

A Review of the Alberni Clayoquot Regional District's Involvement in Exercise Coastal Response and a Five Year Plan for the Emergency Program

Alberni Clayoquot Regional District



FINAL REPORT February 2017



Exercise Coastal Response was announced in the summer of 2015 and I admit I was nervous. The Regional District was in the midst of a transition with its Alberni Valley Emergency Planning Service. We responded to the Dog Mountain wild fire and were fresh with ideas for improving our preparation and response. We were less confident that we should be the community to highlight local response. However, exercises are all about improvement and Exercise Coastal Response gave us the focus to act on our needs in terms of human resources, planning and preparation.

Leading up to the exercise, we assisted the province with its planning and logistical requirements. As always, the community stepped up. Volunteers, business, industry and local agencies helped provide the locations and resources as a stage for destruction. In return, the province assisted us with training and provided an ear for the concerns and perspective of a local authority.

The Alberni Valleys emergency program is modest at the best of times - a bit off the side of our desk, but we are fortunate to have a robust group of professionals and volunteers that are capable of rising to the challenge and working together in the interests of the community when necessary.

Our team of EOC personnel were given the basics – educated in the function of an EOC and the roles they may serve. We did not prepare for the specifics of the event, what was important was to be as life like as possible – capable, competent and available but not rehearsed. We called together for the most part a team of City and Regional District staff with participants from other municipalities across Vancouver Island. Together these individuals worked seamlessly with exceptional professionalism and efficiency. I am very proud of the function of our EOC throughout the four days of Exercise Coastal Response.

This report is a summary of our experience, especially with respect to a local government's role to provide an Emergency Operations Centre. The recommendations of the report are a direct reflection of the various evaluators and members of the EOC. The 47 recommendations reflect modest improvement to our capacity to respond over the next five years. Acting upon these recommendations the Alberni Valley will be better prepared for any level of emergency for any kind of event.

Yours truly,

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I. Executive Summary

The Alberni Valley hosted Exercise Coastal Response in June 2016. Over the course of four days, 52 agencies and 600 individuals participated in the province's first full-scale earthquake and tsunami exercise. Though the exercise was initially designed to test the province's capacity to respond to a large disaster, it also allowed both the Alberni Clayoquot Regional District and the City of Port Alberni to build internal capacity to provide emergency response, specifically operations of an Emergency Operation Centre.

Between June 7th and 10th 2016, City and Regional District staff, alongside personnel from external agencies, ran an Emergency Operations Centre. The Emergency Operations Centre is activated during Level 2 and 3 emergency responses, and an earthquake and tsunami merited a Level 3 classification. When a major disaster arrives, other organizations are activated as well, including emergency first responders, mass care, communications, and others.

There were obvious successes during the exercise, including the teamwork and adaptability displayed by the staff working in the Emergency Operations Centre. Though the City and Regional District staff teams do not work together often, all personnel who participated in the exercise worked seamlessly and supported one another to accomplish tasks. Other successes include establishing communication between sites, opening multiple reception centres and a group lodging site, and working with the province to support the area's most crucial needs.

Just as the exercise demonstrated the strengths of the local emergency program and participants, it also shone a light on opportunities for improvement in the Alberni Valley Emergency Program. These issues have been addressed in the 47 Recommendations of the report, and have been grouped into the following categories: facilities, equipment, personnel, capacity building, process, and mitigation. One of the most frequently occurring comments from the evaluators was that when a stumbling block was identified during the exercise, the Emergency Operations Centre participants were quick to correct. The Recommendations section offers a number of solutions to make the Alberni Valley Emergency Program stronger and more prepared for any emergency event that the Valley might face.



II. Background

Exercise Coastal Response

Exercise Coastal Response (ECR) was an initiative developed by Emergency Management British Columbia (EMBC) and other partners. The intent of ECR was to test the province's Immediate Response Plan, a document that guides the provincial response to earthquakes. Running from June 7-10, 2016, ECR garnered the participation of 52 agencies and more than 600 individuals.

ECR was based on a magnitude 9.0 earthquake resulting from a rupture of the Cascadia Subduction Zone off the coast of southwestern B.C. In this exercise scenario, strong shaking lasted several minutes in areas of Greater Vancouver, Greater Victoria and central Vancouver Island, causing some destruction in the major urban centres and widespread damage in the Alberni Valley. The earthquake would also generate a tsunami on the west coast of Vancouver Island minutes after the initial shock.

The Alberni Clayoquot Regional District (ACRD) was the lead local agency within the Alberni Valley for the exercise. This was a strong fit, as the exercise also included local First Nations and the communities of Tofino, Ucluelet, and Bamfield.

Choosing the Alberni Valley

The Alberni Valley was chosen to host ECR because of the following three qualities:

1. The location of the Alberni Valley relative to the Cascadia Subduction Zone.



From EMBC: "Lying mostly offshore, the Cascadia Subduction Zone (CSZ) is an interface between two plates; it is a giant fault— approximately 1,000KM long. The set of tectonic plates to the west are sliding (subducting) beneath the North American Plate. The movement of these plates is neither constant nor smooth: the plates are stuck, and the stress will build up until the fault suddenly breaks. This last happened in January 1700. The result was an earthquake on the order of magnitude 9.0, followed within minutes by a large tsunami—much like the earthquake and tsunami that struck Japan on March 11, 2011.

The world’s largest quakes occur along subduction zones. Dubbed great earthquakes, the magnitude of these events ranges from 8.0 to 9.0+ (the largest on record was a magnitude 9.5 quake off the coast of Chile in 1960). Their characteristics include prolonged ground shaking, large tsunamis, and numerous aftershocks.”

2. The Alberni Valley’s history of earthquakes and tsunamis, notably the 1964 tsunami.

On March 28, 1964, an earthquake in Alaska triggered a tsunami that ripped through coastal British Columbia, accelerating when it reached the narrow mouth of the Alberni Canal. Throughout the night, the wave struck the Alberni Valley six times, upending cars, lifting homes off their foundations, and destroying properties. Though there were injuries, there were no casualties. This event serves as a reminder of the potential emergencies that we must be prepared for.

3. The willingness of the ACRD and City of Port Alberni to dedicate time and resources to this exercise.

Both the ACRD and the City of Port Alberni (CPA) bought in, understanding the value of this exercise and committing to be strong partners. In a small community, there is a need to pool resources. In this case, staff from the ACRD and CPA worked together in the planning and implementation phases of the exercise.

