply of municipal equipment and vehicles and procure, as required, equipment and vehicles from the private sector
- Maintain flood control measures (storm water management and dykes)
- Provide flood protection operations, i.e., sandbagging, emergency pumps, and drainage or excavation, including monitoring and reporting back to EOC
- Clear roads and work collaboratively with the RCMP on issues of traffic control. This may include the provision of barricades, signs and other traffic control devices to control traffic and pedestrians. This may also require temporary road construction, snow and ice control on roads, and/or inspection of viable transportation systems

- Provide or arrange for the clearing of debris, temporary road construction and maintenance of emergency traffic routes, and inspection of bridges

Potential EOC Assignments:

- Operations Section
- Logistics Section
- As otherwise directed by the Incident Commander or Emergency Operations Centre Director

8.4.2 Utilities

The Utilities department operates and maintains RMOW's district energy distribution loop, water supply and distribution systems, and the municipality's sanitary sewer collection system. In a major emergency, utilities will monitor, maintain and repair these utilities, the landfill gas collection system, and the District Energy System field equipment. In addition, Utilities will liaise with external utility companies (BC Hydro, Fortis BC, etc.) to assist in identifying restoration priorities.

Emergency Responsibilities:

- Depending on the nature of the emergency, provide an Incident Commander (IC), if required
- Support site activity and rescue operations as required
- Provide staff to support EOC activations and operations
- Provide subject matter expertise and/or point-of-contact for all aspects of RMOW utilities
- Monitor vulnerable areas – water mains, sewer lines, district energy lines, landfill gas collection and flare system
- Maintain, repair and provide emergency restoration of specified utilities (potable water, sewage collection, and district energy distribution). The Utilities Department could assist with wastewater treatment plant, solid waste management, and recycling plant restoration issues, however the expertise in these areas is with other groups.
- Provide liaison and assistance, where possible, to public utility companies and commercial communications outlets for emergency restoration and/or discontinuance of the utilities
- Develop and coordinate a strategy for service resumption with the utility companies
- Provide information regarding utilities connections, usability of structures and locations or status of other relevant infrastructure
- Conduct discussions of potential issues relating to emergency telecommunications
- Assist in the containment of a hazardous materials spill and limit any potential damage to waterways and sewer systems
- Implement the Water Emergency Response Plan as required and provide emergency potable water, supplies, and sanitation facilities as requested by the Vancouver Coastal Health Drinking Water Officer

Potential EOC Assignments:

- Operations Section – Utilities Branch
- Logistics Section
- As otherwise directed by the Incident Commander or Emergency Operations Centre Director

8.4.3 Solid Waste

Infrastructure services staff operate and maintain two compactor sites, the waste transfer station, and the composter through contracts with private waste hauling and disposal companies. In an emergency, solid waste staff will initiate procedures to continue operations at waste transfer stations and oversee disaster debris operations.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations

- Perform an assessment on the emergency impacts to the RMOW waste transfer station and compactor sites and municipal waste management operations. Report this information to the EOC
- Arrange for private waste hauling and disposal companies to provide emergency waste collection services (for debris, brush, etc.), as required
- Assess the need for additional waste drop off services at RMOW compactor sites (e.g. extended service hours, additional staffing)
- Work with EOC Information Officer(s) to communicate changes of waste services to the affected public
- Liaise with the Ministry of Environment on emergency amendments to Certificates of Approval for waste facilities as required

Potential EOC Assignments:

- Operations Section

8.4.4 Waste Water Treatment & District Energy System Plants

Waste Water Treatment Plant (WWTP) staff operate and maintain the RMOW's wastewater treatment and district energy system (DES) plant. The WWTP receives treats and releases liquid waste from Whistler's sewage collection system. The DES plant generates thermal energy which is provided to buildings in Cheakamus Crossing for building and domestic heating. In an emergency affecting the WWTP or the DES the WWTP Emergency Response Plan will be activated.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Implement the WWTP Emergency Response Plan, as required
- Assess the extent of damage on the waste water infrastructure and report this information to the EOC
- Communicate resource requirements to the EOC
- Assist in the containment of a hazardous materials spill and limit any potential damage to waterways
- Notify the EOC on any matters which may adversely affect public health and/or the environment
- Notify affected residents and building managers if the DES plans is inoperable.

Potential EOC Assignments:

- Operations Section - Utilities

8.4.5 Development Services

The Development Services Department provides technical/engineering services and Geographic Information System (GIS) to the RMOW. In a major emergency the Development Services department will provide technical and GIS services to the emergency site and EOC.

Emergency Responsibilities:

- Provide technical support with respect to reinstating and maintaining essential infrastructure: water supply and distribution, sanitary sewers, roads and drainage systems.
- Provide staff to support EOC activations and operations, as required
- Provide specialized GIS maps for EOC and site
- Provide technical support on traffic management matters in co-ordination with emergency services and the Roads department
- Coordinate arrangements for the demolition of unsafe buildings and structures as requested by the EOC
- Ensure continuity of core Development services

Potential EOC Assignments:

- Operations Section
- Planning Section – GIS Mapping
- Operations Section – Engineering Branch
- Logistics Section
- As otherwise directed by the EOC Director

8.4.6 Transit

During a major emergency or disaster, the transit department may coordinate emergency transit needs through the deployment of the Whistler Transit system vehicles as required.

Emergency Responsibilities:

- Provide staff to support EOC activations, as required
- Establish contact with BC Transit and the local transit operating company to establish availability of equipment and transportation resources for use in evacuations and other operations as needed
- Maintain inventory of available RMOW transit resources

Potential EOC Assignments:

- Logistics Section –Transportation
- As otherwise directed by the EOC Director

8.4.7 Emergency Program

The Emergency Program is responsible for ensuring that RMOW has a strategy in place to address preparedness, response, recovery and mitigation from emergency events. During a major emergency or disaster the RMOW Emergency Program Coordinator will assume responsibility for the EOC Liaison Officer function.

Emergency Responsibilities:

- Provide staff to support EOC activations and preform the role of Liaison Officer in the EOC, thereby communicating with EMBC, other municipalities and other stakeholders during the emergency response
- Advise on the requirements of RMOW Emergency Bylaw and RMOW CEMP
- Assist with EOC set-up of necessary equipment, arranging of security to the EOC, and signing in EOC personnel
- Provide advice, expertise and support in emergency management functions to EOC staff
- Oversee the response capacities of the volunteer emergency teams including Search and Rescue, ESS, and Emergency Radio

Potential EOC Assignments:

- EOC Liaison Officer (Management Section)
- Supports other EOC Sections as required
- As otherwise directed by the EOC Director

8.4.8 Central Services

During a major emergency, central services will maintain operations at the Public Works Yard including fleet management, garages, stores and purchasing. Stores staff will assist with the acquisition, allocation and tracking of resources through the EOC Logistics section.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations as required

- Working with the EOC Logistics Section, provide and secure equipment and supplies not owned by the RMOW and negotiate vendor contracts not previously addressed
- Ensuring liaison with EOC Finance/Administration Section in order to assist with maintaining accurate records of expenses
- Keep the EOC advised on all significant issues relating to the municipal fleet of vehicles
- Working with the EOC Logistics Section , determine if required resources and quantities are available in the municipal inventory
- Provide mechanical maintenance and servicing of essential vehicles/equipment
- Maintain a list of essential municipal vehicles/equipment and fuel sources
- Maintaining and updating a list of all vendors (including 24-hour contact numbers), who may be required to provide supplies and equipment
- Ensure emergency fuel contracts for vehicles and standby generators are active and in good standing
- Fuel municipal generators, as required

Potential EOC Assignments:

- Logistics Section – Supply Unit
- Finance Section – Procurement
- As otherwise directed by the EOC Director

8.5 Resort Experience

The Resort Experience (REX) Department includes Building Services, Planning, Environmental Stewardship, Strategic Alliances, Parks & Trails Operations, Landscape, Turf and Irrigation Operations, Building Maintenance Services, Village Maintenance and Village Events and Animation. During emergency events the Resort Experience department will provide personnel to support emergency operations.

8.5.1 Building Department

The Building Department administers the building permit approval process for new buildings, alterations and tenant improvements. Responsibilities include the application and enforcement of the *BC Building Code*, Building Bylaw, Zoning Bylaw, Provincial and Federal regulations; archiving and retrieval of historical building documentation; risk management; response to legal challenges; support to designers, contractors, realtors and the general public in the interpretation and implementation of building codes, standards, regulations and municipal bylaws. During a major emergency or disaster, the Building Department will provide damage assessments to areas that have been involved in a major emergency or disaster and assist in disaster recovery operations. The Building Department may also be called upon to contact and coordinate local qualified Registered Professionals (Structural Engineers, Geotechnical Engineers) to assist in damage assessments.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Perform and/or arrange for rapid damage assessments on the structural safety of municipal and public buildings (based on pre-determined priorities) and determine whether they are suitable and safe for occupancy
- Identify and prioritize damaged structures to be inspected and coordinate building and plumbing inspection personnel
- Take action to ensure the protection of the public including, but not limited to:
 - Prohibit the use or occupancy of a building
 - Order a building to be renovated, repaired or demolished to remove an unsafe condition
 - Take measures necessary to mitigate the danger where a building is involved
- Provides technical expertise regarding the construction of buildings, as required
- Document the status of building inspections within the RMOW, including extent of damage and priority for repair and restoration

- Issue any orders as required for required remedial actions to be undertaken
- Provide input into the recovery planning process
- Ensure continuity of core Building Services

Potential EOC Assignments:

- Operations Section – Inspections Branch
- As otherwise directed by the EOC Director

8.5.2 Planning

Planning Services manages all aspects of long range and current planning within the RMOW. During a major emergency or disaster, the Planning Department will provide support to the EOC in the form of personnel and demographic and population information as well as expertise related to land use and zoning.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Upon request, provide demographic and population information to the EOC
- Provide input into the recovery planning process
- Ensure that Recovery Plans and re-construction initiatives consider the RMOW Official Community Plan
- Ensure continuity of core Planning Services

Potential EOC Assignments:

- EOC Planning Section
- As otherwise directed by the EOC Director

8.5.3 Environmental Stewardship

Environmental Stewardship is responsible for developing and implementing policies, bylaws and work programs that promote RMOW's environmental protection and sustainability objectives. During an emergency event the environmental stewardship department will advise on issues related to environmental protection and response.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Act as the coordinating link with all agencies with responsibilities for environmental response or environmental protection within the boundaries of the RMOW including, but not limited to, the Ministry of Environment
- Maintain and advise on a listing of local contractors and vendors with environmental response goods or services
- Provide advice on environmental policies and bylaws to EOC staff in regards to the RMOW environmental protection and sustainability objectives
- Continue to monitor air quality and water quality in lakes and streams for compliance to Ministry of Environment and public health criteria, as required

Potential EOC Assignments:

- Support to the EOC Operations Section
- As otherwise directed by the EOC Director

8.5.4 Parks and Trails/Landscape, Turf and Irrigation/Village Maintenance

The Parks/ Trails and Landscape/Turf/Irrigation and Village Maintenance will provide equipment, vehicles and trained staff in support of emergency response and recovery efforts.

Emergency Responsibilities:

- Assist Public Works/Engineering with clearing roads, establishing road blocks, securing unsafe areas, snow removal, flood control measures (e.g., sandbagging and dyking) and debris removal
- Provide staff, equipment, vehicles and facilities to support various response and recovery efforts at the emergency site
- Provide staff to support EOC activations and operations, as required
- Providing equipment for emergency pumping operations (irrigation department)
- Providing emergency first aid treatment
- Undertake a review of all damage to parks including damage to trees – report the damage to the EOC
- Resume regular services as soon as possible

Potential EOC Assignments:

- Support to the EOC Planning Section
- Support to the EOC Operations Section
- Support to the EOC Logistics Section
- As otherwise directed by the EOC Director

8.5.5 Building Maintenance Services

Building Maintenance Services includes municipal building maintenance, electrical services and construction services. Building Maintenance Services maintains Municipal Hall, Public Safety Building, Whistler Public Library, Public Works Yard buildings, Spruce Grove Field House, Millennium Place, as well as various other minor buildings. During a major emergency, effecting municipal building infrastructure, Buildings Maintenance Services will assist with municipal facility inspections and prioritize repair and reconstruction of these facilities. Building Maintenance Services will also distribute and maintain municipal generators.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- Upon request, support emergency response operations by providing staff, vehicles, equipment and facility space
- Work with the EOC and the Building Services Department to preform (trained staff only) and/or arrange for rapid damage assessments of municipal buildings (based on pre-determined priorities) and determine whether they are suitable and safe for occupancy
- Assess and document the status of municipal buildings, including estimated value of damage and priority for repair and restoration and report these findings to the EOC
- Prioritize which municipal facilities require access to municipal generators
- Provide technical assistance for electrical systems, electrical safety, and temporary power.

Potential EOC Assignments:

- EOC Logistics Section
- EOC Planning Section – Damage Assessments
- Support to the EOC Operations Section
- Support to the EOC Logistics Section
- As otherwise directed by the EOC Director

8.5.6 Village Events and Animation

Village Events and Animation staff are responsible for managing facility bookings for the Village, Whistler Olympic Plaza, parks, fields, trails, outdoor spaces; permits and planning for the Festivals, Events & Animation program; as well as the Village Host program. For major emergencies or disasters involving a festival or event, the Village Events and Animation team will use pre-established contacts to help coordinate activities between the EOC and the festival or event agency.

Emergency Responsibilities:

- If the major emergency or disaster involves a special event, attend the EOC to provide details of the event and key contact information
- Potentially provide resources to the municipality in terms of staff, facilities, communications support or other services; these may include:
 - The acquisition of parks and fields to be used as staging areas by emergency response personnel
 - Coordination of Village Hosts to disseminate information through the village, as required
- Resume regular village events and animation programming as soon as possible
- Depending on the scope of the emergency, work with Strategic Alliances' staff to develop strategies to minimize the impact of the emergency on resort tourism

Potential EOC Assignments:

- Support to the EOC Logistics Section
- EOC Operations Section
- EOC Planning – Recovery (tourism resumption)
- As otherwise directed by the EOC Director

8.5.7 Strategic Alliances

Strategic Alliances is responsible for developing new relationships and expanding existing partnerships both in-resort and externally to help generate awareness of and visits to Whistler. During a major emergency, particularly if the emergency has interrupted resort operations, staff in Strategic Alliances will work to notify existing partners of resort interruptions and develop strategies and plans for encouraging visitors once the emergency has resolved.

Emergency Responsibilities:

- Provide staff to support EOC activations and operations, as required
- In coordination with EOC Information Officers, notify external partners of the extent of the emergency
- In coordination with EOC Information Officers and external partners (as available/required), develop a strategy to encourage tourists to return once the emergency has resolved

Potential EOC Assignments:

- Support to the EOC Planning Section
- As otherwise directed by the EOC Director

9 GOVERNMENT AND EXTERNAL AGENCY SUPPORT

This section will provide the essential emergency responsibilities and potential EOC assignments of the following external support agencies:

Federal and Provincial Agencies

- Public Safety and Emergency Preparedness Canada (PSEPC)
- BC Ambulance Services
- BC Coroner Service
- Emergency Management British Columbia
- Vancouver Coastal Health Authority
- Wildfire Management Branch

Local Partners

- Search and Rescue
- Emergency Radio
- Whistler Blackcomb
- Whistler Transit
- School District #48
- Whistler Health Care Centre
- Victim Services
- Whistler Animals Galore (WAG)
- Salvation Army
- St. John Ambulance
- Red Cross

Utilities

- BC Hydro
- TELUS/Shaw
- Fortis BC

Transportation Agencies

- CANUTEC
- CN Rail

9.1 Government Support (Federal/Provincial)

9.1.1 Public Safety Canada (PSEPC)

Public Safety Canada (PSEPC) is responsible for implementing a comprehensive approach to protect Canada's critical infrastructure and enhance Canada's emergency management framework.

Emergency Responsibilities:

- Assist EMBC with planning and coordination for response to and recovery from major emergencies or disasters
- Coordinate federal assistance if requested by provincial authorities
- Activate federal response and recovery plans in the event of province wide emergency events

9.1.2 BC Ambulance Service (BCAS)

BCAS will provide ambulances, trained personnel and whatever other essential resources may be required to assess, treat, stabilize, transport and deliver patients with medical needs to appropriate medical care facilities.

Emergency Responsibilities:

- Coordinate the triage and transportation of all injured persons to the Whistler Health Care Centre and other available hospitals
- Provide staff to support the Operations Section of RMOW's EOC Operations Section Ambulance Branch
- Oversee Critical Care Transport of injured as required

Potential EOC Assignments:

- Operations Section – Ambulance Unit Leader

9.1.3 BC Coroner's Service

The BC Coroner Service is responsible for the recovery, identification and ultimate disposal of human remains, and more specifically, for:

- Recovering the dead
- Recovering personal property
- Recovering evidence
- Determining the cause of deaths

Emergency Responsibilities:

- Coordinate care of the dead
- Recovery, identification and ultimate disposal of the dead
- Coordinate activities with RMOW's EOC

Potential EOC Assignments:

- Operations Section – Coroner Unit Leader

9.1.4 Emergency Management BC

EMBC is a division of the Ministry of Justice and is administered under the BC Emergency Program Act. EMBC coordinates the provincial response to emergencies and provides specialized technology resources to support local government emergency response activities. On a day-to-day basis, EMBC is available to respond to local government and agency calls through the PREOC that is staffed 24/7 and provides training to municipal staff and volunteers.

Emergency Responsibilities:

- Maintain a 24-hour Emergency Coordination Centre to provide support to the RMOW's emergency response and recovery efforts
- Issue a Task Number to the RMOW so the RMOW may account for all eligible expenses incurred during response and recovery efforts
- Support the efforts of emergency volunteers that provide critical emergency response services (e.g., Emergency Radio, ESS, WSAR)
- Coordinate provincial response and recovery efforts through the establishment of PREOC's and a PECC
- Make appropriate requests to the provincial ministries and agencies for assistance if the RMOW's resources are not adequate for an effective response to an emergency
- Recommend a Declaration of Provincial State of Emergency, as required
- Coordinate regional, provincial and federal assistance, as required

Potential EOC Assignments:

- Planning Section

9.1.5 Vancouver Coastal Health Authority

The RMOW is serviced by the Vancouver Coastal Health Authority (VCH). VCH is the administrative organization responsible for providing all publicly funded health services to the RMOW. VCH executes the duties of the Drinking Water Officer pursuant to the Drinking Water Protection Act, which regulates the potable water supply activities of the RMOW, and the implementation of emergency responses.

Emergency Responsibilities:

- Provide staff to the RMOW's EOC upon request
- Support the emergency activities undertaken by the Whistler Health Care Centre
- Determine the status of medical facilities within the RMOW and availability of facilities in surrounding area and report this information to the EOC
- Assist BCAS in ensuring that casualties are evenly distributing to receiving facilities
- In cooperation with Infrastructure Services, ensure that potable water supplies are inspected and monitored and implement emergency responses if required
- In cooperation with Infrastructure Services, ensure that sewage systems are operating at acceptable levels

Potential EOC Assignments:

- Operations Section – Health Branch

9.1.6 Wildfire Management Branch

The Wildfire Management Branch is a division of the Ministry of Forests, Lands and Natural Resource Operations. The Wildfire Management Branch is responsible for managing wildfires on both Crown and private lands outside of the RMOW. In the event of an interface fire within the RMOW boundary, the Wildfire Management Branch would assist and support the WFRS.

Emergency Responsibilities:

- Provide support to the EOC, as event requires.
- Support site activity through the provision of personnel, equipment, supplies, telecommunications equipment, aviation support and weather information to assist in emergency response operations.

Potential EOC Assignments:

- Operations Section – Fire Branch

9.2 Local Partners

9.2.1 Whistler Search and Rescue

WSAR is a community-based volunteer organization providing land and inland water search and Rescue Services, wilderness public safety education and assistance to local and regional governments during emergencies and disasters.

Emergency Responsibilities:

- Support site activity and rescue operations, as required
- Provide Ground and Inland water search and Rescue Services when requested by RCMP, BCAS, EMBC
- Provide some assistance to local and regional governments during major emergencies
- Provide assistance to the BC Coroner Service for the recovery of deceased persons
- Participate in RMOW's EOC, as requested

Potential EOC Assignments:

- Operations Section – WSAR Branch

9.2.2 Emergency Radio

The Whistler Emergency Radio Team provides alternate emergency communications to the RMOW. An inventory of emergency radio equipment is available in the Public Safety Building.

Emergency Responsibilities:

- Provide a representative to the EOC to determine the emergency radio communication needs and capabilities
- Coordinate the deployment of emergency radio operators and resources during an emergency according to the needs of the EOC

9.2.3 School District #48

School District #48 (SD#48) will provide for the safety of children, teachers and staff. SD#48 is responsible for developing school emergency plans and ensuring that staff and students have been trained and exercised in the details of the plans. SD#48 emergency plans are developed in cooperation with the RMOW's emergency program and emergency response officials. SD#48 will activate a centralized EOC to coordinate all activities and response needs of the various schools impacted by an emergency situation. The SD#48 EOC will communicate with the RMOW's EOC, on their status and identify what emergency assistance they require.

