Bella Bella – Denny Island Emergency Response Plan

HAZARD ANNEX – EARTHQUAKE RESPONSE PLAN

Central Coast Regional District
&
Heiltsuk Nation

Updated by Frontier Resource Management Ltd
January, 2018

Earthquake Emergency Response Plan

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1 Earthquake Emergency Contact List

See Bella Bella / Denny Island EOC Call out list.

The following individuals and organizations comprise the Bella Bella/Denny Island Earthquake Response Team:

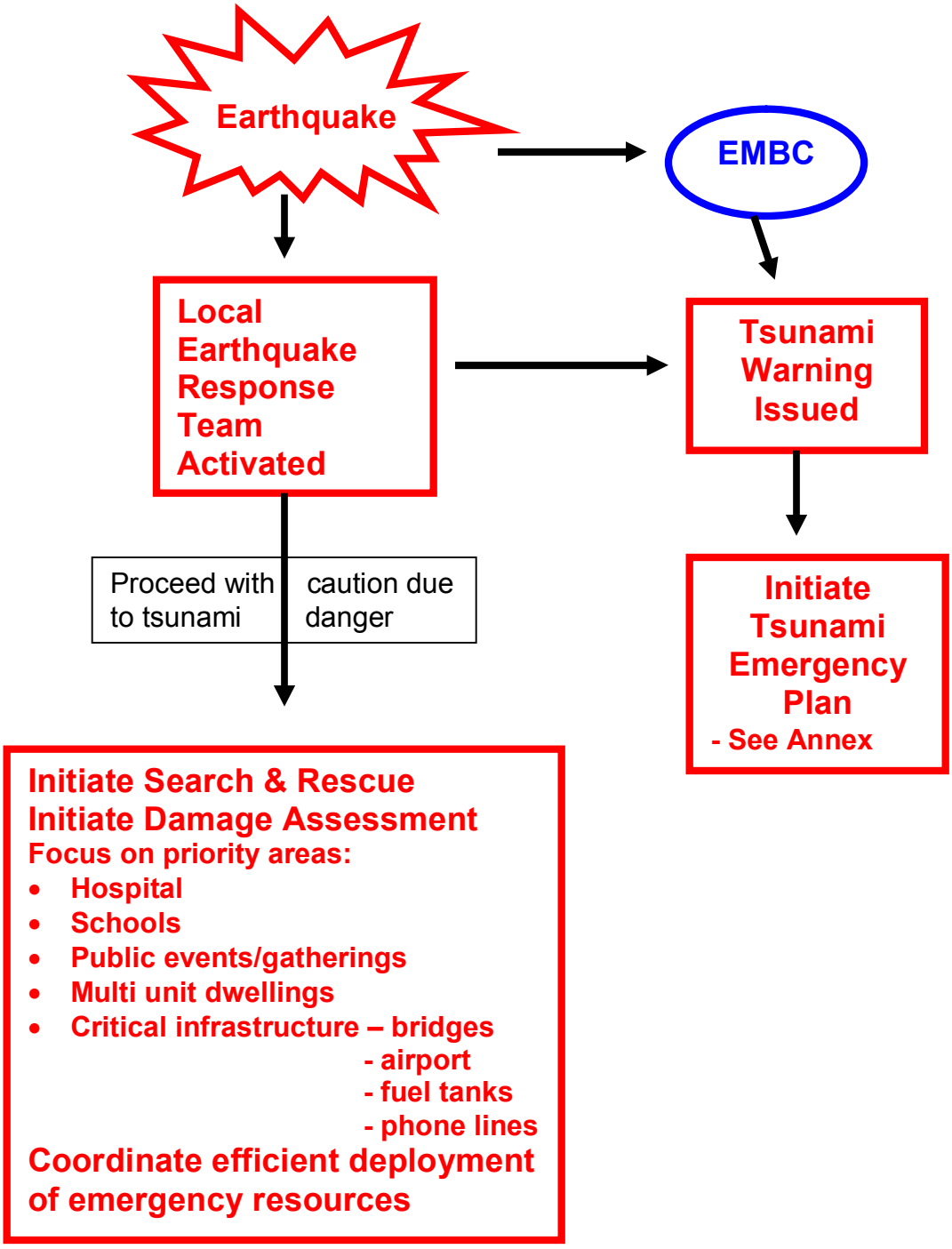
Local Emergency Team (L.E.T.) - Denny Island Deputy EPC
- Heiltsuk Emergency Rep

Emergency Executive Committee – Coordinator
- CCRD Rep
- Secretary
- Nuxalk Rep

Emergency Response Core Team – RCMP
- Ambulance
- Communication Officer
- Public Information Officer
- ESS Officer
- Hospital

Emergency Response Operations – Fire Hall
- Harbour Masters
- Highways
- Fuel Depots
- BC Hydro
- Airport
- Coast Guard/DFO
- School District

1.1 *Earthquake Emergency Action Diagram*



2 Introduction

Earthquakes generally happen without warning, so initial emergency response actions must be virtually automatic and based on the locally available emergency resources. The activation of the local emergency program would be immediate once an earthquake is felt. Earthquakes can occur as a series of shocks so even if an earthquake appears minor, it is recommended that the local Earthquake Response Team be alerted in case there are more severe aftershocks. **Furthermore, given the proximity of Bella Bella and Denny Island to the sea and distance to the main seismic fault in the Pacific Ocean, damage from tsunami may pose a greater risk than damage caused by a typical earthquake. Therefore, an earthquake automatically triggers the Tsunami Emergency Response Plan as well.**

The primary role of local emergency response following an earthquake is to initiate search and rescue along with damage assessment. This information would then be used to coordinate response to address areas of greatest need.

