

Tuesday, November 8th, 2016

08:45 - 09:00

Opening of the Conference

09:00 - 10:00

Plenary 1

*Professor Stephen Sheppard, Ph.D., ASLA
University of British Columbia*

Climate Change: BC Threats and Pathways toward Solutions

We are constantly seeing and often experiencing the results of climate change which is impacting us in so many ways. Extreme weather events are happening throughout the world and they overtax emergency response systems due to their devastating consequences such as drought-related fires, major storm surges, power outages, landslides, and flooding to name just a few. Dr. Sheppard will provide us with local context, drawing on his research and visual media experience to portray various future scenarios for BC under projected climate change threats. This will be a very engaging hour – not all doom and gloom – he will also discuss alternative pathways toward some potential solutions.

10:00 - 11:00

Coffee Break

11:00 - 12:00

Sessions A

A1: Climate and Seismic Resiliency in Risk and Emergency Management

Frameworks

Angie Woo, MSc¹, Jackie Z.K. Yip

Fraser Health Authority, Vancouver BC

Public infrastructure is vulnerable to extreme weather-related events, including flooding and storm surges that are increasing in frequency and intensity in the PNW. This session will focus on the integration of extreme weather and seismic hazards into relevant assessments for our largest, most complex and critical (during and after events) public institutions: acute care facilities.

Angie Woo and Jackie Yip will outline a unique approach to adapting and integrating the “[Sustainable and Climate-Resilient Health Care Facilities Toolkit](#)” into existing risk and emergency management frameworks to assess facilities' resilience to extreme events and identify viable actions. This approach is being piloted in the region by Lower Mainland Facilities Management (LMFM) and HEMBC.

The audience will be invited to participate actively during this session, and to suggest how this approach could be applicable to their respective sectors (*e.g.* retail, municipal infrastructure, academic campus).

Session hand-outs will include:

- The resiliency assessment toolkit adapted for the Canadian context, and for smaller-scale structures (*e.g.* residential care facilities, and multi-unit buildings)
- A chart comparing resilience toolkits currently being used in Canada, US and internationally

A2: New and Improved Support Tools for Local Government Emergency

Programs

Elizabeth Scambler¹, Chris Wilson, Ian Foss, Sybille Sanderson

¹Emergency Management BC, Saanichton, BC

In October 2015 EMBC released a *Strategy to Advance Support to Local Authority Emergency Management Programs*, a document outlining specific activities EMBC is undertaking to improve program support to BC's local authorities. The project has been active for the past year and is ready to showcase some of the progress to other emergency management professionals.

The presentation will include a dynamic “sneak peek” of the work that EMBC has been leading with the essential support of a team of Emergency Program Coordinators from a diverse set of communities across the province. The project outcomes are based on research, best practices and feedback obtained from BC's emergency management community and include a local authority emergency plan template and an improved *Hazard Risk and Vulnerability Assessment* tool.

Participants will hear from both EMBC and Local Authority Emergency Programs Coordinators on progress made to date. Participants will have an opportunity to provide feedback and will come away with ideas on how these support tools can add value to their own community emergency programs.

A3: Active Threat Training at Thompson Rivers University - Creating a Safe Environment to Learn and Work

Stacey Jyrkkanen¹

¹Thompson Rivers University, Kamloops, BC

All too often the evening news leads with a story about a school or workplace shooting. Have you ever watched and wondered, ‘what would I do in that situation?’ or ‘why didn’t they notice that person’s behaviour before it happened - surely someone should have known.’

Thompson Rivers University has created a unique program to address these questions. While many organizations are implementing strategies to respond to a workplace shooter, TRU's Active Threat Program goes a step further to incorporate prevention. Active Threat training gives employees a deeper understanding of these threats, the tools to recognize the ‘worrisome behaviours’ indicative of persons in crisis, and the resources available to intervene and help move these individuals off the pathway to violence. Unfortunately, like most emergency events, you can't plan for every eventuality – there are external sources of violence that we don't always know about – partner violence, custody issues, etc. The Active Threat program also provides employees with strategies for survival in the event of an active shooter situation. These strategies can be used anywhere – at work, in a mall, a restaurant or conference – in your hometown, elsewhere in the country or around the world.