Emergency Responsibilities:

- Participate in RMOW's EOC, as requested
- Provide for safety of all children, teachers and staff within SD#48
- During emergency situations impacting Whistler schools, implement the appropriate school emergency plan and/or school evacuation plan
- Establish a SD#48 EOC to coordinate school response and recovery procedures
- Communicate priority needs to RMOW's first response agencies and RMOW EOC
- Provide school facilities and school resources for emergency use (e.g., ESS reception centres), as requested
- Upon request, coordinate the use of SD#48 transportation resources

Potential EOC Assignments:

- Operations Section

9.2.4 Whistler Blackcomb

Whistler Blackcomb (WB) is a ski resort located in the RMOW. WB maintains emergency plans and procedures for the safety of staff and visitors who work and recreate on the ski mountain. WB has many specialized resources that could be used to respond to emergency events both on the mountain and in the RMOW. WB resources include: trucks, snow cats, snowmobiles, radios, temporary fencing materials, fuel and diesel, first aid supplies and cooking facilities. WB has many staff trained in first aid, search and rescue, rope rescue, firefighting, and avalanche searches.

Upon request, and assuming WB staff is available, the WB will provide a representative to the RMOW's EOC to help coordinate emergency activities between the WB and the RMOW.

Emergency Responsibilities:

- Provide for the safety of staff and visitors
- Protection of Whistler Blackcomb buildings and structures
- Provide staff to RMOW's EOC to help coordinate emergency activity
- Provide staff and resources to support emergency social services
- Support Whistler's emergency response and recovery efforts
- Support Emergency Social Service activities by providing staff and resource support.
- In cooperation with Whistler Fire Rescue Service, support back-country fire response activities.

- Provide emergency equipment and expertise to the RMOW, including snowcats and snowmobiles, radios, temporary fencing materials, cooking facilities, first aid, search and rescue, firefighting, avalanche control blasting and search, emergency lighting
- Provide important safety information to the public during emergency events that impact Whistler Blackcomb

Potential EOC Assignments:

- Operations Section

9.2.5 Whistler Transit

Whistler Transit LTD. operates the public transit service in Whistler. Buses operate every day between 5:30 a.m. and 3 a.m. In the event of a major emergency or disaster, Whistler Transit Ltd. will allocate existing Whistler Transit System resources to the RMOW to facilitate emergency evacuations and other operations as required and report these resource allocations to BC Transit 1-800 number within the required timeframe according to BC Transit policies.

Emergency Responsibilities:

- Provide staff to support EOC activations, as required
- Communicate to the EOC the availability of transportation resources for use in evacuations and other operations as needed
- Provide transportation to move people from evacuation areas to designated reception centres
- Maintain scheduled transit service in unaffected areas

Potential EOC Assignments:

- Logistics Section – Transportation Unit

9.2.6 Whistler Health Care Centre

The Whistler Health Care Centre (WHCC) is a medical treatment and diagnostic centre. The main focus of the centre is to provide emergency care to Whistler patients. In the event of a major emergency or disaster, the WHCC will implement their emergency plan and activate an EOC to coordinate necessary medical services and support that will meet the needs of the emergency event.

Emergency Responsibilities:

- Provide emergency health care services
- Refer acute trauma patients to Lions Gate Hospital or Squamish General Hospital
- Activate the WHCC EOC for larger events requiring medical services coordination.
- Provide staff to RMOW's EOC when requested to do so
- Assist with the setting up of a field hospital, in the event the WHCC is damaged or non-functional

Potential EOC Assignments:

- Operations Section – Health Branch

9.2.7 Whistler Victim Services

The Whistler Victim Services team is positioned within the RCMP umbrella to provide emotional support, information and referrals to victims of crime and trauma. In a major emergency or disaster, Victim Services volunteers may provide emotional support to victims, witnesses and their family members. Although they do not provide counseling, they can make appropriate referrals to counseling services in the community.

Emergency Responsibilities:

- During emergency situations impacting Whistler – provide emotional support, information, and referrals to victims, witnesses, evacuees and family members
- Work with ESS to provide support in Reception and Group Lodging facilities

Potential EOC Assignments:

- Operations Section – RCMP Branch

9.2.8 Whistler Animals Galore

Whistler Animals Galore (WAG) is an animal shelter owned and maintained by the RMOW. During a major emergency, WAG will coordinate with RMOW Bylaw Services to care for domestic animals lost and/or impacted by the emergency event through the implementation of the RMOW Animal Disaster Preparedness Manual.

Emergency Responsibilities:

- Coordinate Animal Control with ESS and RMOW Bylaw Services
- Provide for the sheltering and feeding of animals
- Coordinate medical care for animals that have become sick or injured
- Establish a foster program for animals in need of temporary sheltering beyond the time they can remain in WAG facilities
- Coordinate the adoption of unclaimed animals after an extended holding period

9.2.9 Salvation Army

The Salvation Army may provide assistance to the RMOW in the form of emergency resources for public welfare, short term accommodation, clothing, feeding, emergency responder critical incident stress issues, and ESS Reception Centre support.

At the request of the RMOW the Salvation Army may:

- Provide trained staff for personal services at ESS Reception Centers
- Provide support to site response personnel
- Assist with mass feeding
- Assist in Donation Management

9.2.10 St. John Ambulance

St. John Ambulance has resources for communications, First Aid, mobile canteen services, and ESS Reception Centre medical support.

At the request of the RMOW St John Ambulance may:

- Provide registration and inquiry services
- Provide assistance to first responders by providing first aid and food services at the site level

9.2.11 Red Cross

The Sea to Sky Branch of the Canadian Red Cross may provide assistance to the RMOW in the form of registration and inquiry services. This service will assist the public in locating immediate relatives who have left their homes as a result of the major emergency or disaster.

At the request of the RMOW the Canadian Red Cross may:

- Assist with Registration and Inquiry functions at Reception Centers
- Collaboratively work with ESS to provide shelter and mass care
- Assist in Donations Management

9.3 Utilities

9.3.1 BCHydro

BC Hydro is responsible for the supply of electrical services to customers throughout the RMOW. This includes emergency response and restoration of services during emergencies. Upon request, and

subject to availability, BC Hydro will provide staff to support RMOW's EOC to coordinate activity on behalf of the utility agency.

Emergency Responsibilities:

In the event that the electrical distribution system becomes significantly disrupted, BC Hydro's response would involve the following:

- Distribute and restore electrical services
- Activating one or more BC Hydro EOCs
- In conjunction with the RMOW EOC determine exact priorities for the restoration of electrical services in affected areas
- Restore electrical services including the assessment of damage, prioritizing the work that has to be carried out and the mobilization and deployment of personnel and equipment to areas where they are needed
- Ensuring ongoing communications with RMOW's EOC

Potential EOC Assignments:

- Operations Section – Utilities Branch

9.3.2 TELUS/Shaw

TELUS and Shaw are responsible for providing telecommunications service to the RMOW. TELUS and Shaw will be requested to keep its equipment operational with primary emphasis on that equipment which is vitally needed by Whistler for an effective response to a major emergency or disaster.

Emergency Responsibilities:

- Ensure telecommunications capability in support of response efforts
- Restore telecommunication outages throughout Whistler, based on RMOW EOC priorities

Potential EOC Assignments:

- Operations Section – Utilities Branch

9.3.3 Fortis BC

Fortis BC is responsible for the generation, distribution and restoration of the natural gas system in the RMOW. Upon request and subject to availability, Fortis BC will provide staff to support the RMOW EOC activity.

Emergency Responsibilities:

- Generate, distribute and restore natural gas service to the community of Whistler
- Upon receiving a report that an emergency involving natural gas has occurred, immediately dispatch response personnel to evaluate the nature of the emergency and specify needs for action and support; on-site remedial action to correct the problem will then be implemented as soon as possible
- Provide information on above ground facilities and the location of buried pipes
- Upon request and when available to do so, provide staff to the RMOW EOC to coordinate activities on behalf of the utility agency

Potential EOC Assignments:

- Operations Section – Utilities Branch

9.4 Transportation Agencies

9.4.1 Canadian Transport Emergency Centre (CANUTEC)

CANUTEC is a federal government agency in Ottawa to assist with the handling of hazardous material emergencies. CANUTEC can be called whenever immediate information is required for emergencies involving all hazardous materials including chemicals, chlorine, toxic gasses, radioactive substances, acids, corrosives. Scientists (chemists) will provide information on the dangers involved and the proper method of clean up. CANUTEC provides information from its extensive data base and also makes every attempt to link emergency response personnel at a disaster site directly with individuals and organizations that can offer technical advice such as shippers, manufacturers of the product or others who handle the same product.

Emergency Responsibilities:

- Provide hazardous goods information to the RMOW IC and RMOW EOC upon request

9.4.2 CN Rail

CN Rail operates the rail-line that passes through Whistler. It provides rail right of way, rail bed, rail crossing and management of local rail service. CN Rail transports many varieties of regulated products and is responsible for their care.

Emergency Responsibilities:

- Assist in coordinating emergency response to CN Rail incidents and Provide emergency response capability
- Assist with transportation of emergency resources, as required
- Upon request and when available to do so, provide staff to the RMOW EOC to coordinate activities on behalf of CN Rail

Potential EOC Assignments:

- Operations Section

10 HAZARD, RISK, AND VULNERABILITY ASSESSMENT

Given the RMOW's environment, development and geographical location, it is vulnerable to numerous hazards, any one of which has the potential to disrupt municipal operations, cause damage, and create casualties. While it is not possible to predict the next occurrence of any of these hazards, their probability to some extent can be postulated by researching and analyzing historical records; and, the risk associated with each hazard can be projected by analyzing the expected and potential impacts that might occur.

To read the complete Hazard, Risk, and Vulnerability Assessment document please see [Appendix 1, Hazard, Risk, and Vulnerability Assessment](#).

10.1 Hazard, Risk, and Vulnerability Analysis (HRVA)

A HRVA is both a process and a tool used to identify hazards or emergency situations which are a priority for the municipality to make contingency plans for. The process assesses each situation by both its potential impact on the area, the probability of its occurrence, and also the vulnerability of the area to the event. Events with both a high risk of probability (i.e., likelihood) and seriousness of impact (i.e., consequence or vulnerability of the municipality) receive the highest rating. Risk-based choices can then be made to address vulnerabilities, mitigate hazards and prepare for response to and recovery from hazard events. A HRVA is a requirement mandated by the Local Authority Emergency Management Regulation of the BC Emergency Program Act.

A hazard is a source of potential harm or a situation with potential for causing harm, in terms of human injury, damage to health, property, the environment, or economic hardship. Risk is the chance of injury or loss as defined as a measure of the probability (*likelihood*) and *severity* of an adverse effect to health, property, the environment or other things of value. *Hazard likelihood* is categorized based largely on the historical occurrence of similar events: frequent (1 - 3 year occurrence), moderate (3 - 10 year occurrence), occasional (10 - 30 year occurrence), unlikely (30 - 100 year occurrence), rare (100 - 200 year occurrence), and very rare (200+ year occurrence). *Consequence severity* is based on seven categories of impacts for each hazard: fatalities, injuries, critical facilities, lifelines, property damage, environmental factors, economic and social factors.

In this plan, risks are rated on a progressive scale - very low, low, high and very high – based on the analysis of event likelihood combined with consequence severity. Different impacts will have different potential consequences. Lastly, hazard vulnerabilities are considered in the development of the HRVA in terms of broad groupings: social, physical, economic, environmental and political.

10.2 HRVA Summary

Following is a summary of the results of the RMOW HRVA, completed in 2012. The Risk Matrix [Figure 9](#) on the following page shows the relative ranking of all hazards analyzed.

As reflected in the risk matrix ([Figure 9](#)), the Municipality has no hazards with a rating of very-high and has identified five hazards with a rating of high. These include: interface fire, earthquake, volcano, interruption to water supply and snow storm.

Figure 9 Risk Matrix

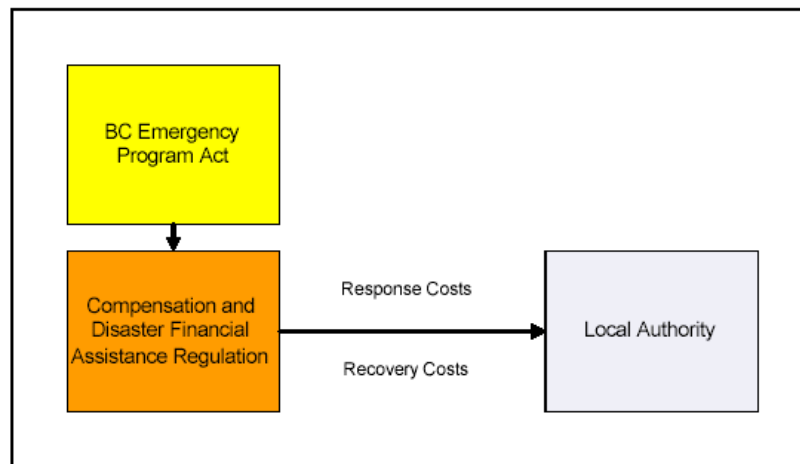
Hazard	Risk Rating			
	Low	Medium	High	Very High
Aircraft Crash		X		
Avalanche	X			
Civil Disorder / Riot		X		
Debris Flow/Debris Flood		X		
Drought		X		
Earthquake			X	
Epidemic/Pandemic		X		
Flood		X		
Geotechnical Event		X		
Hazardous Materials Accident		X		
Hazardous Materials Accident - Rail		X		
Heat wave		X		
Ice Storm (Major)		X		
Ice Storm (Minor)		X		
Industrial Accident		X		
Interface Fire			X	
Interruption to Water Supply			X	
Landfill Gas Emergency	X			
Multiple Casualty Incident - Event Related		X		
Multiple Casualty Incident - Motor Vehicle		X		
Natural Gas Distribution System Failure		X		
Power Outage		X		
Rock Fall		X		
Sanitary Sewer Failure	X			
Ski-Lift (Mountain Incident)		X		
Snowstorm (Major)		X		
Snowstorm (Minor)			X	
Structure Fire		X		
Terrorism		X		
Volcano			X	
Volcanic Ash Fallout		X		
Windstorm	X			

11 FINANCIAL ASSISTANCE

Under the Emergency Program Act and the Compensation and Disaster Financial Assistance Regulation (C&DFA), each municipality can receive financial assistance for eligible emergency response costs incurred during a major emergency or disaster, and assistance for some post-disaster recovery costs expended to repair or restore public works and facilities that are essential to municipal operation.

Under this legislation, EMBC is authorized to assist local governments with eligible costs for response and recovery, providing there is sufficient documentation.

Figure 10 Legislation for Assistance of Response and Recovery Costs



11.1 Overview of Eligible Response and Recovery Costs

Figure 11 Summary of Assistance Ratios by Expense Type

Expense Type	% of Eligible Costs
Local Authority Response	100 %
Local Authority Recovery (accepted claim that exceeds \$1,000)	80 %
Community Recovery (accepted claim that exceeds \$1,000)	80 %
Recovery Administration	10 %
Business Interruption	No eligible costs

Figure 10 illustrates that local authorities may receive financial assistance from the province for 100 percent of eligible response costs. Under provincial regulation, local authorities may receive 80 percent of recovery and/or community recovery costs that exceed \$1,000 in total per event. Local authorities are responsible for the remaining twenty percent of eligible costs and all response and recovery costs that are not eligible for financial assistance from EMBC.

Two criteria are common to all categories to qualify for financial assistance:

- Costs must be eligible, and
- Costs must be documented

Note: Materials ordered when preparing for an emergency are only eligible if used. For example, sandbags brought in to prevent a flood will only be paid for if a flood materializes and the sandbags are used. Re-stocking fees for unused materials are not eligible. In addition, clean-up that is not debris is not covered. For example, in the case of a flood sandbag cleanup is not an eligible response costs.

11.2 Response Costs

Response means all efforts to save lives, reduce suffering, protect property, and other immediate objectives to reduce threats from major emergencies and disasters. Response may begin before impact if early information warns of an imminent event, and may continue as long as the event is in progress or the imminent threat exists. EMBC has a mandate which includes minimizing the economic and social impact from major emergencies and disasters.

EMBC is permitted under the C&DFA Regulation to assist a local authority with 100 percent of eligible response costs. Each local authority is expected to pay response costs first, then to submit claims to EMBC for processing.

Eligibility for response costs depends on these factors:

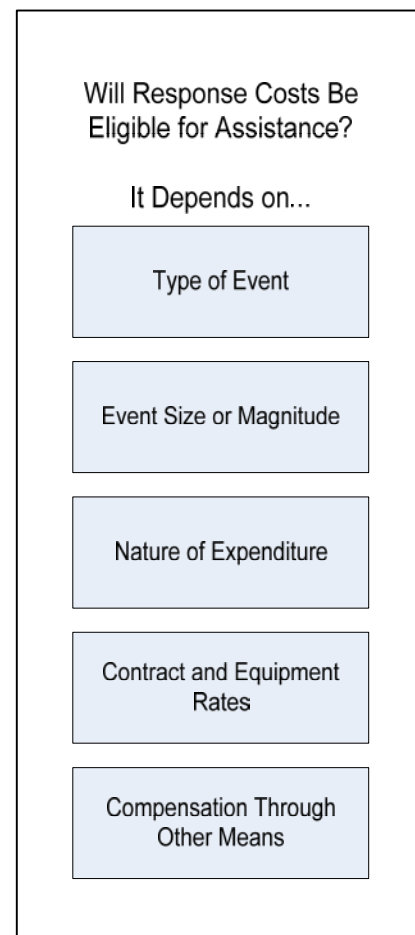
Type of Event – Most disasters caused by natural hazards may be considered for financial assistance under BC legislation, including floods, severe winter storms, landslides and mudslides, and some wildfire situations. Municipal economic losses caused indirectly by unexpected events will likely be considered on a case-by-case basis.

Event Size or Magnitude – Most emergency events will be small in size and require relatively little response effort. The province reserves the right to refuse claims from municipalities for such events as minor floods or snow storms.

Nature of Expenditure – The nature of the response expenditure is an important factor to consider. Only response expenses and staff time over and above normal day-to-day costs are eligible for assistance. Also, eligibility pertains to response costs for efforts needed to preserve public safety related to a specific event.

Contract and Equipment Rates – There are limits on the rates eligible for financial assistance from the province. The province will only assist municipalities with equipment rental costs to the rates accepted by the province. These rates are published in the Blue Book - Equipment Rental Rate Guide, including values for a wide range of heavy equipment. Contracts should also specify either provincial Group 1 or Group 2 rates for meal allowances, travel, and accommodation.

Compensation through Other Means – If the RMOW has access through other means to funds for response expenditures, the province may reduce or forego payment. For



example, if the RMOW seeks legal compensation from a person who caused an emergency under the BC Emergency Program Act, the province will account for such claims in calculating the amount of provincial assistance.

Refer to [Appendix 2 Eligible and Ineligible Response Costs](#) for examples of eligible response costs.

11.3 EOC Procedures

To be most effective, the Finance/Administration Section of an EOC should be operating as soon as possible in an emergency that generates municipal response costs.

The EOC should undertake four activities to assist with later claims for response costs. These activities include:

Obtain an EMBC Task Number – Request a Task Number from EMBC, either by telephone to the PECC in Victoria, or through the EMBC Regional Manager. Every supplier and contractor, all staff members working overtime, and all volunteers should record and reference the EMBC Task Number in tracking their hours and costs.

Submit Expenditure Authorization Forms, where required – Prepare and submit an Expenditure Authorization Form (EAF) to the PREOC to confirm eligibility of particular response costs for actions being considered by the local government. A blank Expenditure Authorization Form (EOC Form 530) is available in [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#).

Once an EAF has been authorized by the PREOC, the municipality is assured the province will provide assistance to the dollar limit identified, as long as the proper documentation is provided with the claim. If circumstances require an increase in the estimate, the EOC should prepare an addendum to the EAF and seek authorization from EMBC through the PREOC.

Submit Daily Expense Reports – Prepare a daily expense report and submit it to the PREOC. Use EOC Form 532, available in [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#).

With the daily totals, the local government will also want to record the total cost amount committed to the entire event to date. The EOC Form 534 “Expenditures Event Totals” serves this function, also available in [Annex 2 Emergency Operations Centre Quick Action Checklists & Forms](#).

Submit Resource Requests – Under the BCERMS, the RMOW is responsible for using local resources to fill immediate needs to the greatest extent possible, including any mutual aid that may be available. If locally available resources are insufficient for operational needs, the local government may request assistance through the PREOC, using EOC Form 514.

All four activities involve direct communication with the PREOC.

11.4 Recovery Costs

Recovery involves efforts to return municipal facilities and materials to pre-disaster conditions. Local government recovery applies to the repair or replacement of structures, equipment and materials that are essential to effective operation. Under the C&DFA Regulation, EMBC is allowed to assist municipalities with 80 percent of eligible costs required to repair or replace public facilities and materials, after applying a \$1,000 deductible to eligible costs per event.