Scope of the Alberni Valley Emergency Program

Feature	Included in Scope
Geographic	<ul style="list-style-type: none"> • City of Port Alberni • Electoral Area "B" (Beaufort) • Electoral Area "D" (Sproat Lake) • Electoral Area "E" (Beaver Creek); and • Electoral Area "F" (Cherry Creek)
Hazard Types	All Hazards
Severity Levels	All Levels (1, 2, and 3)
Response Support Levels	<ul style="list-style-type: none"> • Site Response • Site Support

State of Alberni Valley Emergency Program: 2015 and Earlier

As required by provincial law, all local governments must:

- Have an emergency plan in place for any situation that exceeds the capacity of local first responders
- Maintain an emergency management organization

Under the British Columbia Emergency Program Act, the ACRD is also responsible for emergency planning for Electoral Area "A" (Bamfield) and Electoral Area "C" (Long Beach). The Districts of Tofino and Ucluelet are responsible for their own emergency planning.

While we often think of emergencies as large-scale events such as earthquakes and tsunamis, there are 3 levels of emergencies recognized by the province.

Emergency Operations Centre (EOC) Activation Levels

Level	Event/Situation	Possible Staffing Requirements
<i>One</i>	<ul style="list-style-type: none"> • Small event • One site • Two or more agencies involved • Potential threat of a more serious event 	<ul style="list-style-type: none"> • EOC Director • Information Officer • Liaison Officer • Operations Section Chief • EMBC Notified
<i>Two</i>	<ul style="list-style-type: none"> • Moderate event • Two or more sites • Several agencies involved • Major scheduled event (e.g. conference or sporting event) • Limited evacuations • Some resources/support required 	<ul style="list-style-type: none"> • EOC Director • Information Officer • Liaison Officer • Risk Mgmt Officer • Section Chiefs (as required) • EMBC/PREOC limited activation
<i>Three</i>	<ul style="list-style-type: none"> • Major event • Multiple sites • Regional disaster • Multiple agencies involved • Extensive evacuations • Resources/support required 	<ul style="list-style-type: none"> • All EOC functions and positions (as required) • Policy Group • PREOC Activation

From the Alberni Valley Emergency Plan, page 15

Locally, the ACRD and CPA have written and enacted bylaws that are compliant with the province's demand for prepared communities. These bylaws include:

- Alberni Clayoquot Regional District's Bylaw No. PS1006: A Bylaw to Establish the Alberni Valley Emergency Plan
- City of Port Alberni Bylaw No. 4836: A Bylaw to Provide for the City of Port Alberni Emergency Plan

The Alberni Valley Emergency Plan was updated in 2014 by Black Shield Preparedness Solutions. This plan assesses a number of natural hazards and provides instruction on responding to emergency situations.

Much like the Emergency Program, the Alberni Valley Emergency Plan is inclusive of the many local governments and elected officials, first responders, emergency volunteers, representatives from industry and the business community, infrastructure and public works, health, education, and more.

In late 2014, the Emergency Program had demonstrated successes in many respects including a completed Community Wildfire Protection Plan, the re-written AV Emergency Plan, and a recently completed door-to-door tsunami education and outreach program in partnership with the Port Alberni Fire Department.

The Emergency Program Coordinator (EPC) role was unfilled between the fall of 2014 and early 2015. Emergency Social Services (ESS) volunteers dwindled in number between 2010 and 2014, and in 2015, there was one volunteer left.

When the current EPC, Dan Holder, was hired in mid-2015, the following tasks were assigned for completion by the end of 2016:

- Re-establish the ESS program, including City of Port Alberni partnership for Reception Centres
- Continue Emergency Planning Committee meetings
- Refresh training initiatives and establish training program
- Establish contact with Emergency Management BC and the Mid Island Emergency Program Coordinators group
- Continue to coordinate and implement community engagement and outreach
- Ready the ACRD and CPA staff and external organizations for ECR
- Organize the EOC for efficiency and easy of use

Objectives for ECR as set by ACRD Directors

- Provide support for planning and execution of the exercise as the lead local authority
- Demonstrate the Alberni Valley's excellence in hosting
- Engage in a robust EOC throughout the exercise to develop capacity and learn from the experience
- Support the engagement of local first responders in the exercise

Planning and Preparation for ECR

There were three major focuses in planning and preparation for the Exercise. The first was to support the province with the planning, preparation, logistics and conduct of the exercise. The second was to prepare local participants who would be working in the Emergency Operations Centre and supporting the exercise. The third was to engage the community in both ECR and personal and household preparedness.

Working with the province, various committees were struck. Two large events supported the provincial committees: One planning event took place November 26 and 27, 2015, with nearly 100 attendees representing provincial and local government, government agencies, external partners, and more. The other event was held in Victoria, one month prior to the exercise. This gathering allowed participants to learn more about the exercise and to continue planning. The ACRD and CPA CAOs, EPC, Alberni Valley directors, City councillors, and relevant staff were active participants in all planning processes. As issues arose and troubleshooting was needed, Valley participants took a leading role in problem solving.

To achieve the second goal, the EPC identified training opportunities that were then administered and hosted by the ACRD. These trainings included:

- EOC Essentials, administered by the Justice Institute of British Columbia and attended by 50
- Emergency Communications (Social Media and Traditional Communications), administered by EMBC and attended by 14 ACRD and CPA staff
- Finance training, administered by EMBC and attended by 14 ACRD and CPA staff
- Logistics training, administered by EMC and attended by 10 of ACRD staff
- Section-specific training, developed and administered by EPC and attended by 50 (an average of 10 per section)
- All Red Cross/ ESS training
 - The Red Cross volunteer team (10 total) attended 2 full days of training delivered by Red Cross trainers
 - The Mass Care committee sponsored training from the Vancouver Island Mobile Support Team. Over 4 days, 50 community members, ACRD staff, and CPA Parks, Recreation, and Heritage staff were trained in reception centre and group lodging management, registration and referrals, and documentation.
 - ESS Level 2 and 3 Coordinator Laurie L'heureux provided 6 training sessions for CPA and ACRD staff. Trainings were a mix of tabletops, reception centre set-up, and information sessions.

To engage the community, the following initiatives were undertaken:

- The Red Cross were contracted to develop an ESS Level 1 team. This team of 10 volunteers is trained by the province and by Red Cross to provide immediate and recovery assistance to evacuees of disaster. Many of the volunteers have also been trained to set-up and run Reception Centres and Group Lodgings.
- Monthly stories on emergency preparedness in the AV News, including stories on personal preparedness, tsunami week, and the ESS program; May 26 newspaper wrap in conjunction with Shake Zone.
- Monthly stories on Shaw TV, including tsunami week, earthquake preparedness, and building a grab-and-go bag.