Refer to the Prepared BC "Earthquake and Tsunami Smart Manual" (2015) in Appendix 1 and "BC Earthquake Immediate Response Plan" (2015) in Appendix 2 for additional information.

3 Response Action

When an earthquake is experienced, the local Emergency Coordinator, or EEC, would determine need to activate EOC. The EOC would immediately initiate response actions. The level of response would depend on the severity of the event and would vary from simple acknowledgement of the occurrence with no additional action needed to full deployment of search and rescue and comprehensive assessment of damage. **In initiating response and deploying personnel, the threat of tsunami must be carefully considered and integrated into response actions.**

When an earthquake is experienced, the following steps are recommended:

1. EEC ascertain whether EOC callout is required
2. Earthquake and/or Tsunami callout initiated
3. EOC established
4. Search and rescue initiated
5. Damage assessment initiated (Watch for Hazardous Spills)
6. Remedial and recovery action coordinated.

3.1 *Search & Rescue*

For significant earthquake events, search and rescue would be initiated immediately under the direction of the EOC. In a significant event, RCMP, Fire Departments and ambulance can be expected to receive calls for assistance. It is important that EOC is notified of response and deployment of emergency services and that EOC initiates a coordinating function to deploy emergency help on a priority needs basis.

3.1.1 S & R Callout

- If available, Neighbourhood Emergency Team (NET) Captains initiates neighbourhood callout and field check.
- RCMP
- Fire Departments
- Recruit capable volunteers

3.1.2 S & R Priority Areas

- Hospital
- Schools
- Multi unit dwellings – Lodges, apartments
- Public functions – Sunday church, community hall
- Large offices – Band office, Shearwater Marine facility
- Stores

3.2 *Coordination of Resource Deployment*

Following a significant earthquake event, the immediate establishment and co-ordination of emergency service deployment is critical for effective response. Threrefore:

1. EOC needs to be quickly established.
2. Operational contact links with RCMP, Fire Department and ambulance needs to be established immediately.
3. Ascertain extent of injuries, infrastructure damage and transportation disruption.
4. Rank reported emergency situations.
5. Deploy emergency assistance to highest priority needs.

4 Damage Assessment

Damage assessment commences once search and rescue of victims is completing.

4.1 *Damage Potential*

An earthquake capable of structural damage (greater than 5 on the Richter scale) can be expected to strike somewhere in southwestern British Columbia once every ten years, and there are predictions that a very serious (8 to 9) earthquake is overdue for the Lower Mainland - Vancouver Island region. Such a quake would likely cause some problems in Bella Bella/Denny Island area in terms of structural shake damage and disruption of power and supply lines. However, the greatest threat of damage from earthquake in outer coast region would likely result from an associated tsunami or hazardous materials spill.

Severe damage can be expected in areas within 100 km of epicenter and moderate amounts of damage within 300 km of epicenter. Injury to death ratios are 30:1 and hospitalization injury to death ratio is 4:1. In case of a large earthquake, other parts of the Province will likely be affected thus limiting the availability of outside emergency assistance as larger population centers will receive priority help.

Bella Bella and Denny Island are fortunate in the sense that there are relatively few multistory buildings, large structures or facilities that would be vulnerable to earthquake effects. However, damage to buildings, roads and runways, power and telephone lines, fuel lines, water lines and sewage systems is possible. Damage may be minor or nearly total, local or regional. Debris removal and cleanup will be a concern after the event.

Fires can also be triggered by earthquakes and although it is not anticipated that these fires would be multi-structure catastrophes, it is conceivable that there would be numerous single structure fires that would severely tax fire fighting resources.

4.2 *Primary Local Vulnerabilities*

- Hospital
- Schools
- Power lines
- Phone lines
- Wharves
- Fuel tanks at harbour
- Airport
- Multi story buildings
- Water distribution lines

4.3 *Damage Assessment Callout*

- NET Captains, if available

- Hospital staff
- Government Ministries
- Business contacts – BC Hydro, BC Tel, Airport manager, gas stations, fuel depots, hotels and stores.
- Government damage assessors.
- Insurance adjustors.

5 Appendices

5.1 *Earthquake and Tsunami Smart Manual*

Prepared BC, 2015
See CCRD EMP Annex D – EMBC Supporting Emergency Manuals

5.2 *BC Earthquake Immediate Response Manual*

2015
See CCRD EMP Annex D – EMBC Supporting Emergency Manuals