The RMOW will not receive assistance for recovery costs that are not eligible under the Regulation. For example EMBC will not assist the RMOW with stockpiling supplies or with replacing equipment that may have been damaged by incidents other than the event. Refer to [Appendix 2 Eligible and Ineligible Recovery Costs](#) for examples of eligible recovery costs.

Community Recovery Costs

The Emergency Program Act also allows financial assistance for local authority efforts to support community recovery. Local authorities may qualify for up to 80 percent of eligible costs, including efforts to coordinate local recovery organizations and service providers.

Business Interruption Losses

This category of loss by local authorities does not qualify for financial assistance under BC legislation. This includes local authority costs and interrupted revenues that may not be immediately obvious, including lost income from public facilities and lost tax base. These loss types may arise from other impacts, such as public works and facilities damage, or the commitment of key local authority personnel to the emergency event.

The information provided above on Disaster Financial Assistance was excerpted from "[Financial Assistance for Emergency Response and Recovery Costs: A Guide for BC Local Authorities and First Nations](#)" (EMBC, September 2005).

12 APPENDIXES

12.1 Appendix 1 – Hazard, Risk, Vulnerability Analysis



Resort Municipality of Whistler

Hazard, Risk & Vulnerability Assessment

JUNE, 2012

EXECUTIVE SUMMARY

A Hazard, Risk, and Vulnerability Assessment (HRVA) examines the hazards that may impact a community and the risk that each hazard event poses to the community as a whole and to vulnerable elements of the community. A HRVA is a requirement mandated by the Local Authority Emergency Management Regulation of the B.C. Emergency Program Act [see Appendix A] and the Resort Municipality of Whistler *Emergency Measures Bylaw NO. 1593, 2002* [see Appendix B]. This document represents that assessment, as completed by a committee of Municipal staff (the HRVA advisory committee).

No municipality has unlimited resources allowing them to plan for every hazard event possible, therefore some form of ranking is required when deciding which hazards are most important to plan for.

The information presented in this assessment should be used by the Resort Municipality of Whistler to:

1. Meet the requirement mandated by the B.C. Emergency Program Act and the Resort Municipality of Whistler *Emergency Measures Bylaw NO. 1593, 2002*;
2. Update the 2005 Resort Municipality of Whistler Emergency Plan, the 2004 Resort Municipality of Whistler Evacuation Plan and other emergency response plans, policies and procedures; and
3. Prepare strategies for cost-effective, on-going emergency planning.

This HRVA advisory committee used qualitative methods to determine risk ratings for various hazards. The committee identified 32 hazards that could affect the Resort Municipality of Whistler. Based on the information obtained in the course of this assessment, the HRVA advisory committee has assigned each hazard with a rating of very high, high, moderate or low. The HRVA advisory committee used the Provincial Emergency Program HRVA Toolkit to provide the most accurate assessment possible.

The risk rating chart on the following page shows the relative ranking of all hazards analyzed. These rankings were determined using the criteria from the Provincial Emergency Program HRVA Toolkit and therefore may not be identical to risks assigned using other methods or criteria.

Risk Rating Chart

Hazard	Risk Rating			
	Low	Medium	High	Very High
Aircraft Crash		X		
Avalanche	X			
Civil Disorder / Riot		X		
Debris Flow/Debris Flood		X		
Drought		X		
Earthquake			X	
Epidemic/Pandemic		X		
Flood		X		
Geotechnical Event		X		
Hazardous Materials Accident		X		
Hazardous Materials Accident - Rail		X		
Heat wave		X		
Ice Storm (Major)		X		
Ice Storm (Minor)		X		
Industrial Accident		X		
Interface Fire			X	
Interruption to Water Supply			X	
Landfill Gas Emergency	X			
Multiple Casualty Incident – Event Related		X		
Multiple Casualty Incident - Motor Vehicle		X		
Natural Gas Distribution System Failure		X		
Power Outage		X		
Rock Fall		X		
Sanitary Sewer Failure	X			
Ski-Lift (Mountain Incident)		X		
Snowstorm (Major)		X		
Snowstorm (Minor)			X	
Structure Fire		X		
Terrorism		X		
Volcano			X	
Volcanic Ash Fallout		X		
Windstorm	X			

Whistler’s Emergency History

The RMOW has experienced many emergency events, some recent and some prior to resort development. Listed below are the emergencies that have occurred within, or directly impacted, the Resort Municipality of Whistler.

EVENT	DATE	DESCRIPTION
Blackcomb Mountain Wildfire	July 30, 2009	30 hectare Blackcomb Mountain wildfire; led to an evacuation of the north side of Blackcomb Mountain.
Porteau Cove Rockslide	July 30, 2008	A large rockslide 1 kilometer north of Porteau Cove blocked Highway 99 for 5 days. (Hayward, 2008).
Gondola Tower Collapse, Blackcomb Mountain	December 16, 2008	Tower 4 of the Excalibur Gondola partially collapsed causing the line to sag and 3 cabins to hit the ground. The lower line of the Excalibur Gondola was evacuated. 10 injured; 0 fatalities.
Snowstorm	December 14 -15, 2005	Whistler area recorded approximately 58 cm of snow in 24 hours. At approximately 4 p.m. on December 14 th , Highway 99 vehicle traffic was blocked south of Whistler. Hundreds of motorists were stranded overnight, some for as long as 14 hours.
Fitzsimmons Slip	November 2004 - January 2005	Sometime between November 2004 and January 2005, a large mass of earth sitting about 2 km above Whistler slipped almost 1 meter. The slip generally moves a few centimeters each year but occasionally accelerates and moves several meters. Following this event, Whistler constructed a debris barrier to mitigate the debris hazard from future slips.
Rain on Snow Event	October 18, 2003	During a 5-day period from October 16 th to 20 th , Whistler received over 220mm of rain. The unusually heavy rain produced record rain-on-snow peak flows. Floodwaters destroyed the Rutherford Creek Bridge, linking Whistler and Pemberton on Highway 99, resulting in the deaths of 5 people. In addition, floodwaters along the Cheakamus River near Cheakamus Canyon took out 200m of pavement from Highway 99. Whistler was cut-off both to the north and south.

EVENT	DATE	DESCRIPTION
Floatplane Collision	August 12, 2000	Upon take-off in Green Lake a floatplane collided with the water. All 5 occupants escaped with minor injuries. The floatplane was substantially damaged. (Transportation Safety Board of Canada, 2001).
Quicksilver Chairlift Incident	December 23, 1995	4 chairs fell from the Quicksilver chairlift line on Whistler Mountain. 1 fatality; 10 injured. (Nixon, 2004).
Flood, Fitzsimmons Creek	August 30, 1991	Whistler Valley received 150mm of rain in 5 days, with 76.2mm of rain (return period of 20 years) on August 30th. Consequently, the Fitzsimmons Creek basin contributed runoff generating high flows with significant debris. As a result, there was significant damage to bridges, a water intake structure, and utility crossing and deposited 128 000 m ³ of bed load in the lower reaches of Fitzsimmons Creek. (Sigma Engineering Ltd., 1991)
Rain on Snow Event	November 9 - 12, 1990	Over a 4 day period Whistler received approximately 200mm of rain. The storm was a high-intensity, long-duration rain-on-snow event and exceeded the 25-year records at Whistler. Flooding was reported in several low-lying areas of Whistler.
Lions Bay Rockslide	October 20, 1990	An estimated 10,000 m ³ of rock and debris came down on Highway 99 north of Lions Bay. The slide left thousands of Vancouver residents attending the weekend Oktoberfest festivities stranded at Whistler. Highway 99 was also blocked to the north due to an unrelated political issue, effectively cutting off Squamish, Whistler and Pemberton to communities to the north and south.
Train Derailment	February 3, 1986	A rockslide 16 km north of Whistler derailed a northbound B.C. Rail train. 4 locomotives derailed but remained upright, blocking the rail line.
Thanksgiving Day Flood	October 8, 1984	Whistler received 127mm of rain in 3 days causing major flooding in Whistler. Flood damage in Whistler included: Severe erosion of the Cheakamus River approximately 250 meters above the municipal sewage treatment facility, resulting in migration of the

EVENT	DATE	DESCRIPTION
		Cheakamus River channel and loss of about 1 hectare of land. Large logjams completely blocked the Cheakamus River in its canyon section downstream of the treatment facility. In addition, debris flows in Fitzsimmons Creek washed-out two footbridges and minor accumulations of logs and debris were scattered over the reach from the Blackcomb Way Bridge to the Nancy Green Drive Bridge. Creek overflows were reported to have entered the day parking area. Damage was estimated at \$100 000.
Rain on Snow Event	December 23-27, 1980	Between December 25 th and 27 th , Whistler experienced heavy precipitation and unusually high seasonal temperatures. The freezing level rose to approximately 2000 meters. Snowmelt combined with more than 100 mm of rain triggered debris flows in many torrents, such as Nineteen-Mile, Twenty-one mile and Fitzsimmons Creek. Some damage was done to roads and bridges in the valley. (Eisbacher 1983).
Mt. Meager Volcano Eruption	2350 Before Present	Mt. Meager's eruption is the youngest explosive eruption in Canada. It was similar to that of Mt. St. Helens in 1980. The explosive phase of Mt. Meager's eruption generated an ash plume that covered most of southern B.C. and extended into southern Alberta and its pyroclastic flows extended down the Lillooet River a distance of 7 km. (Geological Survey of Canada, 2005).

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1.0 INTRODUCTION

This Hazard, Risk, and Vulnerability Assessment (herein referred to as HRVA) was conducted by a committee of staff selected for their experience in public works, emergency response, policing and emergency operations centre experience. This staff committee is referred to as the HRVA advisory committee.

1.1 HRVA Advisory Committee

The HRVA advisory committee was initiated by the Municipal Emergency Program Coordinator to update the Resort Municipality of Whistler's (herein referred to as the Municipality or the RMOW) HRVA. Committee members included representatives from various RMOW departments including Environmental Services and Community Life. Other RMOW departments, external agencies and subject matter experts contributed their expertise, time and input into this assessment.

1.2 Hazard, Risk, and Vulnerability Assessment

Considering **hazards** alone may lead to a skewed set of priorities for action. It is equally important to consider the **severity** of possible impacts from the hazard as well as the frequency or **likelihood** of a hazard event occurring. The combination of severity and likelihood is termed the **level of risk** (Provincial Emergency Program, 2004).

In determining the **severity** of a hazard event, a community's **vulnerability** must be examined. Vulnerability is defined as people, property, infrastructure, industry and resources, or environments that are particularly exposed to adverse impact from a hazard event (Provincial Emergency Program, 2004).

Likelihood reflects the frequency of occurrence for a particular hazard event and can range from rare events occurring every 200 years to more frequent events, which usually have a high number of recorded incidents or anecdotal evidence (Ministry of Public Safety and Solicitor General, 2004).

A HRVA examines the hazards that may impact a community and the risk that each hazard event poses to the community as a whole and to vulnerable elements of the community.

1.3 Scope

This HRVA is designed to provide an assessment of the hazards that may present risks to the RMOW.

The objective of the HRVA is to:

- 1. Investigate potential natural and human-caused hazards that pose a risk to the RMOW;**
- 2. Identify potential hazards that may require a non-routine emergency response and as a result require the activation of the 2005 RMOW Emergency Plan and/or other RMOW emergency response plans and policies; and**
- 3. Recommend measures that can be taken to mitigate the impact of the hazards identified in the HRVA.**

In addition to meeting a Provincial mandate and Municipal Bylaw, the intent of this HRVA is to provide a basis from which the Emergency Program Coordinator, the Emergency Planning Committee, municipal staff and council, and responders can update the 2005 RMOW Emergency Plan and other emergency response plans and policies, and prepare strategies for cost-effective, on-going emergency planning.

This assessment is based on both primary and secondary sources, and at times relies on anecdotal evidence. Qualitative methods are used to determine hazard ratings for the area of interest. The HRVA advisory committee used the Provincial Emergency Program (PEP) HRVA Toolkit to provide the most accurate assessment possible, taking into consideration that the assessment – because it is qualitative – includes subjective components. Duplication of this assessment by third parties may not yield exactly the same results.

The HRVA advisory committee has identified 32 hazards that could affect the Municipality. In selecting these events for consideration, the HRVA advisory committee acknowledges the potential that other hazards might exist. However, the hazards identified in this assessment are considered more likely to impact the Municipality than others.

For the purpose of this analysis, emergency is defined as a present or imminent event in the RMOW that requires non-routine and prompt coordination of actions concerning persons or property to protect the health, safety or welfare of people, or to limit damage to property or the environment and for which the RMOW has the primary responsibility for dealing with the emergency. To ensure clarity, a routine emergency response is one that is managed at the site level and does not require the activation of the RMOW 2005 Emergency Plan. Ninety-eight percent of the Municipality's emergency events are considered routine.

1.4 Methodology

In this analysis, consultation with subject matter experts was cross-referenced with background and historical research, as well as observational data. This information was then considered in the context of the seven impact criteria utilized by the PEP HRVA Toolkit. The impact criteria were individually ranked on an ascending scale from zero to four, zero being no impact, four being the most severe. The sum of these scores was taken to create an overall consequence score, the score was then contrasted against a likelihood rating of one to six, one being the least likely and six being most likely. Each hazard was given an aggregate score that combined impact consequence and likelihood (i.e. 16/4). This aggregate score provided the basis for a risk ranking of low, moderate, high or very high.

2.0 RESORT MUNICIPALITY OF WHISTLER

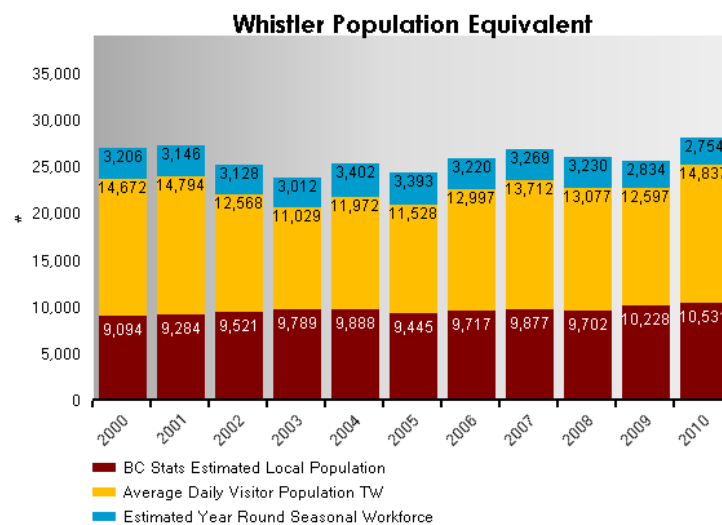
2.1 Geographic Setting

The RMOW is located on Highway 99 (Sea to Sky Highway) 57 kilometers north of Squamish and 34 kilometers south of Pemberton. It consists of a total land area of 240.40 square kilometers. Whistler is a four-season resort community, a tourist destination and was the home of the 2010 Winter Olympic and Paralympic Games. The community boasts an array of sporting activities, music festivals and special cultural events. At the centre of all this activity is Whistler Village which is renowned for its dining and shopping experiences. Part of Whistler’s uniqueness is also what can make it vulnerable to emergencies. Large and diverse transient populations, seasonal population influxes, a single-access transportation system, and multifaceted geographical landscape add complexities to emergency events.

2.2 Population

As of 2011, Whistler’s permanent population was estimated to be 9,824. Population growth is an annual average rate of 1.3% per year (Census Canada, 2011; Whistler 2020 Explorer, 2010).

The RMOW is a popular tourist destination which means that the number of people in Whistler on any given day is greater than the population counts provided by Canada Census. As a result, in an effort to calculate more accurate population numbers, the total population equivalent is calculated. The total population equivalent is an estimate of the total number of people in Whistler on average at one time. The following figure provides an estimate of the total population equivalent in Whistler from 2000 to 2010. (Ibid, 2010).



(Source: Whistler 2020 Explorer, 2010)

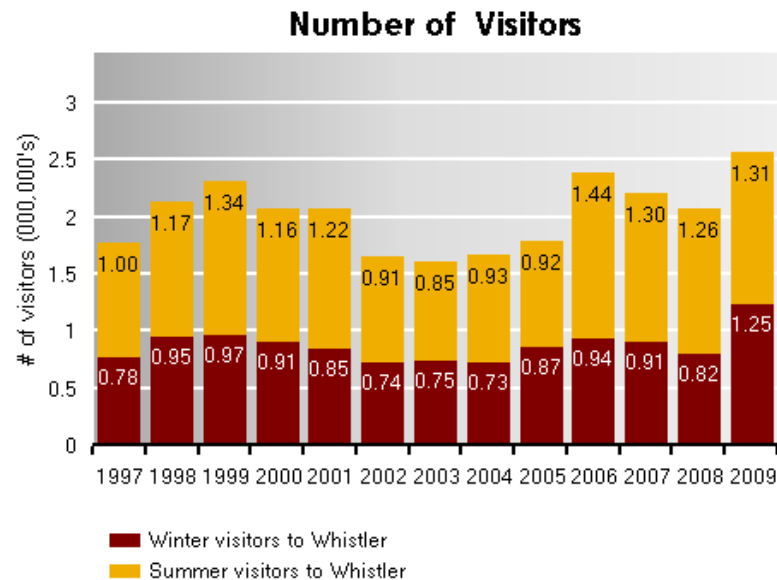
In 2010, the estimated number of people in Whistler overnight per day averaged 28,122; this number is almost 2.5 times greater than the permanent resident population of 9,824. In addition, approximately 3,672 employees commuted into Whistler on a daily basis, primarily from the neighboring communities of Pemberton and Squamish; this increased the yearly daily average population equivalent to 31,794. (Ibid, 2010).

2.2.1 Family & Household Characteristics

Whistler's family and household characteristics are different from those in the province of British Columbia (B.C.) overall with a large percentage of single individuals, one-person households and households comprised of non-family members and a smaller percentage of family households with children. One-person households and households comprised of non-family members represent 54.2% of all households; 26% are households with couples without children. Nineteen percent of Whistler households are made up of couples with children compared to 26% for B.C. The average household size is 2.3 persons per household. (Census Canada, 2007; Whistler 2020 Explorer 2010).

2.3 Economy

Designed as a destination resort community centered around a pedestrian friendly village and at the foot of two world-class ski mountains, Whistler's economy is largely based on tourism. Whistler receives approximately 2.1 million overnight and non-overnight visitors each year (approximately 48 per cent in winter and 52 per cent in summer). (Resort Municipality of Whistler, 2011).



Eighty-eight percent of Whistler's workforce was employed in the tourism-related service sector in 2006. Almost half of all employment was comprised of accommodation, food services, arts and recreation services. The second greatest concentration of labor force activity was in business services (17%) followed by retail trade (10%). Only a small percentage of Whistler's workforce is employed in goods production (12%), with the majority being employed in manufacturing and construction (11%). Whistler has very little employment in resource-based industries (1% of total). (Whistler 2020 Explorer, 2010).

3.0 VULNERABILITY

3.1 Social Vulnerability

This HRVA considers certain aspects of social vulnerability and their role in contributing to the risk from hazards.

The term social vulnerabilities reflects "...the degree to which societies or socio-economic groups are affected by stresses and hazards, whether brought about by external forces or intrinsic factors – internal and external – that negatively impacts the social cohesion of a municipality" (United Nations Development Programme, 2000).

For the purpose of this report, vulnerability is defined as the ability of an individual within a household to recover from a natural hazard impact. Numerous hazards such as floods, interface fires, earthquakes and human health emergencies can have serious impacts on vulnerable populations (e.g. the very old, the very young, transient populations); just as certain types of emergencies can have a tremendous impact on the housing market and local economy.

3.1.1 Language Groups

The majority (84.4%) of residents of the RMOW reported English as their mother tongue in 2006; another 14.9% of residents do not speak English at home but are fluent. 0.7% of the permanent resident population (65 persons) does not speak English and may require special arrangements in a response to an emergency. (Statistics Canada, 2007). As noted in previous sections, Whistler is a popular international tourist resort with visitors from around the world. Because visitors do not necessarily speak English, the issue of communicating emergency-related information in an efficient and effective way becomes particularly relevant. Due to these tourist-related language issues emergency planners and officials may need to customize preparedness materials and /or official advisories so that both English speaking and non-English speaking residents and visitors may understand them. (World Tourism Organization, 1998).

3.1.2 Age Groups

The age distribution of Whistler residents is less balanced than is typical for the province of B.C. as a whole, with fewer children, youth and seniors, and a larger percentage of young adults. Whistler's age distribution is centered on a median age of 32.2 years, almost ten years younger than the provincial median age of 41.9 years. Fifty-seven percent of Whistler's population is between 20 and 44 and people aged 65 and over make up less than 4% of the population. (Statistics Canada, 2007 & 2011).

3.2 Economic Vulnerability

As mentioned in previous sections, Whistler’s economy is largely dependent on tourism. This makes Whistler’s economy especially vulnerable to the effects of an emergency. Disaster literature indicates that the loss of a major industry or employer as the result of an emergency can lead to a reduced population, increase in foreclosed homes, and reduced tax revenue in the effected community. Loss of property tax base associated with damaged and destroyed housing and commercial real estate can have a longer term impact on operating budgets. Closure or relocation of major employers – and the loss of jobs with that employer and with related/dependent businesses - directly affects the confidence of a community to rebuild. (Wemple, 2008).