- AV Bulldogs game, Feb 27: Celebration of first responders (100 tickets given free to first responders); celebration of dedicated ESS volunteer Suzy van Herwaarden; entries for generator contest.
- Mayor's emergency kit, January – May: At biweekly regular council meetings, Mayor Ruttan added an item to his Grab and Go bag. This was documented on the council meeting livestream, on social media, and by the AV News.
- 93.3 The Peak radio contest: 20 hand crank radios were given out by the Peak in late May and early June. Listeners waited for a cue to call and then had to answer an emergency preparedness trivia question to win a radio.
- Exercise Coastal Response Public Information Session: Roughly 50 people attended this event held at the Capitol Theatre on May 17. Local politicians, a seismologist, and exercise coordinators spoke about the importance of being prepared, and this was used as an opportunity to recruit volunteers.
- Shake Zone: On May 31, the public were invited to experience a ride on the Shake Zone, an 8.0 magnitude earthquake simulator. Nearly 800 Alberni Valley residents came to try the simulator, and our event was the best attended on Vancouver Island. In addition to the Shake Zone, local first responders were in attendance with their vehicles, personnel, and information for the public.
- ECR Opening Reception: On June 6, an opening reception was held at Echo Centre. Food and drinks, speeches, and an Alberni Valley Museum presentation on the 1964 tsunami were enjoyed by all.



III. Exercise Overview – Local EOC perspective

*Overview of Each Day**

June 7: The exercise began at 7:45am with a 9.0 magnitude earthquake and an ensuing tsunami, 20 minutes later. A declaration of emergency was issued. The EOC was modestly staffed with 12 personnel, while another 6 undertook a rapid damage assessment of critical infrastructure, including the ACRD, City Hall, the RCMP station, and fire halls. Arrowsmith Amateur Radio Club was also on site, facilitating communications with the province and field sites, as all phone lines and Internet were down.

Additional personnel arrived after lunch, and continued the work that the morning crew began: trying to determine the extent of the event. This was required for the situation report to the province and to begin setting priorities. ESS facilities were opened. Logistics processed many requests, but constantly had to figure out how to get materials to the Valley in the wake of widespread damage to our roads.



End of day estimates: 3000 homeless, 200 injured, 200 hospitalized, 26 dead

June 8: The EOC was fully staffed, with nearly 50 personnel divided between the morning and afternoon shifts.

An evacuation order was issued for the entire inundation zone. Fortis and Hydro were shut off. Regular communications were sent to 93.3 The Peak, who were able to broadcast announcements to the public. The mobile medical unit was requested. More rapid damage assessments were undertaken, focusing again on key infrastructure and public buildings.

At 13:30, Highway 4 opened to single lane traffic east of Port Alberni. The road south to Bamfield also opened. As the day went on, the phone lines came back (voice only, no data or email), and the internet was restored as well. We began emailing with the province and with external agencies. 5.2 magnitude aftershock reported at 19:00; no damage reported.

The policy group (ACRD Board of Directors) held a mock emergency board meeting, where they received situational updates, discussed bylaw, finances, and decision making as it related to the exercise. They toured the EOC and activities in the field and a group was provided with a fly over to view infrastructure and the tsunami zone.



End of day estimates: 3000 evacuated, unknown number injured, 200 hospitalized, 119 dead.

June 9: Logistics processes many requests from Operations. Finance tracked these requests. Logistics and Operations worked together to determine that the Coombs Rodeo Grounds would be a staging area for all materials arriving from the eastern side of the Island and the mainland. From there, materials would be brought to a closer staging ground at the SD#70 works yard on Maebelle Road.

Reception Centres were opened at Echo Centre, Tsheshah Market, and the Multiplex. 2712 were registered at ESS facilities.

An aftershock of 6.2 magnitude occurred at 13:25. Later, 2 SAR volunteers died, a firetruck was crushed, and the Victoria Quay Bridge collapsed over Roger Bridge.

Various officials, provincial government staff and Minister Yamamoto were toured through the live exercise, visiting the inundation zone, the HUSAR camp, mass care sites, the EOC, and other relevant sites.

End of day estimates: 3000 evacuated, 8000 injured, 2000 missing, 400 dead, 400 hospitalized.

June 10: A seismologist assessment of the inundation area resulted in the tsunami watch being lifted. Long Beach Airport became operational. Highway 4 East was opened.

Exercise ended 11:00.

*A list of all personnel in the EOC during the event, including evaluators is attached as an appendix 1.

Exercise Functions

- **Communications:** Amateur radio associations from the Alberni and Cowichan Valleys and Oceanside participated in the exercise, with the Arrowsmith Amateur Radio Club stationed at the EOC, and the Cowichan Valley and Oceanside clubs at the various mass care sites. Messages were transmitted between exercise sites, to the provincial government, and to relevant external agencies (RCMP, for example). This committee also liaised with communications providers, Industry Canada, and relevant provincial ministries.
- **Logistics:** Logistics committee work was focused on transporting goods and services to the effected area. This group was comprised of ACRD staff and various transportation and public safety ministries.
- **Mass Care:** Reception Centres and Group Lodging sites would be utilized in a real scenario, so these were exercised as well. Led by the Emergency Social Services Specialists at EMBC, a number of partners including the ACRD, CPA, Ministry of Child and Family Development, USMA Family and Child Services, First Nations communities, and School District #70 planned and developed mass care sites, personnel, and participants.
- **Medical Care:** Medical Care was largely beyond the scope of the local authority, and involved the coordination of public health, emergency health services, and the provincial health authority. BC Coroner was also engaged in this function.
- **Operations:** Representatives from the Operations section met frequently in the lead-up to the Exercise. These participants represented fire departments, police, ambulance, ESS, Search and Rescue, public works, and more. Local participants liaised with provincial counterparts, including HUSAR Task Force 1. During the exercise, Operations personnel participated in both the EOC and out in the field.
- **Public Information:** Led by the EMBC communications team, this function examined the role of public information both locally, in the area devastated by an emergency, and provincially and nationally. This included preparing for civilian briefings, news media, and public safety bulletins.

ECR: Extent of Damage

During the Exercise, there was extensive damage to local infrastructure, public and private buildings, roadways, bridges, and more. Nearly one-third of Alberni Valley residents were injured, and 3000 were evacuated from their homes, either due to being in the inundation zone or damage from the earthquake. Many residents were missing, and 400 died. An additional 400 were hospitalized. Due to demand and possible damage, health services would only provide medical help to those most in need and most likely to recover.