This session looks at how TRU developed the Active Threat program, the program itself – with topics including worrisome behaviours, threat assessment, privacy legislation, workplace risk assessments and planning, lockdown and survival strategies including hands on demonstrations just to name a few – and testing in a full scale Emergency Exercise situation including a video of TRU's landmark Active Shooter exercise.

How will you benefit from attending? This program can serve as a framework for building your own program and address workplace violence issues before they happen

A4: Donation Management: Lessons Learned & Resources for Responders

Patrick Cullen¹, John McEwan²

City of Maple Ridge, BC, Salvation Army, Abbotsford, BC

When disasters happen the outpouring of community support can be overwhelming – literally! From apartment fires to flood events, when people lose their homes there is often a genuine and well-intentioned movement to round up donations to help. But what happens when it becomes too much? As emergency managers and Emergency Social Service Directors we aim to lessen the impact on those affected and provide them with the immediate resources they need to find their “new normal”. But managing donations can take a lot of resources away from local response efforts.

This panel discussion will provide challenges and lessons learned from ESS activations, a case study on using convergent volunteers and social media to guide the process of matching needs to donors, and a review of donation management resources documents. The Salvation Army will present their response capabilities to provide support to local authorities with managing in-kind donations in larger events.

A5: Business Impact Analysis: A Foundation for Strategic Value

Barry Huybens¹

¹Strategic Advisors Inc., Edmonton, Alberta

Business Impact Analysis (BIA) is an important process that probes business processes and functions to determine and rank key functions. It is necessary to understand the business environment, analyze data and information, identify critical processes needed to carry out business operations and finally prepare a BIA report enlisting findings and priorities for executive management.

This session will provoke the audience to consider the value and importance of the Strategic BIA's and their integral contributions toward an overall (Business Continuity Management System (BCMS) and the organization. Several dimensions will be considered in this presentation including definitions, tools, techniques and the holistic integration of BIA results into strategic planning. In today's current economic environment, organizations must scrutinize not only spending but the allocation and availability of personnel toward internal projects. While some organizations are completing BIA's, few understand how to leverage the results and outputs toward addressing the continuity requirement for people, facility, information and technology, assets and the supply chain and ultimately response, recovery and restoration.

This session is not just about effective and efficient BIA's it is about how to strategically use the BIA as a foundational tool within a BCMS and toward influencing organizational improvement and resiliency.

The audience will be engaged about the approaches and tools to conducting a BIA while then contemplating how to use the BIA ranking of functions to form the basis of priorities for crisis managers and leaders – a playbook if you will. Ultimately, the audience will recognize the Strategic BIA as a truly enterprise-wide investment.

A6: Managing flood risk in BC: from politics to policy to practice

Lilia Yumagulova¹

¹University of British Columbia, Vancouver, BC

This presentation examines changing flood risk in the Metro Vancouver regional area (subject to river flooding, intense rain storms and an increasing rate of sea-level rise in the future). It presents a unique perspective on flood management: from politics (Mayors and former premiers) to policy (provincial authorities) to practice (municipal staff).

The presentation identifies how municipalities in the region plan for and respond to current and future flood risks under conditions of uncertainty. The responses in soft infrastructure (e.g. governance networks, learning and collaboration) and hard infrastructure (e.g. diking) are analyzed. Given the differences in size, capacity and hazards across municipalities, a diverse set of planning responses to the long-term risks and short-term political pressures that municipalities face is identified. The presentation draws on sixty expert interviews (municipal, regional, provincial staff and elected officials in BC); and a Lower Mainland survey (emergency managers and fire services; engineers, planners).

Attendees will gain an understanding about region-wide approaches to flood management and climate change adaptation which can help better incorporate considerations of best practices for managing flood risk in BC which requires an increased collaboration between emergency managers, engineers and planners. Attendees will also gain familiarity with key tools, methods and flood resilience planning resources in BC and internationally.

12:00 - 13:30

Lunch

13:30 – 14:30

Sessions B

B1: Health Emergencies, Zika Virus and Other Nasty Stuff

BC Centre for Disease Control

Numerous health threats from local to international will be discussed in this breakout.