3.3 Physical Vulnerability

3.3.1 Critical Facilities

Within this HRVA, critical facilities are defined as facilities that are essential in order for the RMOW to carry out emergency response activities. In addition, there are numerous critical facilities outside of the Municipality that are essential in order for the Province to support the RMOW in an emergency (e.g. the Provincial Regional Emergency Operations Centre, the Provincial fire control centre and the Provincial Emergency Coordination Centre). The primary critical facility for coordination of non-routine emergencies is the Municipality’s Emergency Operations Centre (EOC), located in the Public Safety Building. Before, during, and after a hazard event, the EOC is essential for site support, including the coordination of special resources, information, multiple departments and external agencies. For more information on the RMOW EOC please refer to the 2005 Emergency Operations Centre Plan. In addition to the EOC, first response facilities are of critical importance to carrying out emergency response activities. These include police, fire and emergency health care centers, along with pre-selected congregate shelter facilities including:

- | | |
|--------------------------------------|-------------------------|
| 1. EOC – Public Safety Building/RCMP | 4315 Blackcomb Way |
| 2. Municipal Hall | 4325 Blackcomb Way |
| 3. Firehall #1 | 4400 Village Gate |
| 4. Firehall #2 | 8900 HWY 99 |
| 5. Firehall #3 | 1505 Spring Creek Drive |
| 6. B.C. Ambulance Service | 7192 Lorimer Road |
| 7. Whistler Health Care Centre | 4380 Lorimer Road |
| 8. Municipal Public Works Yard | 8001 HWY 99 |
| 9. Spring Creek Community Centre | 1509 Spring Creek Drive |
| 10. Whistler Secondary School | 8000 Alpine Way |
| 11. Myrtle Phillip Community Centre | 6195 Lorimer Road |
| 12. Spruce Grove Field House | 7328 Kirkpatrick Way |

3.3.2 Critical Infrastructure

Through the HRVA process, the HRVA advisory committee has identified nine sectors of critical infrastructure that, if disrupted or destroyed, would have a serious negative impact on the health and safety of the RMOW or the effective functioning of the government. Critical infrastructure spans nine sectors:

1. Energy and Fuel
 2. Communications and Information Technology
 3. Finance
 4. Health Care
 5. Food
 6. Water
 7. Transportation
 8. Safety
 9. Government
- (Public Safety and Emergency Preparedness Canada, 2005)

3.3.2.1 Energy and Fuel

Energy (electrical power), natural gas and fuel (diesel, gasoline) are essential to day-to-day operations within the RMOW to heat homes and businesses, cook and preserve food, communicate through e-mail and charge cellular phones, bathe and flush toilets, and fuel equipment and vehicles. Without electrical power, natural gas and fuel many of the services on which the community depends are compromised.

Energy related infrastructure within the RMOW includes a network of electrical power transmission lines and facilities. The Whistler electrical power supply system is fed from two substations – Function Junction substation (located in Function Junction) and the Rainbow Substation (located in the Nesters/Mons area) and consists of overhead or underground distribution lines, usually located within roadways. Larger transmission infrastructure traverses the community generally in a north-south direction, with direct connections to the local supply system at Rainbow Substation and the Function Junction Substation.

Fortis B.C. (formally Terasen Gas) provides natural gas to the RMOW via a single pipeline along the Highway 99 corridor, extending northward from Squamish. The pipeline connects into a pressure reducing station at Function Junction. Gas is distributed within the RMOW via underground plastic pipes, mostly located beneath roadways.

The District Energy System at the Wastewater Treatment Plant uses a low-temperature heat pump technology to extract heat from the Wastewater Treatment Plant. The heat from this system services the Cheakamus Crossing neighborhood.

Access to fuel, both gasoline and diesel, are considered essential in day-to-day and post-emergency situations. Fuel is vital for emergency response and heavy equipment vehicles, generators, and for members of the community needing to fuel personal vehicles to abide evacuation orders. As a result, fuel is in high-demand post-emergency. There are four fuel distribution and storage facilities in Whistler. These include:

- Gasoline & Diesel Storage, Sabre Group, 8021 Mons Road;
- Gasoline & Diesel Storage, Public Works Yard, 8000 Alpine Way;
- Gasoline & Diesel Storage, Husky Market, 2101 Lakeplacid Road;
- Bus Depot, Hydrogen, Gasoline & Diesel Storage.

It is necessary to note that if Highway 99 is closed, and fuel supply routes are interrupted, there is a limited amount of fuel available in Whistler. Husky Market, the only public-access fuel station, has an average 12-14 hour supply of fuel during normal-use periods. However, it has been Husky Market's experience that fuel supplies are quickly drained during an emergency due to increased demand. During the 2008 Porteau Cove rockslide which closed Highway 99 to the South the gasoline tank at the Husky Station was drained in less than 3 hours (Personal communication with Husky Market, 2011). The RMOw Public Works Yard has, on average, a 4-5 day stock (3000-4000 liters) of both biodiesel and gasoline. Again, increased demand during an emergency could mean the supply is drained quickly depending on the fuel needs of RMOw vehicles and equipment (Personal communication with RMOw personnel, 2011). The United Petroleum Products gasoline and diesel storage at the Sabre Group, have an approximate 2-day supply of gasoline and 5-day supply of diesel during normal-use periods. United Petroleum Products estimates that the intense demand for fuel during an emergency could see this supply expended in as little as 24 hours (Personal communication with United Petroleum Products personnel, 2011).

3.3.2.2 Communications and Information Technology

Television and radio broadcasting, as well as cellular and land line telephones, are considered essential in emergency operations. Communications infrastructure is essential for the EOC, broadcasting systems, and front-line responders in communities in the aftermath of an emergency. Communication is necessary for: assessing damage and need; collecting information on supplies and other resources; coordinating rescue and relief activities; accounting for missing people; and motivating public, political, and institutional responses. It is important that communication infrastructure in a hazard prone area be resilient with built-in redundancy.

The majority of household telephone service continues to be using conventional land-line technology although most of Whistler's transient population relies on cellular phones. The current landline telephone providers in Whistler are TELUS and Shaw. The infrastructure is, in most cases, by overhead lines or buried wires. Landline telephones will continue to operate during an extended power outage, assuming the telephone lines are not damaged. Cordless phones will not work

without electrical power so residents and businesses without a cord phone will not have landline telephone capabilities in a power outage.

There are currently numerous wireless and cellular providers in the Municipality; their stations are usually at remote, elevated sites and are typically reinforced with backup power supplies that will continue service for extended periods of power supply interruption. Cellular towers are generally equipped with back-up power that will last 4-8 hours depending on usage. Despite this built-in redundancy cellular phone failure in emergencies is not uncommon. Most often, these failures are caused by the extraordinary demands placed on cellular networks. Even if communication infrastructure is not damaged by the event, the emergency provokes greater communication from the general public; the result is often a denial-of-service for all, including emergency personnel. (National Research Council, 2002). Wireless Priority Service (WPS) is one method that can be used to mitigate the risk of system overload by customers. WPS ensures priority access to wireless networks by providing qualified subscribers with the next available wireless channel on an antenna tower. WPD Dialing is available to essential personnel responsible for public safety, emergency preparedness, continuity of government and other critical services.

Whistler does not have a radio station broadcast but several stations re-broadcast in Whistler. Mountain FM (102.1) is broadcasted in Squamish and re-broadcasted in Whistler; Mountain FM can be utilized as a medium to communicate critical information to the public during emergencies. There are several other Vancouver stations that re-broadcast in Whistler including CFTW 88.7FM (tourism radio), CFMI 90.7FM (classic rock), CFOX 92.3FM (hard rock), Jack 96.9FM (adult hits), 100.1FM CB.C. Radio (news/information), CISW 102.1.

Note: With the purchase of specialized equipment (audio switches, access decoders and voice lines), the RMOW would have the ability to broadcast emergency information to listeners over these radio channels (Telecommunications site agreement between CORUS Entertainment Company and the RMOW, 2004).

The Municipality has an inventory of emergency radio equipment and one trained and certified emergency radio operator. Section 5.4 below discusses the role of emergency radio in emergency communications.

Many Whistler agencies, both municipal and non-municipal use radios to communicate during day-to-day operations. The Municipality has a Combined Events Radio Channel that can be used simultaneously by RCMP, Whistler Fire Rescue Service and B.C. Ambulance during an emergency. This is a simplex channel and therefore is only effective when the users are in close proximity to one another. Some municipal departments and external agencies are able to access each other's channels for communication during an emergency; however this type of interoperability is difficult as it involves municipal and emergency personnel switching back and forth amongst various channels to communicate. This puts emergency personnel and responders at risk, as they may not hear notifications

and warnings while communicating on a different channel. Radio communications between the various municipal departments and emergency services is currently fragmented which can negatively impact response efforts during emergencies when multiple agencies are required to work together. The RMOW EOC is equipped with satellite phones that are tested on a monthly basis.

3.3.2.3 Finance

Several banking institutions (including credit unions) serve the community of Whistler. It is essential that these institutions will continue to be open, provide services, and disperse funds in an emergency. Banking services are in great demand in emergencies; individuals, families, businesses, and governments need access to financial services during crisis situations. It is recommended that all financial institutions in Whistler have sufficient business continuity plans in order to ensure that banking services are available to Whistler businesses, residents and visitors in an emergency.

3.3.2.4 Health Care

Health facilities and health services are an essential community lifeline in normal times, and this is especially true during emergencies. The RMOW is serviced by Vancouver Coastal Health. The Whistler Health Care Centre is Whistler's only emergency medical centre with onsite radiology, CT scanner and laboratory services. Facilities that may be able to play a local support role include Northlands Medical Clinic, 4359 Main Street #101 and the Town Plaza Medical Clinic, 4314 Main Street.

Pharmaceutical supplies are essential to the treatment of chronic medical conditions, acute injuries, environmental exposures, and infectious diseases during emergencies. In post-emergency situations, high demands are placed on medical relief pharmaceutical supplies. Medicines are needed for the treatment of injuries and diseases as a result of the emergency, as well as medicines for chronic illness that are often worsened by post-emergency conditions. (Jhung, M., 2007). Whistler pharmacies include Nesters Pharmacy, 7019 Nesters Rd; Shoppers Drug Mart, 4295 Blackcomb Way; and 2 Rexall Pharmacies, 4212 Village Square and 103-4360 Lorimer Road.

3.3.2.5 Food

Access to safe food is necessary for sustaining life. Emergencies can disrupt food supply and delivery and result in food shortages. The supermarket food supply in Whistler is approximately 1-2 days for non-perishables (milk, bread, etc.) and up to one week for perishables (dry-goods) under normal consumption (Personal Communication with supermarket store manager, 2011). Restaurant and household food supplies may increase available food for some visitors and residents and emergency rationing may make the limited supply last longer. However, the small stock of food and lack of easy transportation to and from Whistler during an emergency to replenish this makes food supply a critical issue in

the event of a large-impact emergency.

3.3.2.6 Water

Safe and accessible water for drinking and sanitation is imperative to the health and well-being of the residents and visitors within the RMOW.

The RMOW's current water supply consists of both municipal and private water sources. The Community Water System is managed under three separate systems: the major system extending from Cheakamus Crossing in the south to Alpine Meadows, the Emerald Estates Water System, a stand-alone independent water system, and the Van West system in Function Junction that is privately owned and operated. The RMOW Community system includes both surface water (21 Mile Creek and Blackcomb Creek) and groundwater sources located throughout the Municipality. The Emerald system is supplied by groundwater supply source located within the Emerald Estates neighborhood area.

The design parameters used for development of the municipal water supply system is to deliver Maximum Daily Demand (MDD) volumes in a 25-year drought condition concurrently with a design fire event. In other words, the system is designed in a way that when the water surface supplies are at their lowest levels, the municipal water supply can supply the maximum foreseeable daily demand of 700 liters per person per day while at the same time putting out a major structural fire. In addition, all major water supply sources have emergency backup power supplies.

3.3.2.7 Transportation

During and after an emergency, transportation is an essential component for effective emergency response and recovery. Access to the RMOW is limited to road, rail and air transport. Whistler's transportation routes are vulnerable to various hazards including, but not limited to, floods, interface fires, earthquakes, rockslides and transportation accidents.

The RMOW Environmental Services Department is responsible for the operation, maintenance and capital construction of the Municipality's roads. Roadway transportation to and from the Municipality is available by Highway 99 only. A major disaster may cut-off access and egress to and from Whistler to the south or the north or both. This limited surface transportation makes Whistler especially vulnerable to certain hazards as access to safe evacuation routes, food, energy and fuel could be limited for an extended period. The B.C. Provincial Government, specifically the Ministry of Highways, is responsible for the operation and maintenance of Highway 99.

Railway transportation runs through Whistler on the B.C. Rail Line. This line is used for both tourism and commodity transportation. While the rail line is vulnerable to many of the same hazards as road, a disaster that cut-off the rail line would not have a severe negative impact on the Municipality as few, if any, commodities arrive in Whistler by rail.

Air transport is via helicopter (weather dependent) or floatplane (seasonal). The Whistler Heliport is located at 9960 Heliport Road and is maintained and operated by the Whistler Heliport Society. Helicopters transporting medical patients use the helipad at the Whistler Health Care Centre, at 4280 Lorimer Road, which is operated and maintained by Vancouver Coastal Health. Whistler Air operates a float plane business out of Green Lake, offering regular flights to Vancouver.

There are several commercial carriers that offer full transport service to and from Whistler, both to the north and south. The Municipality is also serviced by four Taxi carriers. Greyhound also maintains regularly scheduled service throughout the corridor.

3.3.2.8 Safety

There are several organizations that work to provide safety to residents and visitors within the RMOW. Whistler Fire Rescue Service (WFRS), Whistler Royal Canadian Mounted Police (RCMP), B.C. Ambulance, Search and Rescue and several other organizations are critical to the safety of the RMOW in day to day operations and in emergency situations. A more detailed description of each organization is provided in section 5, Response Capabilities.

3.3.2.9 Government

Emergency situations can have a catastrophic impact on a government's day-to-day business operations. Governments deliver critical services including protection of persons and property, local transportation, utilities, information, networks and assets, and more. Governments must ensure that these essential functions can continue during and after an emergency. In an emergency, the RMOW will establish an EOC to help support the site and coordinate the response. Provincial and Federal Governments also establish emergency operations centers', on an as-needed basis, to support local government EOC's. In addition to emergency and EOC planning, the RMOW should develop Business Continuity Plans to ensure that essential business functions within the Municipality are continuously delivered without interruption, or are re-instated post-emergency, as soon as possible.

4.0 RESPONSE CAPABILITIES

This section provides a summary of the Municipality's response capabilities that are considered when assessing the Municipality's overall risk to the hazards discussed in section 6.0.

4.1 Whistler Fire Rescue Service

The WFRS consists of 24 full-time staff and 51 paid on-call firefighters. The full-time staffs include a Fire Chief, two Assistant Fire Chiefs, and 21 Firefighter/Inspectors. The WFRS offer a range of services including: fire suppression, fire investigation, fire prevention, fire safety inspections, by-law enforcement (as it relates to the B.C. Fire Code and the Fire Protection and Fireworks Bylaw 1956, 2010), a full spectrum of fire & rescue training, public education, First Responder Medical Services and comprehensive rescue services. The WFRS is limited in its ability to provide adequate service to multiple incidents at one time. WFRS have the capacity to deal effectively with two structure fires (single family homes or small multi-family dwellings), assuming that 75% of paid on-call staff are available and off-duty career firefighters can provide reinforcement if required. A single incident in a high-rise building would require a significant amount of WFRS resources.

The WFRS has established Mutual Aid Agreements with Squamish, Garibaldi Fire Department and the Village of Pemberton. Mutual Aid response is limited to the release of one piece of apparatus and a crew of 4 firefighters, assuming this does not reduce the ability of WFRS to respond to incidents within RMOW boundaries. The RMOW can expect to receive the same reciprocal resource allocation from its Mutual Aid partners.



Fire Hall 1

4.2 Police

Municipal policing is provided by the RCMP Whistler Municipal Detachment located at 4125 Blackcomb Way. As a result of an area-wide amalgamation in 2006, the Whistler RCMP Detachment falls under the umbrella of the Sea-to-Sky Regional RCMP Services. The RCMP Detachments along the Sea to Sky corridor are commanded by one Officer-In-Charge and supported by a leadership team of senior staff in each jurisdiction. Whistler RCMP provides the people of the RMOW with a 24/7 police service made of four General Duty Watches, and complimented with a plainclothes Unit, Municipal Traffic Services and a Community Policing Unit. The Detachment has access to additional support in the way of additional resources and/or equipment if required from neighboring Detachments in the corridor (Squamish RCMP, Pemberton RCMP & Tribal Police).

In addition, Whistler RCMP is able to rely on the assistance of additional support services and Integrated Teams at the District (Metro Vancouver) and Divisional (Provincial) level. Such teams would include, but are not be limited to Integrated Traffic Units, Dive Teams, Marine Sections, and others.

It should be noted that in the event of a major event, Whistler RCMP would have the capacity and capability to respond accordingly and deal effectively with the situation, and is well prepared to reach-out for additional support beyond the Sea to Sky corridor if required, to enhance the level of response depending on the scale of the event.



4.2.1 Whistler Victim Services

The Whistler Victim Services team is positioned within the RCMP umbrella and operates out of the RCMP office. Victim Services works with the RCMP to provide emotional support, information and referrals to victims of crime and trauma. Staff and volunteers provide emotional support in person and over the phone to victims, witnesses and their family members. Although they do not provide counseling, they can make appropriate referrals to counseling services in the community. One full-time staff member, one part-time staff member (20 hours per week) and approximately 10 volunteers work with the Whistler Victim Services Team.

4.3 British Columbia Ambulance Service

Emergency medical service is provided to the Municipality by the B.C. Ambulance Service (B.C.A.S.) which is dispatched by the regional 9-1-1 system. BCAS in the RMOW employs 4 full-time paramedics and 25 part-time paramedics. In Whistler, from 0700 to 1800 hours there is one full-time ambulance unit and one call out unit available. From 1800 to 0700 hours there are two call-out units available. From December 16th to the end of April an additional unit is available between 1200 and 2300 hours. The units are based at the ambulance station located at 7192 Lorimer Road, Whistler. The Municipality is cross-covered by the stations in Pemberton and Squamish.

Critical Care Transport (CCT) is provincially coordinated through the British Columbia Air Ambulance Service. The Whistler Health Care Centre (WHCC) located at 4380 Lorimer Road, is equipped with a helicopter landing area (operated and maintained by Vancouver Coastal Health) to accommodate the British Columbia Air Ambulance Service. Due to Transport Canada restrictions only double-engine aircraft are permitted to land at the WHCC. This limits the number of eligible aircraft as many of the helicopters in Whistler are single-engine machines. When an aircraft is unable to land at the WHHC patients requiring critical care will be transported to the Municipal heliport and then transferred to WHHC by ground ambulance. It is also worth noting that CCT is dependent on both helicopter availability and weather and in all cases the decision to land is at the discretion of the pilot. (Personal Communication with BCAS, 2011).



4.4 Search and Rescue

Whistler Search and Rescue (WSAR) provide search and rescue services to the Municipality and in outlying areas. WSAR can be activated by RCMP, BCAS and Ministry of Forests although WSAR is most commonly activated through Whistler RCMP in the search for missing persons.

WSAR consists of 24 volunteer members certified in several wilderness SAR disciplines including ground search, air search, and mountain search including high-angle rescue.

WSAR is not certified for Swift Water Response. Pemberton SAR has a Swift Water Rescue Team that has verbally agreed to aid Whistler in a response if necessary and available. Historically Whistler has had nine incidences requiring a Swift Water Rescue response including three cars submerged in rivers and six stranded kayakers.



Whistler Search and Rescue

4.5 Hazardous Materials (HAZMAT)

There are hazardous materials located at various locations throughout the RMOW. The primary responsibility for on-site response to hazardous materials accidents rests with the spiller. However, local governments with their emergency services (fire, police, and ambulance) are responsible for operational support to the extent that expertise and resources are available and to the extent that the response functions are within their mandate. If needed or requested, the province will provide technical assistance to industry, local government and/or both. The B.C. Ministry of Environment is the lead provincial agency for responding to a hazardous material incident in cooperation with other responding jurisdictions and/or industry.

For additional information concerning HAZMAT emergency response, the RMOW can contact the Canadian Transport Emergency Centre (CANUTEC); operated by Transport Canada. CANUTEC is staffed by professional scientists specialized in HAZMAT emergency response and experienced in interpreting technical information and providing advice. CANUTEC does not respond on-site but offers communication and data support on chemicals that are manufactured, stored and transported in Canada. CANUTEC can assist in the activation of industry emergency response plans such as TEAP, the Transportation Emergency Assistance Plan, operated by the Canadian Chemical Producers' Association or on-site assistance from other industry or government specialists (Transport Canada, 2005).