Rural communities including Sproat Lake were completely cut off due to a downed bridge, and communication to other areas in the Alberni Clayoquot Regional District (namely Bamfield, Tofino, and Ucluelet) was severed during the first days of the event.

Due to the large geographic area covered by the Alberni Clayoquot Regional District, some staff and elected officials would likely be unable to access the ACRD offices and may be unable to participate in the EOC or Policy Group meetings.

New Tools

Truvian Labs Inc.: Truvian's map-centric approach to data management helps municipalities create, visualize, and record data in the simplest way possible. With Truvian, staff can self-serve detailed information that would typically require a multi-day request from a specialized technician.

During ECR, Truvian was present at the EOC and demonstrated how their mapping software could be used for modelling and predicting damage after an emergency event. Truvian technologies allows users to record data in the field using low-bandwidth, streamlined forms that can be created and customized for each event. Locations, GPS coordinates, photos, files, and links can be added to each input asset for monitoring, inspections, and maintenance.

Tsunami Models: Ocean Networks Canada's preliminary tsunami models for Barkley Sound and the City of Port Alberni were integrated into ECR. Tania Lado Insua, Ocean Analytics Program Manager was on site in the EOC to share the information.

These preliminary models provide time of arrival, wave height and inundation maps that are crucial tools for tsunami preparedness. These models, together with ONC's observatories sensors and the new warning system under development will detect and forecast tsunamis for coastal and First Nations communities in British Columbia.



IV. Feedback

Evaluator Feedback

Evaluators* were recruited for all sites during the Exercise, though the feedback below is specific to the EOC. Many evaluators were Emergency Program Coordinators from other Vancouver Island communities, though a few evaluators were Alberni Valley locals.



Evaluators provided feedback in two ways: rough notes and observances captured during their shifts in the EOC, and through a thorough template provided to them by EMBC.

Overall, the evaluators were in agreement that EOC personnel performed well during ECR. Many evaluators, though EPCs, had never been in an active EOC and believed that their experience was as worthwhile for them as it was for the Alberni Valley.

One of the most common pieces of feedback was that the ACRD and CPA staff worked well together and were quick to problem solve. On Day 1, communications problems were addressed. On day 2, the EOC personnel realized that there were problems with the form structure. In both instances, the EOC staff were quick to comprehend that there were problems and quick to create solutions to these problems. Individuals, sections, and the larger group were all commended for their get-it-done attitude to problem solving and innovative thinking.

“As the week progressed and people returned for second shifts, there was better integration between sections – the different coloured vests were mixing at the various sections. People were getting out of their seats to share and/or gain information.” – Bettina Falloon, Program Manager, Justice Institute of British Columbia

“3 strengths of the ACRD EOC: Smart people, good problem solvers; good collaboration and adaptation; top-down communication. 3 areas for improvement: Get clear on your objectives and stay focused on them; trust your intuition; document and train to your processes.” – Kirsten Jasper, Manager – Operational Readiness, City of Vancouver

*A list of evaluators is attached as in appendix 1.

Just as there was frequency in highlighting what was done well, a common weak point emerged. Most evaluators reported that an area of improvement is priority setting and reporting. Given the nature of this exercise, there were many issues to be dealt with. However, the evaluators felt that we could learn more about deciding which of those issues are imperative and which are secondary.



Personnel Feedback

At the end of each shift, EOC personnel were asked to respond to a short survey, listing what went well and what needed improvement.

Overwhelmingly, EOC staff listed “teamwork” as the best facet of their shift. Second to that was problem solving and continuous improvement. Though the EOC personnel were faced with significant issues each day, they recognized that they could work together to solve them. Other strengths as highlighted by EOC personnel include section to section communication, interagency collaboration, and the training that they had received beforehand that prepared them for the exercise.

When asked what needed improvement, the vast majority of respondents said paperwork. This encompasses internal paper flow, standardizing and tracking resource requests, filing and documenting, and knowing which forms should be used. Other areas of improvement included setting priorities, more visual aids, and staffing.

Finally, EOC participants were asked to provide feedback about the physical space. Most respondents replied that the space was far too small. At peak, the EOC had nearly 50 people in it and the small, tight hallways and enclosed spaces made it difficult to move freely in the space. There is also some concern that, in the event of an emergency, the ACRD EOC may sustain damage. Many EOC personnel expressed a desire to have a known back-up location, and continuity plans for the emergency program.

Emergency Social Services

Emergency Social Services (ESS) is a provincially-coordinated program that assists those impacted by a disaster. Generally, ESS volunteers facilitate access to lodging, food, gas/transportation, and miscellaneous items (i.e. clothing, medication, hygiene products) for evacuees.

In the event of a large-scale disaster, ESS volunteers open Reception Centres (RC) and Group Lodgings (GL). Reception Centres serve as check-in points for those who have been evacuated. Anyone who comes to an RC is registered and assessed for referral needs. Group Lodgings is established for evacuees

requiring shelter. In the event that hotels are full and/or evacuees do not have family or friends to stay with, simple cots are arranged in public buildings designated to house evacuees.

During ECR, many ESS volunteers were engaged, including:

- ACRD and CPA staff, under the direction of Laurie L'Heureux, operated an RC at Echo Centre. Laurie and staff also offered support at the Tseshaht RC.
- Mid-Island ESS volunteers, under the direction of Aaron Dawson, operated an RC at the Multiplex. These volunteers came from surrounding Island communities and lent their expertise.
- Tseshaht staff and citizens, under the direction of Lisa Gallic, operated an RC at Tseshaht Market.
- Red Cross volunteers from across the province, under the direction of Elysia Dempsey, operated a GL at the Athletic Hall.

Volunteers came from a variety of backgrounds. Some had been trained specifically for ECR, while others have been volunteers for years but may not have worked in an active RC or GL, and still others have on the ground experience in large disasters. Because of this, feedback was quite varied.

Participants noted that set-up was done well across all sites. Though many participants were new to ESS, there was enthusiasm and a strong sense of teamwork noted at all RCs and GLs.

Fresh ESS volunteers also allowed for an opportunity to revisit existing ESS processes and provide feedback about the experience. They covered many topics, including forms, communication, and information sharing. Below are some of the specific comments:

- *"Information board – messy writing, blackboard hard to see, whiteboard would be better" – Athletic Hall volunteer*
- *"Clearer communication between departments" – Tseshaht volunteer*
- *"Lots of confusion around filling out forms properly" – Echo volunteer*
- *"More information and briefing required before the doors open; better debriefing" – Athletic Hall volunteer*

Note: Full feedback summaries from evaluators, EOC personnel, and ESS volunteers are available.