Currently, the WFRS responds to the majority of hazardous materials' incidents within the RMOW at an awareness level. WFRS will help identify the product, contact CANUTEC, establish a perimeter and assist with any evacuations that may be necessary.

The WFRS will respond to a HAZMAT incident, at an operational level, to product specific sites operated and owned by the RMOW. WFRS will respond to ammonia leaks at the Whistler Sliding Centre and Meadow Park Ice Arena, and to chlorine leaks at the Meadow Park Sports Centre and the Waste Water Treatment Plant, and for chlorine issues related to drinking water chlorination sites around the valley.

5.0 EMERGENCY SUPPORT AND PREPAREDNESS ORGANIZATIONS

In B.C., local governments are responsible for providing the initial response to emergencies occurring within their boundaries, assuming it falls within their mandate. (Emergency Program Act, 2004). On request, the provincial government will provide material support, advice, expertise and other assistance.

The B.C. Emergency Program Act sets out responsibilities for emergency management within the province. Section 6(1) states, “a local authority is at all times responsible for the direction and control of the local authority’s emergency response [if the local authority has the primary responsibility and mandate for dealing with the specific type of emergency]” Section 6 (2) of the Act states that: “A local authority must prepare, or cause to be prepared, local emergency plans respecting preparation for, response to and recovery from emergencies and disasters.” In addition to primary response organizations (police, fire, ambulance), the RMOW utilizes a number of organizations and programs to prepare for and support response and recovery in the case of an emergency. These include the Municipality’s Emergency Program and other municipal departments, Whistler Emergency Social Services, Whistler Emergency Radio, Vancouver Coastal Health and many Provincial Ministries and Crown Corporations.

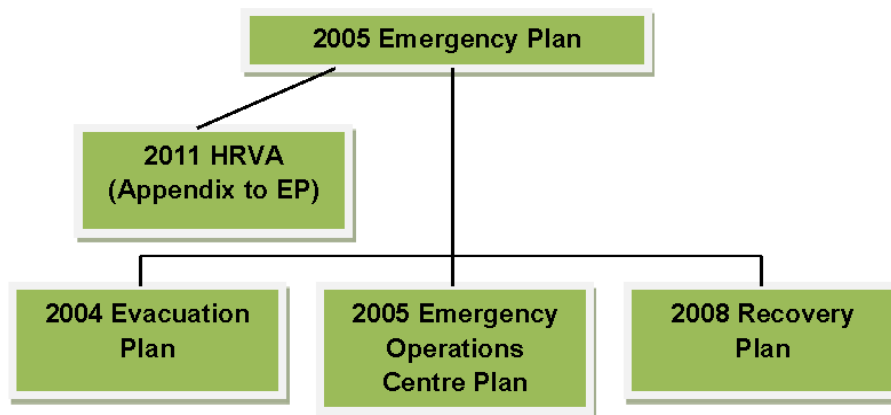
5.1 Whistler Emergency Program

The RMOW Emergency Program is responsible for coordinating the systems and processes for mitigating against, preparing for, responding to and recovering from emergencies. The Whistler Emergency Program portfolio includes plan administration, staff training and exercises, public education, EOC coordination and the Emergency Planning Committee.

The RMOW Emergency Program Coordinator is responsible for the management and coordination of the emergency program. This is a part-time municipal staff position (16 hours per week); this is a casual position. The Emergency Program Coordinator reports to the Manager of Community Planning.

5.1.1 Plan Administration

Emergency response plans are developed and maintained to provide guidance and direction to RMOW municipal departments and external support organizations regarding their primary emergency role. The RMOW has several plans including the 1999 Evacuation Plan, the 2005 Emergency Plan, the 2005 Emergency Operations Centre Plan, the 2008 Recovery Plan and several department specific plans.



As indicated in the above diagram, the HRVA will be added as an Appendix to the 2005 Emergency Plan. Although the Evacuation Plan, the EOC Plan and the Recovery Plan are all separate documents they are used in addition to the Emergency Plan in an emergency.

Note: All of the plans listed above require updating, most urgently the 2005 Emergency Plan and the 2004 Evacuation Plan. Emergency response plans should be updated every 3-4 years and resource and staff-callout lists should be updated annually.

5.1.2 Staff Training and Exercises

During and after an emergency, Municipal staff will be expected to assist with the response efforts. A series of courses and workshops are offered to Municipal staff and volunteers to assist them in their emergency roles and responsibilities. Exercises are developed and conducted to test emergency plans, familiarize staff with one another's roles, practice emergency procedures and build confidence in the RMOW's ability to respond to and recover from emergency events.

5.1.3 Public Education

Public education is a method of ensuring that the community of Whistler is prepared for an emergency. Public education includes the distribution of educational pamphlets on relevant hazards to Whistler, and hosting presentations and training workshops. Emergency Preparedness Week is an annual Canada-wide event held the first week of May; Emergency Program staff and volunteers organize a series of community events to highlight the importance of being prepared for emergencies.

5.1.4 EOC Activities

The Municipal EOC is located at the Public Safety Building. Before, during, and after an emergency event, the EOC is essential for coordinating resources, information, multiple departments and external agencies. In order for the EOC to operate effectively, personnel from various departments must be trained in EOC operations. In addition, the EOC should be activated in a simulated emergency in order to test current practices, reinforce procedures, and identify shortfalls or problems.

A successful EOC requires large numbers of trained personnel. Personnel from each municipal department should be trained in EOC operations and should participate in simulation exercises. Each EOC position requires trained alternates to provide relief during lengthy EOC activations. This also provides an alternate should the primary person be unable to attend. EOC personnel should be selected based on experience and skill-set, as opposed to being deemed qualified based on their usual municipal position. Additionally, a permanent Emergency Program Coordinator is required in order to ensure that appropriate numbers and types of staff are adequately trained and available in the event of an emergency.

5.1.5 Emergency Planning Committee

The role of the Emergency Planning Committee is to provide policy direction and guidance to the Emergency Program and ensure that legislative requirements are fulfilled. The duties and responsibilities of the RMOW Emergency Planning Committee are described in detail in the "Emergency Measures Bylaw NO. 1593, 2002". Members of the Committee include the Mayor, a Councilor, the Chief Executive Officer, the Emergency Program Coordinator, General Managers, the Emergency Social Services Director and others as required (RCMP, BCAS, School District #48, WSAR, Whistler Blackcomb).

5.2 Emergency Social Services

The Municipality's Emergency Social Services (ESS) team has approximately 40 volunteers who are trained to provide short-term assistance to people who are forced to evacuate their homes due to an emergency. In an emergency where people are evacuated, a reception centre will be established at the Myrtle Phillip Community School, the Spruce Grove Field House or Spring Creek Community Centre.

The ESS team is under the direction of the Recreation Department. However, in the event of an emergency, the ESS Director will be working in the EOC under the direction of the Operations Section Chief. An eight-hour per week casual municipal staff position is responsible for the coordination of the Whistler ESS team.



Whistler ESS and the Community Preparedness Booth

5.3 Emergency Radio

The Whistler Emergency Radio Coordinator provides alternate emergency communications to the RMOW. An inventory of emergency radio equipment is stored in the Public Safety Building. In addition to backup communications within the Municipality, the Emergency Radio Coordinator can provide communications links to Provincial Regional Emergency Operations Centres (PREOCs) and to other municipalities (e.g. to request mutual aid or share critical information) when other forms of communication are unavailable.

Note: At this time there is no deputy Emergency Radio Coordinator. As a result, if the Emergency Radio Coordinator is unavailable this capability is non-existent as this person is the only member certified to operate the equipment.

5.4 Environmental Services

The RMOW Environmental Services department is responsible for the operation, maintenance and capital construction of the Municipality's roads (with the exception of Highway 99 which is the responsibility of the Ministry of Highways), solid waste, water, sewer, drainage, flood protection systems, snow clearing, and numerous environmental projects. Operational staff and specifically trained crews are available to provide technical expertise and support at the emergency site. In addition, municipal staff have strong relationships with both private consulting professionals and Provincial/Federal agencies and personnel. The Logistics Section of the EOC can request the assistance of the private sector, when required, to mobilize equipment and machinery in an emergency.

5.5 Vancouver Coastal Health

The RMOW is serviced by Vancouver Coastal Health (VCH). VCH is the administrative organization responsible for providing all publicly funded health services to the people of the Lower Mainland and Sea to Sky Communities. The Whistler Health Care Centre provides urgent and emergency health care services to people living in and visiting Whistler.

VCH executes the duties of the Drinking Water Officer pursuant to the Drinking Water Protection Act, which regulates the potable water supply activities of the RMOW, and the implementation of emergency responses.

The Whistler Health Care Centre is equipped with onsite radiology, CT scanner and laboratory services. Facilities that may be able to provide additional medical support in an emergency include Northlands Medical Clinic, 4359 Main Street #101, Whistler and the Town Plaza Medical Clinic, 4314 Main Street, Whistler.

5.6 Emergency Management British Columbia

Emergency Management British Columbia (EMBC), formally the Provincial Emergency Program, is a division of the Ministry of Public Safety and Solicitor General and is administered under the B.C. Emergency Program Act. EMBC coordinates the provincial response to emergencies and provides specialized technology resources to support local government emergency response activities. On a day-to-day basis, EMBC is available to respond to local government and agency calls through the PREOC that is staffed 24/7 and provides training to municipal staff and volunteers.

5.7 Provincial Ministries & Crown Corporations

The Government of B.C. is made up of ministries and Crown Corporations. The B.C. Emergency Program Act (2004) identifies the responsibilities of each of these Ministries and Crown Corporations; responsibilities are listed on the next page [responsibilities that have no direct relation to emergency events have been omitted].

5.7.1 Provincial Ministries

Provincial Ministry	Description of Responsibilities
Ministry of Children and Family Development	Responsible for the care of children who are not accompanied by a guardian or custodian.
Ministry of Environment	Responsible for environmental monitoring and emergency response (ensuring the proper disposal of hazardous wastes and pollutants) and assessment and monitoring of air quality
Ministry of Forests, Lands and Natural Resource Operations	Responsible for wildfire management and pests/disease/invasive plants and species. Ministry of Forests Wildfire Protection Branch will provide personnel, equipment, supplies, telecommunications equipment, aviation support and weather information to assist in emergency response operations. In addition, this ministry is now responsible for flood forecasts and bulletins (through the River Forecast Centre), flood assessment, technical services and planning staff at government EOC's in the case of floods, flood management (flood safety and drought management, and the Office of the Inspector of Dikes), dam safety and inspection services, and water protection and water sustainability policy.
Ministry of Health	The majority of responsibility for local health services has been delegated to VCH which consist of: BCAS including triage, treatment, transportation and care of casualties; the continuity of care for persons evacuated from hospitals or other health institutions and for medically dependent persons from other care facilities; provide standard medical units consisting of emergency hospitals, advanced treatment centers, casualty collection units and blood donor packs; inspect and monitor potable water supplies; inspect and regulate food quality with the assistance of the Minister of Agriculture, Fisheries and Food; provide critical incident stress debriefing and counseling services; and provide support and supervision services for physically challenged or medically disabled persons affected by an emergency.
Ministry of Public Safety and Solicitor General	Oversee EMBC, the B.C. Coroners Service, the Office of the Fire Commissioner, Police and Correctional Services and the Victim Services Division.
Ministry of Transportation and Infrastructure	Responsible for transportation planning and policy, provincial highway construction, maintenance and repair, BC Transit, and BC Rail.

5.7.2 Crown Corporations

Crown Corporation	Description of Responsibilities
B.C. Hydro and Power Authority	Responsible for: coordinating the restoration of electric facilities, taking into account domestic, commercial, industrial and government requirements; interrupting hydro services when they pose a threat to life or property; and conducting safety measures in respect to B.C. Hydro dams, including initiating warnings in the event of dam failures. During and after an emergency, B.C. Hydro will establish an EOC to communicate with local and provincial government EOC's providing up-to-date information on the severity and location of damage and an estimate for repairs.
BC Transit	Coordinates the delivery of public transportation throughout B.C. and in most communities, including the RMOW, works in partnership with local governments to supply transit. During and after an emergency B.C. Transit is responsible for coordinating requirements for public transportation, including school and privately owned buses.
BC Rail	Provides priority movement of emergency personnel, equipment and supplies, assistance at railway crashes, derailments in the conduct of rescue operations, removal of debris and the cleanup of hazardous material (in cooperation with Transport Canada), provide railcars for emergency facilities, and provide specialized equipment in an emergency.
BC Housing	Develops, manages and administers a wide range of subsidized housing options. B.C. Housing maintains a stockpile of emergency lodging supplies (cots and blankets) and provides Building Assessment Damage Training to governments and businesses. Following an emergency B.C. Housing will support communities in addressing their emergency accommodation needs and will acquire accommodation for provincial emergency responders should it be required.

5.8 Non-Government Resources

5.8.1 Whistler Blackcomb

Whistler Blackcomb (WB) is a ski resort located in the RMOW. WB maintains emergency plans and procedures for the safety of staff and visitors who work and recreate on the ski mountain. WB has many specialized resources that could be used to respond to emergency events both on the mountain and in the RMOW. WB resources include: trucks, snow cats, snowmobiles, radios, temporary fencing materials,

fuel and diesel, first aid supplies and cooking facilities. WB has many staff trained in first aid, search and rescue, rope rescue, firefighting, and avalanche searches.

Upon request, and assuming WB staff is available, the WB will provide a representative to the RMOW's EOC to help coordinate emergency activities between the WB and the RMOW.

5.8.2 Subject Matter Experts & Heavy Equipment Operators

In some emergency situations, the RMOW may need to access subject matter experts such as Geotechnical specialists or special equipment and equipment operators. In many cases, the RMOW has already built relationships with these specialists and equipment companies. In the event that external people and equipment are required the RMOW EOC can make a request for resources through the PREOC.

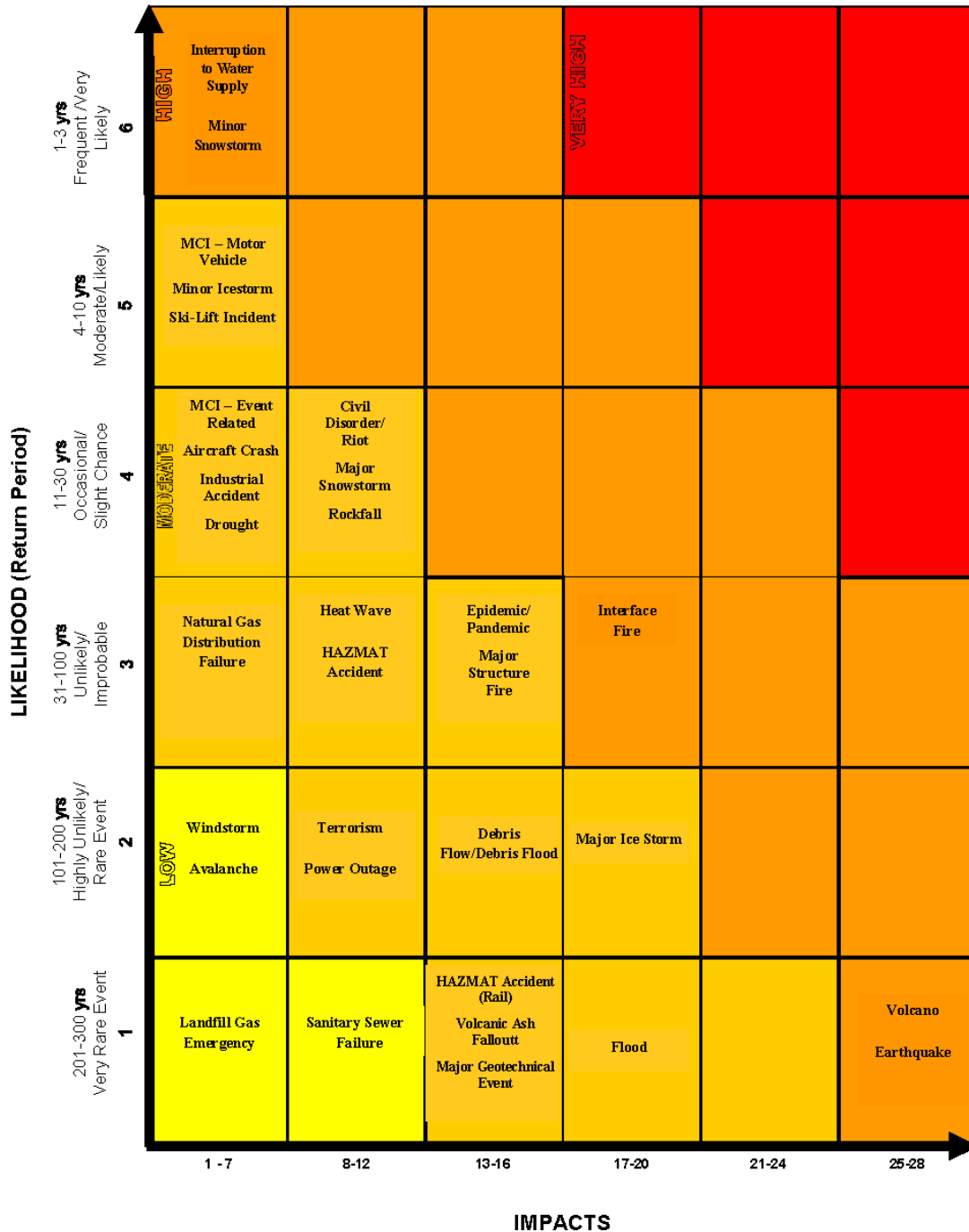
6.0 RESULTS

The results of this analysis are presented in the risk matrix below. The risk matrix graphically displays the relationship between the hazards in terms of risk. The x-axis represents the ranges of impact scores and the y-axis represents the likelihood scores of the hazards. The factors which determined the impact score were the number of expected deaths, injuries, expected damages and losses to critical facilities and infrastructure, expected damages to environment and property, and the expected economic or social losses. The factors which determined the likelihood score was the predicted frequency of occurrence. (See Appendix C for a detailed scoring spreadsheet.)

Using this criterion, each hazard was given an aggregate score that combined impact consequence and likelihood; the aggregate score for each hazard was plotted on the risk matrix, assigning each hazard a rating of very high, high, moderate or low. The risk rating assigned to each hazard directly reflects the seriousness of each risk as described on the following page.

RATING	DESCRIPTION
VERY HIGH	Very-high risk hazards are those that are both frequent and high impact. These hazards require immediate mitigation and the development of hazard specific emergency plans [assuming plans of this nature are not already complete] to strengthen response capabilities until mitigation projects are completed.
HIGH	High-risk hazards are those that have vast impacts but are unlikely; have serious impacts but are infrequent; or have minor impacts but are likely. High-risk hazards require the development of hazard specific emergency plans [assuming plans of this nature are not already complete] to strengthen response capacity of the first responders, the Municipality and the community. High-rated hazards should be evaluated to determine if mitigation is necessary and would successfully lessen the risk.
MODERATE	Moderate-risk hazards indicate the risk is reduced, but not completely removed. These hazards range from low impact and likely to moderate impact and very rare. Moderate-risk hazards are serious enough to be included in emergency plans, although hazard specific plans for each moderate-rated hazard may not be necessary. Moderate-rated hazards should be evaluated to determine if mitigation would lessen the risk; assuming very-high and high level risks are the priority for mitigation.
LOW	Low-risk hazards are both low impact and low probability. Low-risk hazards should be considered in emergency plans but hazard specific plans are likely unnecessary.

RISK MATRIX



Municipality of Whistler Risk Matrix. The risk increases from low to very high in the direction of the arrow, from bottom-left to top-right. The low hazards are infrequent and have a relatively low impact while the very high hazards are frequent and have a very high impact.

6.1 High-Rated Hazards

The results of this HRVA reveal that not all hazards in the Municipality have an equal risk. Therefore, hazard prioritization is required to help the Municipality determine which hazards should be considered for planning and mitigation first. Ultimately, the Municipality should aim to reduce the impacts of, and be prepared to respond to, all hazards that could affect the RMOW. However, because resources are limited, the most serious hazards must be considered for planning and mitigation first.

As reflected in the risk matrix, the Municipality has no hazards with a rating of very-high. It is normal for few, if any, very-high risk hazards to be present in a populated geographic area. If such hazards once existed, the population affected will usually leave the area or employ mitigation measures to reduce the risk. For example, in 2009, the RMOW constructed a debris barrier spanning Fitzsimons Creek to protect the RMOW in the event of a 1:500 year debris flood event. This mitigation project significantly reduced the Municipality's debris flood risk.

This HRVA is designed to provide an assessment of the hazards that may present risks to the RMOW. In selecting these events for consideration, the HRVA advisory committee acknowledges the potential, however small, that other types of emergencies may demand site support in the future. Following a thorough examination of the hazards the HRVA Committee has identified 32 hazards that could affect the RMOW.

The HRVA has identified five hazards with a rating of high. These include: interface fire, earthquake, volcano, interruption to water supply and snow storm. A thorough description of the top-five rated hazards is provided in this section.