V. Going Forward

The Emergency Program was stretched and challenged in the lead-up to Exercise Coastal Response. As ECR was the first exercise of its kind in the province, the Emergency Program was integrated into planning and coordination early in the process. The EPC participated in many working groups, provided many staff training opportunities and hands-on experience, and liaised with various government bodies and external service providers. However, the benefits of participating in the Exercise far outweigh the costs. Not only did ECR build the capacity of the Alberni Valley Emergency Program, it was also instrumental in determining where the program's focus should be. With that in mind, mission and vision statements have been developed for the program.

Mission: To develop a disaster resilient Alberni Valley

Vision: The goal of the Alberni Valley Emergency Program is to educate residents, visitors, businesses and industries, non-profit organizations, and local governments about their ongoing role in preparing for emergencies through education, community outreach, and training, thereby increasing community capacity. Through creating an increased emphasis on disaster preparedness and resilience, the Alberni Valley Emergency Program will reinforce interagency communications and cooperation throughout the area. By fostering a community culture of preparedness and partnership, the Alberni Valley will work together, with neighbours helping neighbours, when a disaster strikes. This approach combines a conservative program budget with a disciplined plan, and draws on the strengths of the personnel involved to ensure that building resilience is affordable, reasonable, and intelligently accomplished.

Pillars

The following are pillars of the Alberni Valley Emergency Program, and serve as the basis for recommendations for time and budget: Facilities, Equipment, Personnel, Capacity Building, Process, and Mitigation.

How do we get there?

The recommendations that follow are meant to address each of the six pillars. Critical to realizing the vision for emergency preparedness and response in the Alberni Valley is having the appropriate organizational structure with proper engagement at all levels.

Changes to the organizational structure of Emergency Planning in the Alberni Valley

In the past, a part time emergency coordinator contracted by the ACRD has worked under a Planning Group that has included representation from politicians and various emergency responders, businesses and industry in the Valley. This group has been very good for coordination and information sharing but not all have the same interest and investment in the ACRD program and responsibilities. The politicians have not met independently to contemplate their role, the allocation of resources and the sharing – cooperation required between the City and Regional District in a major event. It is proposed that a policy group be created to provide budget, policy advice and training for the political responsibility of the program. The liaison group will continue to meet to share information and coordinated efforts and new groups will be established within the organization of the Emergency Operation personnel to support and assist the coordinator in the preparation, planning and delivery of the Alberni Valley emergency program. The proposed organization is outlined in Appendix 2.

Emergency Operations Centre - Preparing for the Key Positions

Based on the ECR experience we have defined the key positions within all sections that will typically be required for level 2 and 3 events. There is more emphasis being placed on administrative support and information officer's positions. The specific positions that we will assign City of Port Alberni and regional District staff to are outlined in Appendix 3. While the actual positions will be defined by the event, these are the positions that we will train and prepare staff to fulfill, being the most likely capacity required. An important function moving forward will be the engagement of those defined as Directors and Deputy Directors of each section that will meet on a regular basis with the coordinator to plan, prepare and build capacity.

VI. Recommendations*

Facilities

1. Identify backup EOC location; sign agreement for use for practices and events; ensure alternative resources (equipment, technology and infrastructure) are in place
2. Purchase sufficient food and water to sustain EOC personnel for one week
3. Purchase cargo container for external storage of EOC equipment
4. Logistics to coordinate and develop EOC setup and all needs – personnel, food facility, IT, etc.
5. Develop an inventory of the critical facilities within the community, considering emergency response needs and priority infrastructure
6. Conduct risk assessments of all key government infrastructure assets in the Alberni Valley starting with City Works facility (6th Ave); develop mitigation plan if required

Equipment

7. Purchase satellite (SAT) phone and develop policy, training, and practice schedule
8. Supplement the EOC with additional computers and photocopiers
9. Purchase detailed, large-scale wall maps for various sections
10. Purchase iPads (12) with wireless hot spots to communicate between EOC and field
11. Secure appropriate emergency mapping software that complements day to day local government needs; coordinate use across agencies
12. Work with Oceans Networks Canada and relevant academics to assess tsunami modelling tools being developed for application to local land use policies and relevance to OCPs for ACRD and CPA

Personnel

13. Adopt new organizational structure for EOC (please see Appendix 3). Build a personnel plan for the key positions of an EOC at all three levels of activation; increase capacity for administrative duties across each section; ensure each local government (ACRD and CPA) supports the involvement of approximately 20 staff each on an annual basis to train, practice and build capacity.
14. Coordinate annual tabletop exercise every two years for ACRD, CPA, and external partners
15. Coordinate every two years a 24-hour exercise for ACRD, CPA, and external partners
16. Implement and convene quarterly meetings among Directors of all sections and task them to maintain capacity and recommend policy
17. Convene quarterly meetings among each section of the EOC and communications
18. Task the Planning section with developing Rapid Damage Assessment teams with knowledge of critical facilities; maintain the team with regular practices and drills to familiarize them with facilities

19. Develop a team of Public Information Officers in order to staff the EOC with a minimum of two for any level event; task team with developing a strategic communications plan
20. Resource personnel for risk management; establish contacts for legal and other professional advice; develop workplace policy for EOC
21. Include public works representatives in the Operations section to provide for more robust participation in the field for future exercises/events
22. Coordinate annual training open to all EOC personnel, including position specific training (to begin with Risk Management and Public Information Officer, as identified by evaluators)
23. Develop liaison contacts and resources and maintain on a semi-annual basis; coordinate liaison activities within the strategic communications plan to ensure capacity in times of limited access; create a plan for contact for each period of event
24. Regularly update contact information for ACRD and CPA emergency personnel, work with the City to share the burden and not duplicate actions
25. Provide exempt staff working under an EMBC task number pay equivalent to their hourly wage, recognizing that each manager is assigned duties in the EOC equivalent to their experience and knowledge from regular employment and that this cost would be borne by EMBC (note: regular employees are paid at regular rates with overtime provisions applying, per their contract)

Capacity Building

26. Purchase ConnectRocket public emergency notification system
27. Investigate opportunities for ACRD and coastal communities to align emergency planning and response procedures
28. Supplement Reception Centre kits
29. Supplement Group Lodging kits
30. Supplement Rapid Damage Assessment kits
31. Contract a designer to create communications templates and brand standards – consider this as a broad regional district project for all communications
32. Support personal preparedness in community through education and outreach programs. Leverage first responders to bolster community outreach and communications, develop a plan for Board approval.
33. Foster community capacity by supporting key organizations in developing and maintaining their internal preparedness

Process

34. Review current emergency bylaws to ensure local and provincial requirements are met
35. Revise organizational structure of Emergency planning with new roles of the policy group and liaison committee (see appendix 2).
36. Create a policy for spending and assignment of authority among organizations

37. Oversee strengthened internal communications process in EOC with better paper flow process in EOC. Oversee development of EOC forms; task a team to undertake paper exercises and redesign forms and charts
38. In advance of an actual event, develop meeting schedules and agendas for EOC operating periods
39. Develop and fine tune strategic communications and media plans for various events at all levels of EOC activation; develop methods to engage in social media and to track social mentions
40. Develop deeper understanding of amateur radio communications and coordination; secure alternative means for local contacts
41. Develop alternatives for field communications given various needs within the EOC, including liaising, situational awareness, contact between emergency response facilities (mass care, etc.)
42. Create improved situational awareness utilizing technology, EOC personnel, first responders, and volunteers who use accepted forms of communications to ensure qualified, reliable reports
43. Working with EMBC, develop a logistics plan for the receipt and administration of equipment and supplies including securing local staging areas and the required personnel and processes

Mitigation

44. Develop ESS plan for all three levels, coordinating Red Cross and City contract, with facilities, resources, and personnel identified
45. Conduct a hazard assessment of the Alberni Valley
46. Write business continuity plans for ACRD
47. Partner with the Chamber of Commerce to offer business continuity planning session to local businesses

*Please see Appendix 4 "Recommendations with timeline and costs"

LIST OF EOC PERSONNEL & EVALUATORS

Appendix 1

EVALUATORS	
NAME	ORGANIZATION
Drew, Jani	Regional District of Nanaimo
Falloon, Bettina	Justice Institute of BC
Jasper, Kirsten	City of Vancouver
Lindsay, Karen	City of Nanaimo
Thomas, Ryan	Powell River Regional District
Watson, Ken	City of Port Alberni

The following pages list the personnel working within the Emergency Operations Centre by shift.

DAY 1**EMERGENCY RESPONSE EXERCISE SCHEDULE**

Tuesday, June 7th

Time: 7:30 am - 1:00 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
Public Information Officer	Wendy Thomson	ACRD
Liaison Officer	Dan Holder/Maggie	ACRD
Operations Chief	Wes Patterson	CPA
ESS	Laurie L'H	CPA
Planning Chief	Mike Irg	ACRD
Logistics Chief	Mark Fortune	ACRD
Administration Support	Shelli Lyle/Kathy McArthur	ACRD
Administration Support	George Rose	ACRD
Security	Jason Kevis	ACRD
Finance/Admin Chief	Teri Fong	ACRD
Rapid Damage Assessment	Mark Zenko, Katt, Rita, Kari, Martin	CPA

Time: 12:00 pm - 5:30 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
EOC Deputy Director	Andrew McGifford	ACRD
Public Information Officer	Davina Hartwell	CPA
Liaison Officer	Dan Holder	ACRD
Risk Management Officer	Rondi Shanks	CPA
Operations Chief	Charlie Starratt	BCVFD
Operations Deputy Chief	Dan Fredlund	ACRD
Fire	Andre Guerin	CPA
RCMP	Dave Boyce	RCMP
Search & Rescue		
ESS	Laurie L'H	CPA
Planning Chief	Heather Adair	ACRD
Planning Deputy Chief	Randy Thoen	CPA
Advanced Planning	Lori Wilson	ACRD
Documentation	Tanis Feltrin	CPA
Documentation	Charity Hallberg Dodds	ACRD
Logistics Chief	Wilf Taekema	CPA
Logistics Deputy Chief	Mark Fortune	ACRD
Administration Support	Wendy Hayes (Shelli/Kathy)	ACRD
Administration Support	Jeff Pelech	CPA
Security	Jacob Colyn	CPA
Finance/Admin Chief	Cathy Rothwell	CPA
Finance/Admin Deputy Chief	Leslie Walerius	CPA
Rapid Damage Assessment	NA	

DAY 2

EMERGENCY RESPONSE EXERCISE SCHEDULE

Wednesday, June 8th

Time: 7:30 am - 1:00 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
EOC Deputy Director		
Public Information Officer	Jake Martens	CPA
Liaison Officer	Dan Holder	ACRD
Risk Management Officer	Andrew McGifford	ACRD
Operations Chief		
Operations Deputy Chief		
Fire		
RCMP	Cpl. Pat Jenkins	RCMP
Search & Rescue		
PCT	Bhreagh Farquharson	Vancouver
ESS	Laurie L'H	CPA
Planning Chief	Scott Smith	CPA
Planning Deputy Chief	Randy Thoen	CPA
Advanced Planning	Chantel Gemmel	ACRD
Documentation	Tanis Feltrin	CPA
Documentation	Shelli Lyle	ACRD
Logistics Chief	Guy Cicon	CPA
Logistics Deputy Chief	Brian Mousley	CPA
Administration Support	Veronica Irg	CPA
Administration Support	Amar Giri	CPA
Security	Jason Kevis	ACRD
Finance/Admin Chief	Tricia Bryant	ACRD
Finance/Admin Deputy Chief	Kathy McArthur	ACRD
Rapid Damage Assessment	Mark Zenko, Katt, Rita, Kari, Martin	CPA

Time: 12:00 pm - 5:30 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
EOC Deputy Director		
Public Information Officer	Karla Robinson	Ucluelet
Liaison Officer	Davina Hartwell	CPA
Risk Management Officer	Keeva Kehler	Parksville
Operations Chief		
Operations Deputy Chief	Vaughn Figueira	Parksville
Fire		
RCMP	Dave Boyce	RCMP
Search & Rescue		
PCT	Bhreagh Farquharson	Vancouver
ESS	Maggie/Laurie	ACRD/CPA
Planning Chief	Alex Dyer	ACRD
Planning Deputy Chief	Bill Sims	Nanaimo
Advanced Planning	Lori Wilson	ACRD
Documentation	Cara Foden	CPA
Logistics Chief	Wilf Taekema	CPA
Logistics Deputy Chief	Gloria Le Gal	Mt. Waddington
Administration Support	Brenda Sauve	ACRD
Administration Support	Dan Fredlund	ACRD
Security	Wayne Cheveldave	CPA
Finance/Admin Chief	Diane Koch	CPA
Finance/Admin Deputy Chief	Kelly DeClercq/Victor Memm	CPA/Nanaimo
Rapid Damage Assessment	NA	