6.1.1 Interface Fire

Hot, dry weather and excessive fuel loading often make forest areas particularly vulnerable to lightning strikes and human carelessness. Whistler has many forested areas in and around the Municipality and a fire in one of these areas has the potential to negatively impact economic stability and environmental quality. (RMOW Wildfire Risk Management System, 2004). Aside from the environmental and economic impact, wildfires become particularly devastating when they encroach on human settlements and critical infrastructure. Wildfires burning in urban areas are referred to as interface fires.

Interface fires can result in significant economic costs, much of which are allocated to fire fighting. However, the total cost of forest fires can far exceed the costs of suppression, and include damage to public and private infrastructure and property, transportation networks, environmental damage, and costs associated with disruption of business in affected communities (Natural Resources Canada, 2008). For example, during the summer of 2003, the region of Kelowna in B.C. experienced an unusually severe interface fire that required evacuation of over 26,000 people, destroyed 238 private homes, caused a major disruption of the region's main tourism season, and destroyed several major tourism attractions. The interruption of the tourism season

had a substantial impact on employment and business operations, with average decreases in business revenues between 30% and 40%. Because the fire impacted Kelowna during the height of the summer tourist season, this resulted in many businesses losing a major portion of their annual business revenues. (Hystad & Keller, 2006).

The WFRS has responsibility for all interface fires within the Municipality's boundaries. In the event of an interface fire, WFRS would establish Unified Command with the Wildfire Management Branch (WMB) of the Ministry of Forests, Lands and Natural Resource Operations (MoFLNRO); this cooperation provides WFRS access to MoFLNRO resources and expertise. Should an incident be of significant magnitude, WFRS could expect assistance from a MoFLNRO initial response team within approximately 10-15 minutes via helicopter; should the incident be less significant in nature, anticipated response time for an MoFLNRO initial response team would be approximately 30-40 minutes via road. All response times are dependent on the location and availability of those resources and the requirements of neighboring communities at the same time.

Note: The Municipality's current Evacuation plan is dated 2004.

6.1.2 Earthquake

Earthquakes may cause a number of phenomena, including ground motion, surface faulting, ground failure, and liquefaction. An earthquake's magnitude reflects an earthquake's strength. Damage to buildings generally begins to occur at magnitude six, while an earthquake above magnitude seven may be a major disaster if it occurs near a populated area.

Seismic zoning maps for Canada are derived from the analysis of past earthquakes, and from advancing knowledge of Canada's tectonic and geological structure. Depending on the expected seismic hazard and intensity of ground shaking, the territory of Canada is divided into 7 seismic zones i.e. zones 0 to 6. Zone 0 is characterized with a very low seismic hazard, whereas zone 6 is characterized with the highest seismic hazard in Canada. According to the National Building Code of Canada (NBBC) 1990, the Municipality of Whistler is located within Seismic Zone four, meaning Whistler is considered at high-risk from earthquake damage. Fortunately, the majority of the structures in Whistler are wood frame and reinforced concrete which are considered reasonably stable buildings in an earthquake due to the flexibility of these materials.

Although a rare occurrence, if a large earthquake were to occur, vulnerable infrastructure and populations would be greatly impacted and aid from neighboring communities would be limited or non-existent as they deal with their own earthquake damage. In addition to direct damage from an earthquake, the Municipality may be indirectly affected by earthquake damage in other provincial zones. Suppliers from outside the Municipality may be unable to offer services forcing the local community to face delays in receiving basic supplies such as food, medication, fuel and clothing

coming from affected areas.

Earthquakes have the potential to damage or destroy much of the infrastructure communities rely on. Power failures are typical in post-earthquake environments and interruptions to service may last days or weeks. B.C. Hydro expects some degree of damage and anchorage failure in its affected substations. This can cause serious problems for buildings and infrastructure that require a continuous power source such as hospitals, communication systems and response facilities. In addition to damage to electrical infrastructure, an earthquake could affect the integrity of underground natural gas pipelines. The effects of natural gas supply interruptions to the RMOW include leakage of contaminants into soil or groundwater, explosion, fire and injury or death caused by toxic fumes. Fire following an earthquake is very common in post-disaster environments. Contaminated water is also a concern post-earthquake. Water can become contaminated with microorganisms, such as bacteria, sewage, industrial waste, chemicals, and other substances. It is difficult to predict what damage will occur to roads throughout the Municipality. Slumping and cracking are not uncommon during an earthquake, nor are rock falls, landslides and liquefaction. Highway 99 which connects Whistler to the north and south is a vital transportation route for both emergency access and evacuation purposes.

6.1.3 Volcano

“Volcanic eruptions in Canada are a rare event. Though infrequent, volcanoes can be catastrophic enough to warrant serious attention (Institute for Catastrophic Loss Reduction, 2010)”. A volcano is a vent in the crust of the Earth’s surface through which molten rock (magma) is extruded onto the surface of the earth as lava and volcanic debris flows, and also into the Earth’s atmosphere as volcanic gases and rock fragments. The Municipality of Whistler sits within the Garibaldi Volcanic belt, part of the Pacific Ring of Fire. (Hickson, Mulder & Stasiuk, 2004). The Garibaldi Volcanic belt includes Mt. Garibaldi, Mt. Price, Black Tusk, Mt. Meager, Mt. Cayley, Mt. Fee and Mt. Silverthorne.

Volcanoes are one of the few hazards that typically exhibit clear precursor activity. (Hickson, Mulder & Stasiuk, 2004). Should a volcano erupt in the Whistler area, this precursor activity would give the RMOW time to plan an emergency response, limiting the amount of injury and loss of life. However, an erupting volcano threatens infrastructure such as highways, roads, and railways. Ash can pollute water supplies and collapse buildings, especially when it falls wet. Airborne ash clouds can adversely affect aircraft corridors and the routing of flights. Heavy ash fall may reduce sunlight, causing a sudden demand and possibly brownouts of electrical power. Ash can clog water systems, sewage plants, and all kinds of machinery, cause roofs to collapse and electrical short circuits. Fine ash is extremely slippery, hampering driving and walking. Ash can also damage the lungs of small infants, elderly, and those having respiratory problems. (Institute for Catastrophic Loss Reduction, 2010).

6.1.4 Interruption to Water Supply

An interruption to Whistler's water supply is rated as high due to the relatively high likelihood of this scenario; the impacts however, are minimal. As noted in Section 3.3.2.6 the Municipality's water supply consists of three separate water systems. Taking into consideration the different water systems, it is far-fetched to suggest that an emergency would threaten the water supply of the entire Municipality. It is feasible, that certain areas may experience a water supply disruption due to an increase in the demand for water for firefighting purposes, damage to a sub-division water main, or other reasons. However, one-off water shortages through the Municipality could be managed through the provision of portable potable water to residents. To respond to water supply emergencies, the Municipality has a Water System Emergency Response Plan (2008).

6.1.5 Snow Storm (Minor)

A minor snowstorm is rated as high due to the relatively high likelihood of this scenario; the impacts however, are minimal. In the event of a minor snowstorm, transportation to and within the Municipality may be delayed due to snow accumulation and/or low visibility. The resulting driving conditions will increase the risk of motor vehicle accidents. Disruption to air transportation including air ambulance transportation services may also be caused. These incidents combined may be sufficient to tax local response agencies such as fire, police, ambulance and public works however serious consequences are unlikely as the Municipality is accustomed to dealing with these storms.

7.0 RECOMMENDATIONS

This HRVA has identified the hazards that may present risk to the RMOW. In order to mitigate the impact of the hazards identified in the HRVA, it is recommended that the RMOW take the measures listed below. Recommendations have been separated into sub-categories and an estimate of required resources has been included.

Sub-Category	Recommendations	Resources Required
Plans	1. Update the 2005 RMOW Emergency Plan and all supporting plans including the 2004 Evacuation Plan, the 2005 Emergency Operations Centre Plan and the 2008 Recovery Plan. Ensure the updated plans consider the following: <ul style="list-style-type: none"> • The Whistler population equivalent and not merely the permanent resident population in the development of policies and procedures; • The needs of people with disabilities in an emergency; • The development of hazard specific emergency plans for all hazards identified as high-risk and medium-risk to strengthen the Municipality's capacity to respond; and • The development of a section focusing on RMOW Business Continuity detailing how RMOW departments will continue to offer critical municipal services post-emergency. 	Staff time.
	2. Review the written emergency procedures for all municipal facilities and work areas. Ensure municipal personnel are adequately trained in emergency procedures applicable to their workplace. These measures will confirm RMOW compliance with WorkSafeBC Occupational Health and Safety Regulation 4.14 and 4.16.	Staff time.

Sub-Category	Recommendations	Resources Required
Community Preparedness	3. Consider changing the recommended time that residents should be prepared to survive without basic services from 72 hours to 7 days. This is based upon the limited amount of resources available in Whistler.	Staff time.
	4. Educate hotels and other service providers to make them aware of what is available within the municipality and what their roles and responsibilities are with respect to incident mitigation and recovery.	Staff time.
	5. In conjunction with the Whistler Chamber of Commerce, educate the Whistler business community on the importance of business continuity planning.	Staff time.
Training and Exercises	6. Instruct the Emergency Program Coordinator to review the training levels received by existing staff and communicate the predicted Emergency Operations Centre (EOC) staff deficiencies, if any, to the Senior Management Team for corrective action.	Staff time.
	7. Instruct the Senior Management Team to evaluate the staffing needs for the Emergency Operations Centre with a goal to match the skill sets and experience of available individuals with the specific needs of the EOC positions during emergency conditions.	

Sub-Category	Recommendations	Resources Required
Communications	8. Organize a campaign to recruit additional Emergency Radio Operators to strengthen the capacity of emergency communications in Whistler. Train recruited volunteers.	Training Scheduled. Cost will be absorbed in 2012 Emergency Program budget.
	9. Expand public education and emergency messaging materials into additional languages to better service resort clientele before, during and after an emergency.	Staff time. Transcribing fees \$800.
	10. Establish Wireless Priority Service for vital emergency staff.	Monthly Fee of \$10 per phone. Sign-up fee of \$30 per phone.
	11. Investigate the need and the associated costs of purchasing equipment to broadcast emergency information to listeners over local radio channels. This is subject to approval by the Canadian Radio-Television and Telecommunications Commission.	Staff time. [Additional costs may be incurred should the decision to upgrade equipment be necessary. Decision to upgrade at the discretion of the Emergency Planning Committee.]
	12. Reestablish relationships with radio broadcasters to be able to rely on their facilities during emergencies.	Staff time.
	13. Study the feasibility of upgrading the RMOW and stakeholder radio system to ensure proper and seamless interoperability.	Staff time to complete the study. [Additional costs may be incurred should the decision to upgrade equipment be necessary. Decision to upgrade at the discretion of the Emergency Planning Committee.]

Sub-Category	Recommendations	Resources Required
Critical Facilities	14. Assess all critical facilities for their anticipated survivability based on the hazards present within the community.	Staff time.
	15. Develop a priority list of RMOW facilities that require access to municipal generators in an extended power outage and ensure this complies with the number of generators owned by, or available to, the RMOW.	Staff time. [Additional costs may be incurred should the decision to purchase additional generators be necessary. Decision to purchase will be at the discretion of the Emergency Planning Committee.]
	16. Develop a priority list of RMOW facilities to be re-energized by BC Hydro following a power outage. This should be developed in conjunction with BC Hydro.	Staff time.
Critical Infrastructure	17. Complete a review of the current RMOW Emergency Operations Centre facility to determine if the current Emergency Operations Centre location is acceptable.	Staff time.
	18. Complete a review of the secondary RMOW Emergency Operations Centre facility to determine if the location is viable.	Staff time.
	19. Assess the fuel needs of the RMOW in conjunction with fuel availability in the RMOW.	Staff time.
	20. If required, establish <i>working</i> agreements with fuel providers to ensure stocks are available to the RMOW during an emergency.	Staff time.
	21. In conjunction with local pharmacies, assess the availability of pharmaceutical supplies in Whistler in the event that supply chains are interrupted.	Staff time.
	22. Conduct a thorough investigation of food supply in Whistler including restaurants and food supply companies. Determine methods to augment the current food supply levels or improve the robustness of food supply to Whistler in an emergency.	Staff time.

Sub-Category		Recommendations	Resources Required
Emergency Planning Committee		23. Reinstate a meeting schedule for the Emergency Planning Committee and the 4 sub-committees. Consider appointing a new committee to deal specifically with Business Continuity.	Staff time.
		24. Continue to have an Emergency Program Coordinator within the RMOW.	Staff time.
		25. Appoint a Deputy Emergency Program Coordinator within the RMOW to ensure there is adequate coverage when the Emergency Program Coordinator is unavailable.	Staff time. [A current staff member could be appointed].
		26. Perform a needs assessment on the Emergency Social Services system to ensure resources are adequate.	Staff time.
Hazard Specific Recommendations	Earthquake	27. Conduct further study on the recurrence frequency of a significant earthquake event in Whistler.	Staff time.
		28. Conduct an RMOW building inventory and create a map of high-risk structures.	Staff time.
		29. Ensure an adequate number of Municipal Staff are trained in Rapid Damage Assessment.	Staff time and Rapid Damage Assessment for Professionals Course \$1800 to train 30 staff members.
	Snowstorm	30. Conduct an annual municipal-wide snow event tabletop exercise to ensure staff is familiar with roles and responsibilities during extreme snowfall events. This should be conducted in the fall so that the Protocol is fresh in the minds of staff.	Staff time.
	Volcano	31. Examine other municipalities in close proximity to Volcanoes to determine what measures they have taken to mitigate hazards associated with Volcanoes.	Staff time.

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APPENDICES

Appendix A

B.C. Reg. 380/95
O.C. 1075/95

Deposited September 8, 1995

Emergency Program Act LOCAL AUTHORITY EMERGENCY MANAGEMENT REGULATION

Interpretation

1 In this regulation "**Act**" means the EMERGENCY PROGRAM ACT.

Local emergency plans

- 2** (1) A local authority must reflect in the local emergency plan prepared by it under section 6 (2) of the Act
- (a) the potential emergencies and disasters that could affect all or any part of the jurisdictional area for which the local authority has responsibility, and
 - (b) the local authority's assessment of the relative risk of occurrence and the potential impact on people and property of the emergencies or disasters referred to under paragraph (a).
- (2) Each municipal council and each board of a regional district that qualifies as a local authority under section 1 (1) of the Act must reflect in its local emergency plan, unless it is documented elsewhere,
- (a) the commitment of the local authority to provide policy guidance and direction to the emergency management organization established by that local authority under section 6 (3) of the Act, and
 - (b) the procedures by which that guidance and direction is to be provided.
- (3) A local authority must, as part of the local emergency plan prepared by it under section 6 (2) of the Act,
- (a) require a periodic review and updating of the local emergency plan and establish a procedure for that review and revision,
 - (b) establish and maintain for all emergency response staff to whom responsibilities are assigned in the plan,
 - (i) a program of emergency response exercises, and
 - (ii) a training program,
 - (c) identify the procedures by which emergency resources, including, without limitation, personnel, equipment, facilities and financial resources, may be

obtained from sources within or outside of the jurisdictional area for which the local authority has responsibility,

- (d) establish the procedures by which the plan is to be implemented,
- (e) establish procedures by which those persons who may be harmed or who may suffer loss are notified of an emergency or impending disaster,
- (f) coordinate the provision of food, clothing, shelter, transportation and medical services to victims of emergencies and disasters, whether that provision is made from within or outside of the local authority,
- (g) establish the priorities for restoring essential services provided by the local authority that are interrupted during an emergency or disaster, and
- (h) recommend to service providers the priorities for restoring essential services not provided by the local authority that are interrupted during an emergency or disaster.

(4) A local authority may incorporate into its local emergency plan any confirmed, potential or anticipated assistance and resources of other levels of government or other non-government bodies.

Powers of a local authority

- 3** Nothing in this regulation or the Act prevents a local authority from
- (a) entering into mutual aid agreements with one or more local authorities for emergency resources of all types and subsequent cost recovery,
 - (b) entering into agreements with non-government organizations for emergency resources of all types and subsequent cost recovery, and
 - (c) providing emergency training to and conducting emergency exercises with persons residing or carrying on business in the jurisdictional area for which the local authority has jurisdiction.

Duties of a local authority

- 4** Each municipal council and each board of a regional district that qualifies as a local authority under section 1 (1) of the Act must, on the request of and within the time required by the minister, submit to the minister
- (a) the local emergency plan as prepared under section 6 (2) of the Act and updated under section 2 (3) (a) of this regulation,
 - (b) the schedule and content of any emergency training or exercise program, and
 - (c) any other emergency prevention, preparedness, response or recovery information that the minister considers necessary to assist the minister in preparing or establishing procedures required for the prompt and efficient implementation of plans and programs to meet emergencies and disasters.

[Provisions of the EMERGENCY PROGRAM ACT, R.S.B.C. 1996, c. 111, relevant to the enactment of this regulation: section 28]

Appendix B

RESORT MUNICIPALITY OF WHISTLER

A Bylaw to authorize the Resort Municipality of Whistler to plan for dealing with emergencies and disasters including declaring a local state of emergency.

WHEREAS:

- A. The Council of the Resort Municipality of Whistler must establish and maintain an emergency management organization to develop and implement emergency plans;
- B. The Council of the Resort Municipality of Whistler wishes to provide a comprehensive management program to prepare for, respond to and recover from emergencies and disasters;

NOW THEREFORE the Council of the Resort Municipality of Whistler, in open meeting assembled, ENACTS AS FOLLOWS:

SECTION 1 – CITATION

- 1.1 This Bylaw shall be cited as the “Emergency Measures Bylaw No. 1593, 2002.”

SECTION 2 – INTERPRETATION

- 2.1 In this bylaw unless the context otherwise requires:
 - a) “ACT” means the Emergency Program Act;
 - b) “COUNCIL” means the Council of the Resort Municipality of Whistler;
 - c) “DECLARATION OF A STATE OF LOCAL EMERGENCY” means a declaration of Council or the Mayor that an emergency exists or is imminent in the municipality;
 - d) “DISASTER” means a calamity that:
 - i) is caused by accident, fire, explosion or technical failure or by the forces of nature, and
 - ii) has resulted in serious harm to the health, safety or welfare of people, or in widespread damage to property;
 - e) “EMERGENCY” means a present or imminent event that:
 - i) is caused by accident, fire, explosion or technical failure or by the forces of nature, and
 - ii) requires prompt coordination of action or special regulation of persons or property, to protect the health, safety or welfare of people or to limit damage to property;
 - f) “EMERGENCY COORDINATOR” means the person appointed under Section 3.3 as head of the Resort Municipality of Whistler Emergency Management Organization;

- g) "MAYOR" means that member of Council who is head and chief executive officer of the municipality;
- h) "MINISTER" means that member of the Executive council charged by order of the Lieutenant Governor in Council with the administration of the Act;
- i) "MUNICIPALITY" means all of the area within the boundaries of the Resort Municipality of Whistler;
- j) "RESORT MUNICIPALITY OF WHISTLER EMERGENCY MANAGEMENT ORGANIZATION" means the Emergency Planning Committee, Emergency Coordinator and such other persons appointed and functional groups established and which are charged with emergency preparedness, response and recovery measures.

This Bylaw shall be construed in accordance with the principals contained in, and subject to, the Emergency Program Act, RSBC 1996 Chapter 111, and all regulations made thereunder.

SECTION 3 – ADMINISTRATION

- 3.1 The Emergency Planning Committee shall be composed of:
 - a) Mayor and one Councilor member appointed by Council;
 - b) Administrator,
 - c) Emergency Coordinator,
 - d) General Managers, Department Heads, Emergency Social Services Director or their designates and,
 - e) Such other members that the Council may determine.
- 3.2 Subject to the approval of the Council, the Emergency Planning Committee may:
 - a) make and amend its terms of reference, policies and procedures;
 - i) enter into agreements with regional districts or other municipalities for the purpose of emergency assistance or the formulation of coordinated emergency preparedness, response or recovery; and
 - ii) enter into agreements with individuals, bodies, corporations or other non-government agencies for the provision of goods or services.
- 3.3 The Council shall appoint an Emergency Coordinator to facilitate emergency preparedness, response and recovery measures.

SECTION 4 – DUTIES AND RESPONSIBILITIES OF THE COUNCIL

- 4.1 The Resort Municipality of Whistler Emergency Planning Committee shall prepare and present to the Council for annual review and approval:
 - a) a list of hazards to which the Municipality is subject and which also indicates the relative risk of occurrence;
 - b) plans respecting the preparation for, response to and recovery from emergencies and disasters, which include:
 - i) a periodic review and updating of plans and procedures for that review;
 - ii) a program of emergency response exercises;

- iii) a training program;
- iv) procedures by which physical and financial emergency resources or assistance may be obtained;
- v) procedures by which emergency plans are to be implemented;
- vi) warning procedures to those persons who may be harmed or suffer loss in an emergency or impending disaster;
- vii) procedures to coordinate the provision of food, clothing, shelter, transportation and medical service to victims of emergencies and disasters, whether that provision is made from within or outside of the municipality, and;
- viii) procedures to establish the priorities for restoring essential services provided by the municipality, or recommend priorities to other service providers, that are interrupted during an emergency or disaster.