DAY 3

EMERGENCY RESPONSE EXERCISE SCHEDULE

Thursday, June 9th

Time: 7:30 am - 1:00 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
EOC Deputy Director	Geoff Goodall	Nanaimo
Public Information Officer	Wendy Thomson	ACRD
Liaison Officer	Dan Holder	ACRD
Risk Management Officer	Rondi Shanks/Krista Tremblay	CPA
Operations Chief	Martin Drakeley	Nanaimo
Operations Deputy Chief	Charlie Starratt	BCVFD
Fire	John Haley	CPA
RCMP	Cst. Maria Marciano	RCMP
Search & Rescue		
PCT	Bhreagh Farquharson	Vancouver
ESS	Maggie/Laurie	ACRD/CPA
Planning Chief	Mike Irg	ACRD
Planning Deputy Chief	Cara Foden	CPA
Advanced Planning	Charity Hallberg Dodds	ACRD
Documentation		
Logistics Chief	Elyse Goatcher-Bergmann	Tofino
Logistics Deputy Chief	Guy Cicon	CPA
Administration Support	Geroge Rose	ACRD
Administration Support	Shelli Lyle	ACRD
Security	Jacob Colyn	CPA
Finance/Admin Chief	Cathy Rothwell	CPA
Finance/Admin Deputy Chief	Brenda Sauve	ACRD
Rapid Damage Assessment		

Time: 12:00 pm - 5:30 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
EOC Deputy Director		
Public Information Officer	Jake Martens	CPA
Liaison Officer	Deb Tardiff	Parksville
Risk Management Officer	Andrew McGifford	ACRD
Operations Chief		
Operations Deputy Chief		
Fire		
RCMP	Cpl. Pat Jenkins	RCMP
Search & Rescue		
PCT	Bhreagh Farquharson	Vancouver
ESS	Laurie L'H	CPA
Planning Chief	Heather Adair	ACRD
Planning Deputy Chief	Shelli Lyle	ACRD
Advanced Planning	Kathy	ACRD
Documentation	Wendy Hayes	ACRD
Logistics Chief	Wilf Taekema	CPA
Logistics Deputy Chief	Brian Mousley	CPA
Administration Support	Jeff Pelech	CPA
Administration Support	Janice Hill	ACRD
Security	Jason Kevis	ACRD
Finance/Admin Chief	Teri Fong	ACRD
Finance/Admin Deputy Chief	Kelly DeClercq	CPA
Rapid Damage Assessment		