SECTION 5 – POWERS OF THE COUNCIL

- 5.1 The Council or the Mayor or the Emergency Coordinator or other person as designated in the emergency plan may, whether or not a state of local emergency has been declared, cause the emergency plan to be implemented.
- 5.2 The Council by bylaw or resolution, or the Mayor by order, may declare a state of local emergency to effectively deal with an emergency or disaster in any part of the Municipality.
- 5.3 Upon a declaration of a state of local emergency being made, Council or the Mayor shall:
 - a) forward a copy of the declaration to the Minister, and
 - b) cause the details of the declaration to be published by a means of communication that the Council or Mayor considers most likely to make the contents of the declaration known to the majority of the population of the affected area.
- 5.4 After a declaration of a state of local emergency is made under section 5.2 in respect of all or any part of the Municipality, and for the duration of the state of local emergency, the Council or Mayor may do any or all acts considered necessary and implement procedures that the Council or Mayor considers necessary to prevent, respond to or alleviate the effects of an emergency or a disaster, including any or all of the following:
 - a) acquire or use any real or personal property considered necessary to prevent, respond to or alleviate the effects of an emergency or disaster;
 - b) authorize or require any person to render assistance of a type that the person is qualified to provide or that otherwise is or may be required to prevent, respond to or alleviate the effects of an emergency or disaster;
 - c) control or prohibit travel to or from any part of the municipality;
 - d) provide for the restoration of essential facilities and the distribution of essential supplies and provide, maintain and coordinate emergency medical, welfare and other essential services in the municipality;

- e) cause the evacuation of persons and animals and personal property from any part of the municipality that is or may be affected by an emergency or a disaster and make arrangements for the adequate care and protection of those persons, animals and personal property;
- f) authorize the entry into any building or on any land, without warrant, by any person in the course of implementing an emergency plan or program or if otherwise considered by the Council or Mayor to be necessary to prevent, respond to or alleviate the effects of an emergency or disaster;
- g) cause the demolition or removal of any trees, structures or brush if the demolition or removal is considered by the Council or Mayor to be necessary or appropriate in order to prevent, respond to or alleviate the effects of an emergency or disaster;
- h) construct works considered by the Council or Mayor to be necessary or appropriate to prevent, respond to or alleviate the effects of an emergency or disaster;
- i) procure, fix prices for or ration food, clothing, fuel, equipment, medical supplies or other essential supplies and the use of any property, services, resources or equipment within any part of the municipality for the duration of the State of Local Emergency; and
- j) authorize the Emergency Coordinator or other designated person to exercise, in any part of the municipality affected by a declaration of a state of local emergency, those specific powers enabled in Section 5.4 and assumed by the Council or Mayor.

- 5.5 The Council or Mayor must, when of the opinion that an emergency no longer exists in the Municipality to which a declaration of state of local emergency was made:
- a) cancel the declaration of state of local emergency in relation to that part
 - i) by bylaw or resolution, if cancellation is effected by the Council, or
 - ii) by order, if the cancellation is effected by the Mayor, and
 - b) promptly notify the Minister of the cancellation of the declaration of a state of local emergency.

SECTION 6 – LIABILITY

- 6.1 No person, including, without limitation, the Council, the Mayor, members of the Resort Municipality of Whistler Emergency Management Organization, employees of the Resort Municipality of Whistler, a volunteer and any other persons appointed, authorized or requested to carry out measures relating to emergencies or disasters, is liable for any loss, cost, expense, damages or injury to persons or property that results from:
- a) the person in good faith doing or omitting to do any act that the person is appointed, authorized or required to do under this bylaw, unless, in doing or omitting to do the act, the person was grossly negligent, or
 - b) any acts done or omitted to be done by one or more of the persons who were, under this bylaw, appointed, authorized or required by the person to do the acts, unless in appointing, authorizing or requiring those persons to do the acts, the person was not acting in good faith.

SECTION 7 – BYLAW REPEALED

Bylaw No.1134, 1995, cited as the “Resort Municipality of Whistler Emergency Program Bylaw”, is hereby repealed.

GIVEN FIRST, SECOND AND THIRD READING this _ day of _____, 2002.

ADOPTED by the Council this _____ day of _____, 2002.

Hugh O’Reilly

Mayor

Brenda Sims

Municipal Clerk

I HEREBY CERTIFY that this is
A true copy of “Emergency Measures
Bylaw No. 1593, 2002.”

Brenda Sims

Municipal Clerk

Appendix C HAZARD TABLE

HAZARD	SCENARIO	Impact Criteria							Total Impact Score (Max. 28)	Likelihood	AGGREGATE SCORE (Max. 28/6)
		Potential Extent of Death	Potential Extent of Injury	Potential Damages or Losses to Critical Facilities	Potential Extent of Damages or Losses to Critical Infrastructure	Potential Extent of Damages or Losses to Property	Potential Extent of Damages or Losses to Environment	Potential Extent of Economic or Social Losses		1 (Very Rare) 2 (Highly Unlikely) 3 (Unlikely) 4 (Slight Chance) 5 (Moderate/Likely) 6 (Very Likely)	
Aircraft Crash	Aircraft issue on take-off resulting in temporary highway closure.	1 (0-4 ppl) 2 (4-10 ppl) 3 (10-50 ppl) 4 (50 + ppl)	1 (0-4 ppl) 2 (4-50 ppl) 3 (50-2000 ppl) 4 (2000 + ppl)	1 (Temporary Relocation) 2 (Closure for a few days) 3 (Loss of 50% Capability) 4 (Permanent Loss)	1 (Temporary Interruption) 2 (Interruption of a few days) 3 (Interruption of one week) 4 (Permanent Loss)	1 (Minimal Damage) 2 (Low Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	1 (Minimal Damage) 2 (Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	1 (Temporary Impact) 2 (Temporary & Widespread) 3 (Extended & Widespread) 4 (Permanent Impact)	6	4	6/4
Avalanche	Avalanche in older (30+ years) neighborhood; Takes out a few houses. Note: There is no evidence of this hazard in developed areas.	1	2	0	0	2	0	0	5	2	5/2
Civil Disorder/Riot	Similar situation to Vancouver June 2011.	1	3	1	1	2	0	2	10	4	10/4
Debris Flow/Debris Flood	Mirrors the 1990's Fitzs. Creek event with concurrent flood exceeding the 200 year clearwater event.	1	1	3	3	2	2	3	15	1	15/1

HAZARD	SCENARIO	Impact Criteria							Total Impact Score (Max. 28)	Likelihood	AGGREGATE SCORE (Max. 28/6)
		Potential Extent of Death 1 (0-4 ppl) 2 (4-10 ppl) 3 (10-50 ppl) 4 (50 + ppl)	Potential Extent of Injury 1 (0-4 ppl) 2 (4-50 ppl) 3 (50-2000 ppl) 4 (2000 + ppl)	Potential Damages or Losses to Critical Facilities 1 (Temporary Relocation) 2 (Closure for a few days) 3 (Loss of 50% Capability) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Critical Infrastructure 1 (Temporary Interruption) 2 (Interruption of a few days) 3 (Interruption of one week) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Property 1 (Minimal Damage) 2 (Low Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Damages or Losses to Environment 1 (Minimal Damage) 2 (Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Economic or Social Losses 1 (Temporary Impact) 2 (Temporary & Widespread) 3 (Extended & Widespread) 4 (Permanent Impact)		1 (Very Rare) 2 (Highly Unlikely) 3 (Unlikely) 4 (Slight Chance) 5 (Moderate/Likely) 6 (Very Likely)	
Drought	Based on 25 year drought. Lowest stream condition in a 25 year period.	0	0	0	0	1	1	2	4	4	4/4
Earthquake	7+ in magnitude resulting in structural damage.	4	3	4	4	4	3	4	26 6	1	26/ 1
Epidemic Pandemic	Canada-wide epidemic affecting over 15% population in Whistler.	4	4	3	0	0	0	3	14	3	14/3
Flood	Clearwater flood event exceeding the 200 year level.	0	1	3	4	4	2	4	18 8	1	18/ 1
Interface Fire	Rank 4 or 5 Fire; scenario 50 year event.	1	2	3	4	3	2	2	17 7	3	17/ 3
Geotechnical Event	Major geotechnical event in region (not necessarily within RMOW boundaries).	4	3	0	2	2	1	1	13 3	1	13/ 1

HAZARD	SCENARIO	Impact Criteria							Total Impact Score (Max. 28)	Likelihood	AGGREGATE SCORE (Max. 28/6)
		Potential Extent of Death 1 (0-4 ppl) 2 (4-10 ppl) 3 (10-50 ppl) 4 (50 + ppl)	Potential Extent of Injury 1 (0-4 ppl) 2 (4-50 ppl) 3 (50-2000 ppl) 4 (2000 + ppl)	Potential Damages or Losses to Critical Facilities 1 (Temporary Relocation) 2 (Closure for a few days) 3 (Loss of 50% Capability) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Critical Infrastructure 1 (Temporary Interruption) 2 (Interruption of a few days) 3 (Interruption of one week) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Property 1 (Minimal Damage) 2 (Low Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Damages or Losses to Environment 1 (Minimal Damage) 2 (Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Economic or Social Losses 1 (Temporary Impact) 2 (Temporary & Widespread) 3 (Extended & Widespread) 4 (Permanent Impact)		1 (Very Rare) 2 (Highly Unlikely) 3 (Unlikely) 4 (Slight Chance) 5 (Moderate/Likely) 6 (Very Likely)	
HAZMAT	Rail or tanker truck leaking environmentally damaging substance.	0	1	0	1	2	3	2	9	3	9/3
HAZMAT (Rail)	Derailed train causing a leak of poisonous gas.	4	3	0	2	2	2	2	15	1	15/1
Heat Wave	Heat wave with power failure; sustained for 5 days.	1	2	2	2	2	0	1	10	3	10/3
Ice Storm (Major)	Several days of ice rain resulting in 1 week power outage/ roof collapse.	1	3	3	3	3	1	3	17	2	17/2
Ice Storm (Minor)	Minor interruption to power. Not overnight.	0	2	1	1	1	1	1	7	5	7/5
Industrial Accident	Many mitigation measures in place. Scenario based on an explosion at a local industrial site.	1	1	0	0	1	1	0	4	4	4/4

HAZARD	SCENARIO	Impact Criteria							Total Impact Score (Max. 28)	Likelihood	AGGREGATE SCORE (Max. 28/6)
		Potential Extent of Death 1 (0-4 ppl) 2 (4-10 ppl) 3 (10-50 ppl) 4 (50 + ppl)	Potential Extent of Injury 1 (0-4 ppl) 2 (4-50 ppl) 3 (50-2000 ppl) 4 (2000 + ppl)	Potential Damages or Losses to Critical Facilities 1 (Temporary Relocation) 2 (Closure for a few days) 3 (Loss of 50% Capability) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Critical Infrastructure 1 (Temporary Interruption) 2 (Interruption of a few days) 3 (Interruption of one week) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Property 1 (Minimal Damage) 2 (Low Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Damages or Losses to Environment 1 (Minimal Damage) 2 (Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Economic or Social Losses 1 (Temporary Impact) 2 (Temporary & Widespread) 3 (Extended & Widespread) 4 (Permanent Impact)		1 (Very Rare) 2 (Highly Unlikely) 3 (Unlikely) 4 (Slight Chance) 5 (Moderate/Likely) 6 (Very Likely)	
Interruption to Water Supply	A non-system-wide interruption in a neighborhood in Whistler.	0	0	0	1	0	0	1	2	6	2/6
Landfill Gas Emergency	Many mitigation measures in place. Scenario based on an explosion.	1	1	0	0	0	0	1	3	1	3/1
Multiple Casualty Event – Event Related	Stage/bleachers structure failure or collapse during an event.	1	2	0	0	1	0	1	5	4	5/4
Multiple Casualty Event – Motor Vehicle Accident	Motor vehicle accident on highway resulting in several injuries.	2	2	0	1	0	1	1	7	5	7/5
Natural Gas Distribution Failure/Interruption	Natural Gas Line is severed/damaged causing an interruption in the supply of natural gas to Whistler.	0	0	1	1	0	0	1	3	3	3/3

HAZARD	SCENARIO	Impact Criteria							Total Impact Score (Max. 28)	Likelihood	AGGREGATE SCORE (Max. 28/6)
		Potential Extent of Death 1 (0-4 ppl) 2 (4-10 ppl) 3 (10-50 ppl) 4 (50 + ppl)	Potential Extent of Injury 1 (0-4 ppl) 2 (4-50 ppl) 3 (50-2000 ppl) 4 (2000 + ppl)	Potential Damages or Losses to Critical Facilities 1 (Temporary Relocation) 2 (Closure for a few days) 3 (Loss of 50% Capability) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Critical Infrastructure 1 (Temporary Interruption) 2 (Interruption of a few days) 3 (Interruption of one week) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Property 1 (Minimal Damage) 2 (Low Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Damages or Losses to Environment 1 (Minimal Damage) 2 (Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Economic or Social Losses 1 (Temporary Impact) 2 (Temporary & Widespread) 3 (Extended & Widespread) 4 (Permanent Impact)		1 (Very Rare) 2 (Highly Unlikely) 3 (Unlikely) 4 (Slight Chance) 5 (Moderate/Likely) 6 (Very Likely)	
Power Outage	Catastrophic event interrupting power supply to Whistler. Similar event to the 2005 Blackout in East US.	0	0	3	3	0	0	3	9	2	9/2
Rock Fall	Rock fall damaging a home, also spilling onto Highway 99 causing a closure.	1	1	0	3	2	0	2	9	4	9/4
Sanitary Sewer System Failure	Catastrophic failure that releases wastewater into the environment; specifically a	0	0	3	3	1	3	2	12	1	12/1
Ski-Lift Incident	Scenario based on the incidents that have occurred in Whistler in the last 20 years.	1	2	0	0	1	0	1	5	5	5/5
Snowstorm (Major)	Heavy continuous snowfall – resulting in an extended interruption to transportation.	1	2	2	2	2	0	1	10	4	10/4

HAZARD	SCENARIO	Impact Criteria							Total Impact Score (Max. 28)	Likelihood	AGGREGATE SCORE (Max. 28/6)
		Potential Extent of Death 1 (0-4 ppl) 2 (4-10 ppl) 3 (10-50 ppl) 4 (50 + ppl)	Potential Extent of Injury 1 (0-4 ppl) 2 (4-50 ppl) 3 (50-2000 ppl) 4 (2000 + ppl)	Potential Damages or Losses to Critical Facilities 1 (Temporary Relocation) 2 (Closure for a few days) 3 (Loss of 50% Capability) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Critical Infrastructure 1 (Temporary Interruption) 2 (Interruption of a few days) 3 (Interruption of one week) 4 (Permanent Loss)	Potential Extent of Damages or Losses to Property 1 (Minimal Damage) 2 (Low Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Damages or Losses to Environment 1 (Minimal Damage) 2 (Localized Damage) 3 (Localized & Severe) 4 (Widespread & Severe)	Potential Extent of Economic or Social Losses 1 (Temporary Impact) 2 (Temporary & Widespread) 3 (Extended & Widespread) 4 (Permanent Impact)		1 (Very Rare) 2 (Highly Unlikely) 3 (Unlikely) 4 (Slight Chance) 5 (Moderate/Likely) 6 (Very Likely)	
Snowstorm (Minor)	Heavy continuous snowfall – no interruption to transportation as a result.	0	1	0	0	0	0	1	2	6	2/6
Structure Fire	Structure fire that exceeds design capacity of Municipal water supply.	3	3	0	1	3	2	1	13	3	13/3
Terrorism	One person detonates a device in crowd.	3	3	1	1	2	0	2	12	2	12/2
Volcano	Volcano erupts in close vicinity to Whistler resulting in full evacuation and major interruption and damage to critical infrastructure.	4	4	3	4	4	4	4	27	1	27/1
Volcanic Ash Fallout	Volcano erupts in B.C. and ash fallout reached Whistler.	1	1	1	2	3	3	2	13	1	13/1
Windstorm	Heavy winds with trees down on power lines.	0	1	1	1	2	0	2	7	2	7/2

12.1 Appendix 2 – Eligible and Ineligible Response Costs

Examples of Eligible and Ineligible Response Costs

(This table presents examples only and is not comprehensive. Refer to the C&DFA Reg for exact wording.)

Response Item	Eligible	Not Eligible
Animal Evacuation and Rescue	<ul style="list-style-type: none"> Evacuation, shelter and feeding for livestock and poultry, including the restoration of facilities used for those purposes 	<ul style="list-style-type: none"> Evacuation and rescue costs for pets, backyard or hobby animals
Assets	<ul style="list-style-type: none"> Assets under \$100 (e.g., white boards) Assets over \$100 pre-approved by EMBC through use of an Expenditure Authorization Form (EAF) 	<ul style="list-style-type: none"> Purchases where there is no approved EAF Assets where there is a suitable rental alternative
Backfilling Positions	<ul style="list-style-type: none"> Backfilling positions to temporarily cover full-time staff coordinating emergency response 	<ul style="list-style-type: none"> Regular wages / benefits of employees Compensatory time off (CTO) or
Civil Litigation	<ul style="list-style-type: none"> Response costs not reimbursed through civil litigation award 	<ul style="list-style-type: none"> Assistance may be withheld pending outcome of proceedings, or amount must be refunded
Clean-up	<ul style="list-style-type: none"> Clean-up necessary to ensure public safety or is essential for public works 	<ul style="list-style-type: none"> Clean-up that is not essential to public safety or for public works
Damaged Equipment	<ul style="list-style-type: none"> Equipment damaged during eligible response activities may be considered as a recovery cost item 	<ul style="list-style-type: none"> Equipment damaged by events other than the emergency or disaster incident
Debris Removal	<ul style="list-style-type: none"> Costs of debris removal necessary to ensure public safety or essential for public works Necessary clearance from channels, streams, intakes & outfalls of sewers & storm drains, water supply reservoirs 	<ul style="list-style-type: none"> Debris removal that is not essential to public safety or for public works
Emergency Operations Centre	<ul style="list-style-type: none"> Facility rental if other than local authority facility EOC assets under \$100 (e.g., white boards) Equipment rental Cost of feeding EOC staff during an emergency Contractors serving in support capacities EOC materials and supplies Telephone and data services, including installation and operation while EOC is active After-action debrief costs, pre-approved by EMBC 	<ul style="list-style-type: none"> EOC assets over \$100, except where EMBC pre-approves the purchase through use of an Expenditure Authorization Form (EAF) Telephone or data services in place prior to EOC activation, and emergency installs that are not removed upon EOC deactivation

Examples of Eligible and Ineligible Response Costs

(This table presents examples only and is not comprehensive. Refer to the C&DFA Reg for exact wording.)

Response Item	Eligible	Not Eligible
Emergency Response Measures	<ul style="list-style-type: none"> • Establishment, operation of communication facilities • Establishment of registration, inquiry services, emergency control headquarters • Determining the areas and extent of the disaster • Human rescue, transport & emergency health activities • Food, clothing and shelter for evacuees • Medical care to casualties and transportation, moving patients or casualties, their return after the disaster • Protective health and sanitation facilities • Remove hazardous materials, chattels, assets, and related storage and transportation costs • Protection of publicly-owned institutions, utilities including equipment, materials, and labour • Shelter and feeding for livestock, including the restoration of facilities 	<ul style="list-style-type: none"> • Normal operating costs of government owned equipment • Purchase of special, additional equipment to fight the disaster • Costs incurred as a result of a disaster that are recovered from agencies such as the Canadian Disaster Relief Fund or from disaster fund raising drives
Emergency Social Services	<ul style="list-style-type: none"> • Non-government owned facility rental if serving as a reception centre • Materials, supplies required to operate reception centres • Transportation of evacuees, including those in need of medical care, to a reception centre or other lodging and return home 	
Environmental Protection	<ul style="list-style-type: none"> • Actions needed during response to protect potable water supplies, essential public lands, and health-related air 	<ul style="list-style-type: none"> • Response activities intended to protect other environments
Equipment	<ul style="list-style-type: none"> • Equipment under \$100 (e.g., shovels) • Equipment if justified by cost efficiencies of purchase over rental or lease options, or if rentals are not available. Must be pre-approved by EMBC through use of an EAF 	<ul style="list-style-type: none"> • Equipment over \$100, except where EMBC pre-approves • Normal operating costs or usage charges of local authority-owned equipment • Purchase of special, additional equipment
Equipment Rental	<ul style="list-style-type: none"> • Equipment needed during response to support objectives • Costs of rented equipment in feeding staff during an event 	<ul style="list-style-type: none"> • Equipment rented to conduct normal operations • Rental equipment rates that exceed <i>BC Equipment Rental Rates Guide</i>

Examples of Eligible and Ineligible Response Costs

(This table presents examples only and is not comprehensive. Refer to the C&DFA Reg for exact wording.)

Response Item	Eligible	Not Eligible
Evacuation	<ul style="list-style-type: none"> • Food, shelter, clothing for persons evacuated • Evacuation costs for other populations at risk (e.g., elderly in care home) as determined by the EOC and PREOC 	<ul style="list-style-type: none"> • Evacuation costs before an Evacuation Order is issued or after an order has been rescinded (e.g., costs of transporting evacuees)
Facility Rental	<ul style="list-style-type: none"> • Rental of non-local authority community hall or facility • Incremental janitorial and utilities • Facility damage due to occupation 	<ul style="list-style-type: none"> • Hall, facility rental to own community(self) or loss of use charges
Fire Services	<ul style="list-style-type: none"> • Costs of special fire protection of local authority facilities (e.g., external sprinklers) not otherwise reimbursed • Use of fire vehicles outside local authority jurisdiction under conditions of EMBC Policy Bulletin 00-11 	<ul style="list-style-type: none"> • Costs of fire protection of private facilities • Fire service charges reimbursed through the Office of the Fire Commissioner
Fuel, Oil, Lubricants	<ul style="list-style-type: none"> • Incremental costs related to the response efforts during the event 	<ul style="list-style-type: none"> • Normal consumption of fuel, oil, lubricants for non-emergency activities
Fundraising	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Expenses that are recovered from agencies, such as Canadian Disaster Relief Fund, or from disaster fundraising drives
Goods and Services Tax	<ul style="list-style-type: none"> • GST for the portion not recoverable by GST rebate. All local authorities are eligible, except municipalities and regional districts. 	<ul style="list-style-type: none"> • GST that is recoverable by rebate • GST paid by municipalities and regional districts
Inventory	<ul style="list-style-type: none"> • Supplies related to the response operations in support of public safety 	<ul style="list-style-type: none"> • Stockpiling of inventory by the local authority
Materials	<ul style="list-style-type: none"> • Materials needed during response to protect public safety • Costs of materials in feeding response 	<ul style="list-style-type: none"> • Materials used to conduct normal operations
Medical Care, Health Services	<ul style="list-style-type: none"> • Medical care to casualties, moving patients, and their return following the disaster • Protective health and sanitation facilities 	<ul style="list-style-type: none"> • Normal medical care and health service operational costs • Purchase of special, additional
Mutual Aid Costs	<ul style="list-style-type: none"> • Resources (personnel, equipment, materials) needed during response at site or site support to protect public safety 	<ul style="list-style-type: none"> • Costs associated with backfilling personnel by the lending jurisdiction
Office Supplies	<ul style="list-style-type: none"> • Related to the operation of special communication facilities, emergency control headquarters, reception centres 	<ul style="list-style-type: none"> • Stockpiling of office supplies by the local authority

Examples of Eligible and Ineligible Response Costs

(This table presents examples only and is not comprehensive. Refer to the C&DFA Reg for exact wording.)

Response Item	Eligible	Not Eligible
Overtime Wages	<ul style="list-style-type: none"> Incremental costs related to the event, plus reasonable benefits 	<ul style="list-style-type: none"> Overtime wages that cannot be attributed to event Regular wages, benefits of employees Base operating costs, such as salaries or regular wages of employees, Compensatory Time Off (CTO) or banked overtime Excessive overtime and benefit rate payments
Police Services	<ul style="list-style-type: none"> Costs of police protection and security to enhance public safety, including mutual aid from other municipal police forces, e.g., patrols of hazardous areas, evacuated areas Evacuation costs and resources when evacuation order in place, including mutual aid 	<ul style="list-style-type: none"> Costs of police protection of private facilities Mutual aid charges from RCMP sources under provincial contract
Preventative Works and Mitigation	<ul style="list-style-type: none"> Protection of publicly-owned institutions and utilities from the current threat, including equipment, materials, and labour 	<ul style="list-style-type: none"> Works undertaken as preventative measures to guard against future disasters without prior approval from EMBC Damage to local authority facilities if prior assistance was not used for the preventative work as required
Provincial Sales Tax	<ul style="list-style-type: none"> All PST 	<ul style="list-style-type: none"> Not Applicable
Public Works	<ul style="list-style-type: none"> Emergency repairs to public works required to support response objectives 	<ul style="list-style-type: none"> Repair or replacement of public works may be eligible under recovery Costs to enhance public works to
Scalping of Gravel Beds	<ul style="list-style-type: none"> Scalping when there is an unusually heavy disaster- related deposition, and then only the cost of removing the deposition 	<ul style="list-style-type: none"> All other scalping of gravel beds
Search and Rescue	<ul style="list-style-type: none"> Rescue, transportation, emergency health arrangements 	<ul style="list-style-type: none"> SAR services not related to the event
Service Contracts	<ul style="list-style-type: none"> Contracts directly related to the response efforts 	<ul style="list-style-type: none"> Contracts not related to the event
Staffing Expenses	<ul style="list-style-type: none"> Paid overtime costs and benefits Feeding emergency response staff during an event that would not usually be provided 	<ul style="list-style-type: none"> Regular wages, benefits of employees Base operating costs, such as salaries or regular wages of employees, Compensatory Time Off (CTO) or banked overtime Excessive overtime and benefit rates
Supplies	<ul style="list-style-type: none"> Supplies from local government stores consumed in response 	<ul style="list-style-type: none"> Stockpiling costs, materials, equipment or other costs related to these activities

Examples of Eligible and Ineligible Response Costs

(This table presents examples only and is not comprehensive. Refer to the C&DFA Reg for exact wording.)

Response Item	Eligible	Not Eligible
Telephone Charges	<ul style="list-style-type: none"> • All telephone charges if rented or leased for event • Airtime charges only if not rented for event (volunteer or staff private phone) 	<ul style="list-style-type: none"> • Telephone charges and equipment used for normal operations
Temporary Wages	<ul style="list-style-type: none"> • Costs of backfilling a regular position with a temporary employee due to incident 	<ul style="list-style-type: none"> • Base salaries or regular wages of regular employees
Travel	<ul style="list-style-type: none"> • Incremental costs related to the event 	<ul style="list-style-type: none"> • Travel costs that cannot be attributed to event
Tree Pruning, Removal	<ul style="list-style-type: none"> • Pruning or removal of trees that constitute an imminent threat to public safety 	<ul style="list-style-type: none"> • Landscaping not essential to the public welfare
Vehicle Repairs	<ul style="list-style-type: none"> • Reimbursement for repair or replacement for damage to or loss of vehicles and related equipment will be limited to the lesser of the insurance deductible or \$1,000. 	<ul style="list-style-type: none"> • Cost of maintaining vehicles used in response, including extraordinary maintenance attributable to emergency conditions (e.g., smoke, dust,
Volunteer Expenses	<ul style="list-style-type: none"> • Volunteer expenses that are attributable to the event (e.g., mileage, meal reimbursement, phone charges) in accordance with EMBC Policy rates 	<ul style="list-style-type: none"> • Volunteer expenses that cannot be attributed to event • Loss of volunteer personal equipment (e.g., eyeglasses, clothing, computer equipment) reimbursed directly from EMBC under policy. Volunteer may
Wages	<ul style="list-style-type: none"> • Paid overtime costs and benefits 	<ul style="list-style-type: none"> • Regular wages, benefits of employees • Base operating costs, such as salaries or regular wages of employees, Compensatory Time Off (CTO) or banked overtime • Excessive overtime and benefits rates

For more information on eligible and ineligible response costs, refer to Schedule 5 of the [C&DFA Regulation](#), and Part 3 of the Regulation.

12.2 Appendix 3 – Eligible and Ineligible Recovery Costs

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Administrative Costs	<ul style="list-style-type: none"> Incremental costs related to recovery plan projects (financial assistance up to 10% of eligible costs as deemed appropriate by EMBC) 	<ul style="list-style-type: none"> Base operating costs
Appliances	<ul style="list-style-type: none"> Repair to pre-disaster condition or replacement only of the value of basic models 	<ul style="list-style-type: none"> Repair or replacement to the value of enhanced models
Appraisals, Inspections	<ul style="list-style-type: none"> Inspection, planning, or design to determine costs of restoration or replacement 	<ul style="list-style-type: none"> Base or normal operating costs of local authority staff
Backfilling Positions	<ul style="list-style-type: none"> Backfilling positions to temporarily cover full-time staff conducting disaster assistance surveys and assessments, if supporting documentation is provided 	<ul style="list-style-type: none"> Backfilling positions for staff doing non-disaster related work
Books, Paper, Records	<ul style="list-style-type: none"> Books, papers, records essential to local authority functions and operations 	<ul style="list-style-type: none"> Books, papers, records that are not essential to local authority functions and operations
Bridges	<ul style="list-style-type: none"> Repair or replacement of bridges that are essential for local authority functions and operations to pre-disaster condition * 	<ul style="list-style-type: none"> Repair or replacement of non-essential bridges Costs to enhance bridge to better than pre-disaster condition
Buildings, Facilities	<ul style="list-style-type: none"> Repair, replacement of public facilities that are essential to local authority functions to pre-disaster condition * Removal of damaged buildings that constitute a threat to public safety 	<ul style="list-style-type: none"> Repair or replacement of non-essential buildings, facilities Costs to enhance buildings, facilities to better than pre-disaster condition
Business Interruption	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Loss of operational income, loss of revenue, cancellation of work projects, or other business interruption losses
Civil Litigation	<ul style="list-style-type: none"> Recovery costs not reimbursed through civil litigation award 	<ul style="list-style-type: none"> Recovery costs that are reimbursed through civil litigation (amount must be refunded to the Province)
Clean-up	<ul style="list-style-type: none"> Clean-up necessary to ensure public safety or essential for public works 	<ul style="list-style-type: none"> Other clean-up costs

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Community Recovery Support	<ul style="list-style-type: none"> • Overtime costs and benefits for local authority staff devoted to community recovery • Backfilling positions to temporarily cover full-time staff coordinating emergency response • Facility rental to support community recovery, if other than local authority facility • Recovery Centre assets under \$100 • Contractors serving in support capacities • Telephone and data services, including installation and operation while Recovery Centre is active • Costs of materials, supplies, rented equipment that would not usually be provided • Reasonable volunteer expenses (e.g., mileage, hourly rate, meal reimbursement, phone charges) 	<ul style="list-style-type: none"> • Base operating costs, such as salaries or regular wages of employees, Compensatory Time Off (CTO) or banked overtime • Local authority donations to disaster victims, including businesses • Charges for use of own (local authority) facilities • Volunteer expenses that cannot be attributed to event • Loss of volunteer personal equipment (e.g., eyeglasses reimbursed directly from EMBC under Policy Bulletin 00.02. Volunteer may submit claim.) • Recovery centre assets over \$100
Contents	<ul style="list-style-type: none"> • Equipment, material, office supplies, institutional furnishings, books, papers, records essential to local authority functions and operations 	<ul style="list-style-type: none"> • Contents not essential to local authority functions and operations
Contractor Rates	<ul style="list-style-type: none"> • Contractor rates that do not exceed BC Equipment Rental Rates Guide 	<ul style="list-style-type: none"> • Contractor rates in excess of BC Equipment Rental Rates Guide
Damaged Equipment	<ul style="list-style-type: none"> • Equipment damaged while undertaking eligible response may be considered 	<ul style="list-style-type: none"> • Equipment damaged by events outside eligible response
Damaged Land, Eroded Land	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Costs related to non-essential access routes and removal of debris
Dams, Breakwaters	<ul style="list-style-type: none"> • Repair or replacement of essential dams and breakwaters to pre-disaster condition * 	<ul style="list-style-type: none"> • Repair or replacement of non-essential dams, breakwaters • Costs to enhance dams, breakwaters to better than pre-disaster condition

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Debris Removal	<ul style="list-style-type: none"> Removal of damaged structures that constitute a threat to public safety pruning or removal of trees that constitute a threat to public safety removal of emergency works and the restoration of their sites to pre-disaster condition, and necessary clearance of debris and wreckage from channels and streams, intakes and outfalls of sewers and storm drains and water supply reservoirs. 	<ul style="list-style-type: none"> Costs for scalping of gravel beds Other debris removal costs that are not a threat to public safety.
Enhancements	<p>Defined as any change or difference between pre-event and post-event structural specifications:</p> <ul style="list-style-type: none"> change in specifications with no increased costs building to meet structural specifications due to application of codes, standards, requirements, where copies of orders are provided building to accommodate physical changes where damage reshapes, transforms natural landscapes causing reconstruction changes 	<ul style="list-style-type: none"> Enhancements that will result in increased costs Works undertaken as preventative measure to guard against future disasters without prior approval from EMBC
Equipment	<ul style="list-style-type: none"> Equipment essential to local authority functions and operations 	<ul style="list-style-type: none"> Equipment that is not essential to local authority functions and operations
Equipment Rentals	<ul style="list-style-type: none"> Equipment needed to repair damage when not used for normal operations Contractor rates that do not exceed BC Equipment Rental Rates Guide 	<ul style="list-style-type: none"> Equipment rented for use on normal local authority operations Equipment and contractor rates in excess of BC Equipment Rental Rates Guide
Eroded Land	<ul style="list-style-type: none"> Repair of eroded land for essential access routes 	<ul style="list-style-type: none"> Repair of eroded land for non-essential access routes
Facility Rental	<ul style="list-style-type: none"> Facility rental of outside community hall or facility 	<ul style="list-style-type: none"> Hall or facility rental to own local authority community or loss of use
Fixtures	<ul style="list-style-type: none"> Repair to pre-disaster condition or replacement only the value of basic models 	<ul style="list-style-type: none"> Costs to purchase fixtures to better than pre- disaster condition or beyond the basic model
Food Services	<ul style="list-style-type: none"> Costs of materials, supplies, rented equipment in feeding staff during recovery operations that would not usually be provided 	<ul style="list-style-type: none"> Food service costs that would normally be provided to staff

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Fundraising	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Expenses that are recovered from relief agencies or from disaster fundraising
Furniture	<ul style="list-style-type: none"> Furniture repair to pre-disaster condition or replacement only of furniture essential to local authority functions and operations 	<ul style="list-style-type: none"> Costs to purchase furniture that is not essential to local authority functions and operations
Goods and Services Tax	<ul style="list-style-type: none"> GST paid is claimable at the portion not recoverable by GST rebate 	<ul style="list-style-type: none"> GST that is recoverable by rebate
Income Loss	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Loss of operational income or revenue, or cancellation of work projects
Institutional Furnishings	<ul style="list-style-type: none"> Institutional furnishings essential to local authority functions and operations 	<ul style="list-style-type: none"> Institutional furnishings not essential to local authority functions and operations
Insurance	<ul style="list-style-type: none"> Private insurance deductible amounts 	<ul style="list-style-type: none"> Insured losses
Inventory	<ul style="list-style-type: none"> Inventory that is essential to local authority functions and operations (proof of inventory, consumption and replenishment is required) 	<ul style="list-style-type: none"> Stockpiling costs for materials, equipment, or other related costs
Land Improvement	<ul style="list-style-type: none"> Compensation of private land owner for legal encroachment under state of local emergency 	<ul style="list-style-type: none"> Costs for illegal encroachment or improvement of land/property for the purpose of damage reduction
Landscaping	<ul style="list-style-type: none"> Landscaping if essential to public welfare 	<ul style="list-style-type: none"> Landscaping not essential to public welfare
Linking of Separate Disasters	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Accumulating recovery costs of two or more distinct disastrous events
Materials	<ul style="list-style-type: none"> Materials needed to repair damage when not used for normal operations or work Replacement of local authority materials / stores damaged or destroyed in responding to emergency or in repairing damaged public facilities Material damaged by disaster that is essential to local authority functions and operations, e.g., inventory 	<ul style="list-style-type: none"> Material that is not essential to local authority functions and operations Construction materials in storage or available for construction purposes
Mitigation	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Works undertaken as preventative measures to guard against future disasters

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Office Furnishings	<ul style="list-style-type: none"> Office furnishings essential to local authority functions and operations 	<ul style="list-style-type: none"> Office furnishings that are not essential to local authority functions and operations
Overtime Wages	<ul style="list-style-type: none"> Paid out incremental costs related to the event, plus benefits CTO paid out 	<ul style="list-style-type: none"> Overtime wages not attributed to event CTO if not paid out Excessive overtime rate payments
Ownership	<ul style="list-style-type: none"> Reconstruction or replacement of structures, equipment, and materials for which there is proof of local authority ownership, including any titles, rights, or privileges assigned by way of a lease or permit 	<ul style="list-style-type: none"> Facilities and materials that are not owned directly by the local authority, or where the local authority can provide no proof of ownership, title, right, or privilege assigned by way of lease or permit
Project Admin Costs	<ul style="list-style-type: none"> Project administration costs 	<ul style="list-style-type: none"> Normal operating costs
Provincial Sales Tax	<ul style="list-style-type: none"> All PST 	<ul style="list-style-type: none"> Not Applicable
Public Works	<ul style="list-style-type: none"> Repair or replacement of public works (e.g. streets, roads, bridges, dams, breakwaters, wharves, docks, retaining walls) that are essential to local authority functions and operations to pre-disaster condition * 	<ul style="list-style-type: none"> Repair or replacement of non-essential public works Restoration to better than pre-disaster condition
Recreational Facilities	<ul style="list-style-type: none"> Repair, replacement of recreational facilities that are essential to local authority functions and operations to pre-disaster condition * 	<ul style="list-style-type: none"> Repair or replacement of non-essential recreational facilities Costs to enhance recreational facilities to better than pre-disaster condition
Retaining Walls	<ul style="list-style-type: none"> Repair or replacement of retaining walls that are essential to local authority functions and operations to pre-disaster condition * 	<ul style="list-style-type: none"> Repair or replacement of non-essential retaining walls Costs to enhance retaining walls to better than pre-disaster condition
Roads	<ul style="list-style-type: none"> Repair or replacement of local authority streets and roads as public works essential to local authority functions and operations 	<ul style="list-style-type: none"> Repair or replacement of non-essential roads Costs to enhance roads to better than pre-disaster condition
Salaries	<ul style="list-style-type: none"> Salaries for backfilled positions when full-time staff conduct recovery project assessments and determination of recovery costs 	<ul style="list-style-type: none"> Normal, regular salaries and operating expenses of employees
Scalping of Gravel Beds	<ul style="list-style-type: none"> The cost of removing the unusually heavy event-related deposition in confined water courses 	<ul style="list-style-type: none"> Other scalping of gravel beds

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Structural Repair	<p>Restoration to pre-disaster condition:</p> <ul style="list-style-type: none"> • Foundations, footings, seals, slab floors, pilings, structural walls and attached garages • Framing, roofing, doors, windows, material, wall coverings, mouldings, fixtures and finishings • Filling and levelling to restore essential access • Parking areas, pumps, services/connections, space and water heating equipment • Retaining walls as part of the public facility or essential to sustain land adjacent to, and critical to a public facility • Existing protective works designed to protect banks from erosion 	<ul style="list-style-type: none"> • Restoration to better than pre-disaster condition
Structure Loss Destroyed	<ul style="list-style-type: none"> • Compensation for loss only when costs for reconstruction exceeds the BC Assessment Authority replacement value 	<ul style="list-style-type: none"> • Compensation for loss of structure when costs do not exceed B.C. Assessment Authority replacement value
Structures – Flood Plain	<ul style="list-style-type: none"> • A public safety facility built or installed in an area after being designated under Municipal Act as flood plain, provided that the Ministry of Water, Land and Air Protection or the Canadian Mortgage & Housing Corporation determine it to have been properly flood protected 	<ul style="list-style-type: none"> • Structures in flood plains that are not properly flood protected
Structures Depreciated	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Neglect or deterioration of structures prior to disaster
Supplies	<ul style="list-style-type: none"> • Supplies needed to repair damage when not used for normal operations, work (proof of inventory, consumption, replenishment required) 	<ul style="list-style-type: none"> • Supplies used for normal operation • Stockpiling supplies
Travel	<ul style="list-style-type: none"> • Incremental costs related to the event 	<ul style="list-style-type: none"> • Travel costs not attributed to the event
Tree Pruning, Removal	<ul style="list-style-type: none"> • Pruning or removal of trees that constitute a threat to public safety due to the event 	<ul style="list-style-type: none"> • Other pruning or removal of trees

Examples of Eligible and Ineligible Recovery Costs

(This table presents examples and is not comprehensive. Refer to the C&DFA Reg. for exact wording.)

Recovery Item	Eligible	Not Eligible
Unoccupied Premises	<ul style="list-style-type: none"> Unoccupied premises under construction will be considered occupied with a valid certificate of occupation for the premises under construction 	<ul style="list-style-type: none"> Unoccupied government premises under construction
Vehicle Repairs	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Cost of repairing or replacing vehicles lost or damaged in a disaster
Volunteer Expenses	<ul style="list-style-type: none"> Volunteer expenses that are attributable to the recovery (e.g., mileage, phone charges) 	<ul style="list-style-type: none"> Volunteer expenses not attributed to recovery
Wharves, Docks	<ul style="list-style-type: none"> Repair or replacement of essential public wharves or docks to pre-disaster condition 	<ul style="list-style-type: none"> Repair or replacement of non-essential wharves, docks Costs to enhance wharves, docks to better than pre-disaster condition

For more information on eligible and ineligible recovery costs, refer to Schedule 5 of the [C&DFA Regulation](#), and Part 3 of the Regulation.