DAY 4**EMERGENCY RESPONSE EXERCISE SCHEDULE**

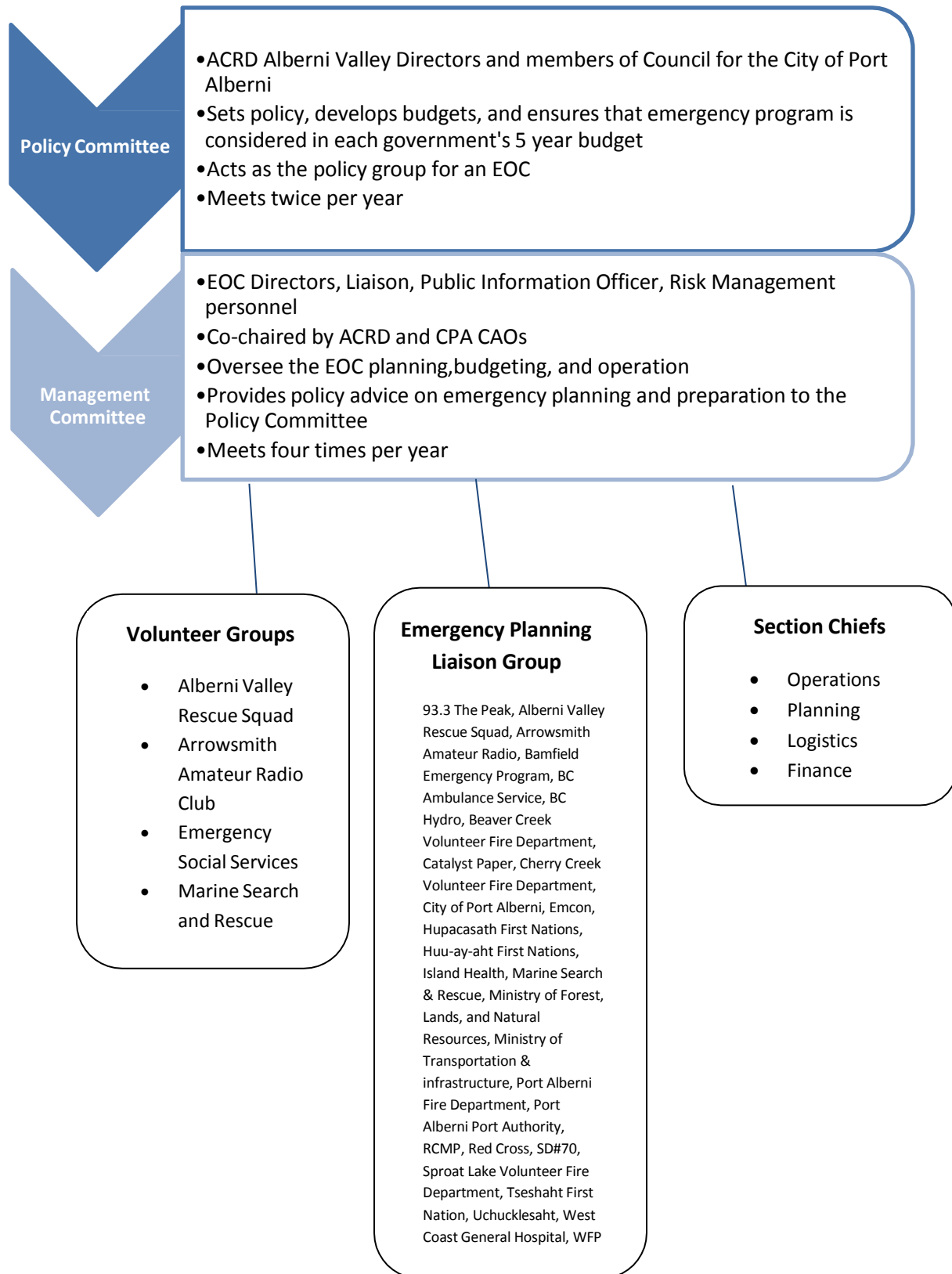
Friday, June 10th

Time: 7:30 am - 1:00 pm

Position	Name	Organization
EOC Director	Russell Dyson	ACRD
EOC Deputy Director		
Public Information Officer	Wendy Thomson	ACRD
Liaison Officer	Juliet Van Vliet	Toquaht
Risk Management Officer		
Operations Chief		
Operations Deputy Chief		
Fire		
RCMP	Cst. Richard Mills	RCMP
Search & Rescue		
ESS	Laurie L'H	CPA
Planning Chief	Scott Smith	CPA
Planning Deputy Chief	Alex Dyer	ACRD
Advanced Planning	Shelli Lyle	ACRD
Documentation	Kathy McArthur	ACRD
Logistics Chief	Guy Cicon	CPA
Logistics Deputy Chief	Wilf Taekema	CPA
Administration Support	Steve Bilideau	CPA
Administration Support	Holly	CPA
Security		
Finance/Admin Chief	Tricia Bryant	ACRD
Finance/Admin Deputy Chief	Diane Koch	CPA
Rapid Damage Assessment	NA	

EMERGENCY PROGRAM: PROPOSED NEW STRUCTURE

Appendix 2



EOC LEVEL TWO & THREE PERSONNEL

Appendix 3

The following outlines the positions the ACRD will assign, train and plan for ACRD and CPA staff to fill, recognizing large and specialized events may have their own specific requirements.

Administration: EOC Director, Risk Management, Liaison, Public Information

1. EOC Director
2. EOC Deputy Director
3. EOC Admin Support
4. Risk Management
5. Liaison
6. Public Information 1
7. Public Information 2

Operations: First Responders, ESS Community Recovery, Engineering, Utilities

1. Operations Director
2. Operations Deputy Director
3. Operations Admin Support
4. ESS community recovery
5. Engineering
6. Utilities
7. First Responders as required

Planning: Situation reporting, advance planning, documentation, damage assessment, demobilization, resources, recovery, technical specialists

1. Plan Director
2. Plan Deputy Director
3. Planning Admin Support
4. Advance planning
5. Documentation and Mapping
6. Rapid Damage assessment
7. Technical specialists
8. Recovery

Logistics: Communications, computer systems, radio systems, supply management, personnel, transportation, EOC Facilities, security, clerical

1. Logistics Director
2. Logistics Deputy
3. Logistics Admin Support
4. Communications
5. Supply management
6. Transportation
7. EOC facilities & Personnel
8. Security

Finance: Time, procurement, claims & benefits, cost accounting

1. Finance Director
2. Deputy Director
3. Admin Support

Recommendations from Exercise Coastal Response Appendix 4

Action	2017	2018	2019	2020	2021
1. Backup EOC	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
2. Agreements for food and water	500	500	500	500	500
3. Cargo container for external storage			6,000		
4. Logistics to coordinate EOC.	500	500	500	500	500
5. Inventory of the critical facilities within the community,	1,000	1,000	1,000	1,000	1,000
6. Risk assessments on all key government infrastructure		6,000	5,000	5,000	5,000
7. Satellite (SAT) phone	5,000	500	500	500	500
8. EOC computers and photocopiers	4,000	1,500	1,500	1,500	1,500
9. Detailed, wall maps for various sections	500	500	500	500	500
10. iPads (12) with wireless hot spots	8,000		2,000	2,000	2,000
11. Emergency mapping software				tbd	
12. Oceans Networks Canada and tsunami modelling tools	*	*			
13. Revise organizational structure of the EOC	*				
14. Tabletop exercise every second year	4,000		4,000		4,000
15. 24-hour exercise every second year		14,000		14,000	
16. Regular meetings among EOC sections & Info Officers	5,000	5,000	5,000	5,000	5,000
17. Quarterly Communications meetings	500	500	500	500	500
18. Task Planning with developing Rapid Damage Assessment	1,200	500	500	500	500
19. Public Information Officers & strategic communications plan	1,000	1,000	1,000	1,000	1,000
20. Risk management for EOC	500	500	500	500	500
21. Public works representatives in the Operations	*				
22. Annual training open to all EOC personnel & position specific	2,000	3,000	3,000	3,000	3,000
23. Liaison contacts and resources	500	500	500	500	500
24. Regularly update contact information for emergency personnel	500	500	500	500	500
25. Exempt staff remuneration during an EMBC task number	*				
26. ConnectRocket public emergency notification system	3,000				
27. Coordinate ACRD and coastal communities to align emergency planning and response procedures	*				
28. Supplement Reception Centre kits	500	500	500	500	500
29. Supplement Group Lodging kits	500	500	500	500	500
30. Supplement Rapid Damage Assessment kits	500	500	500	500	500
31. Communications templates and brand standards		2,000			
32. Support personal preparedness in community	5,000	5,000	5,000	5,000	5,000
33. Foster community capacity by supporting key organizations	*	*	*	*	*
34. Review current emergency bylaws on a regular basis in context of exercises and changing legislation.	*			*	

Action	2017	2018	2019	2020	2021
35. Adopt new organizational structure					
36. Create a policy for spending and assignment of authority among organizations	*				
	*				
37. Oversee strengthened communications process in EOC,		2,000	500	500	500
38. In advance of an actual event, develop meeting schedules and agendas for EOC operating periods	500	500	500	500	500
39. Develop and fine tune strategic communications and media plans	750	750	750	750	750
40. Develop deeper understanding of amateur radio communications	*				
41. Develop alternatives for field communications			2,000	2,000	2,000
42. Create improved situational awareness			2,000	2,000	2,000
43. Plan for the receipt and administration of equipment and supplies	500	500	500	500	500
44. Develop ESS plan for all three levels (CPA contract)	20,000	20,000	20,000		
45. Conduct a hazard assessment of the Alberni Valley	10,000				
46. Write business continuity plans for ACRD				2,000	
47. Partner with the Chamber of Commerce					2,000
TOTALS	\$56,950	\$49,250	\$46,750	\$52,750	\$42,750

* refers to year of realization, no direct expense.

Please note that the monies allocated across the recommendations reflect rough estimates, with much of the work completed in house. The overall plan reflects the Board of Directors past commitment to expenses within the service and the desire to keep costs at or below the rate of inflation compared to previous years. Actual allocations will be reviewed at the budget time each year and adopted through the regional districts five year financial plan following consideration and recommendation from the policy group.