In April of this year, BC's provincial health officer declared a public health emergency in response to the rise in drug overdoses and deaths. BC is the first province to take this kind of action in response to the current public health crises from drug overdoses. The collaborative efforts in response to this emergency will be discussed in detail and why the emergency powers were sought.

The session will also review the threat realities of Zika virus. There has been much news this past year about the growing concerns regarding the different means of transmission, and the risks for women in their child-bearing years.

B2 Performance Metrics for Emergency Management - do they matter?

Dorit Mason¹

¹City of North Vancouver, Districts of North Vancouver and West Vancouver, BC

Local Governments and other organizations are required to have emergency management programs as outlined in legislation, but how are their efforts measured? Performance measurements provide evidence of continual improvement within programs, can provide information used to support budget requests and show organizational due diligence and that emergency management responsibilities are taken seriously. This presentation will provide an overview of legislative requirements and best management practices, the pros and cons of performance metrics, and why emergency managers should consider measurable activities to support their programs.

B3: Social Media for When It Matters Most

Ian Foss¹, Matt Cawsey²

¹Capital Regional District, Victoria, BC, Canada, ²Saanich Police Dept, Saanich, BC, Canada

Social media and other web-based communication tools present beneficial yet challenging opportunities for emergency programs; however, the advent and rising popularity of social media has altered communication patterns and placed greater demands on emergency managers, particularly in times of crisis. This presentation will demonstrate how Social Media is now a publicly demanded communication channel, and will provide a guide to fully adopting and integrating these tools to meet present public expectations.

B4: Community Resilience in Action - Case Studies from the City of Vancouver

Katie McPherson¹

¹City of Vancouver, Vancouver, BC

In 2015, the City of Vancouver Office of Emergency Management specifically created a Community Resilience portfolio. This shift not only acknowledges the value of resilience thinking to disaster risk-reduction and recovery, but also deliberately enables community leadership and engagement in emergency management planning, programming and action. Program areas under the portfolio include

the Vancouver Volunteer Corps, Business Engagement, Public Education and Engagement, Emergency Social Services and other strategic priorities.

This session will report on 2 resilience programs being launched in 2016 that are aimed at building community resilience to disasters:

- The Zone Team Initiative is aimed at expanding the scope of ESS volunteer programming to enable volunteer-led planning and community engagement initiatives to identify and address the unique vulnerabilities and capacities within local neighbourhoods.
- The Disaster Support Hub project is aimed at facilitating community-led response and earthquake awareness and preparedness at the neighbourhood level.

After significant planning and input from experts globally, both of these projects are being launched in the first half of 2016, complete with community and volunteer consultation and engagement plans. This session will be an opportunity for leaders and practitioners to learn from Vancouver's experience, and access tools to support leading edge, resilient action in their own communities.

B5: Putting Business in Business Continuity

Maureen Healey¹

¹Downtown Vancouver BIA, BC

What BIAs need and expect from their partners to be prepared

Putting Business in Business Continuity

Business Improvement Associations represent tens of thousands of businesses of all sizes in Canada's cities. As small businesses themselves, BIAs are logical starting points to both showcase their own business continuity plans and conduits to accessing and educating their small businesses.

Hear how the Downtown Vancouver Business Improvement Association (DVBIA) created and implemented a simple, one-pager continuity plan template to:

1. Prepare itself for emergencies in downtown Vancouver
2. Teach other Vancouver-based BIAs to create plans for themselves
3. Implement an education program to help its members prepare themselves

Learnings include:

- Why BIAs are valuable partners in gaining access to small businesses
- How to work with small businesses to create continuity plans with their limited resources
- How BIAs can partner with municipalities to workshop their plans and much more
- Barriers to small businesses creating continuity plans

B6: Earthquake Early Warning Systems

Teron Moore¹ and Carlos Ventura²

¹Ocean Networks Canada, Business Analyst, Innovation Centre, ²Director, Earthquake Engineering Research Facility (EERF) at UBC

Teron Moore will discuss the development of the earthquake early warning (EEW) capacity at Ocean Networks Canada. It will describe the major concepts behind the technology, including a basic overview of seismic wave propagation, earthquake sensors and their distribution, p-wave detection and the overall architecture of the system. It will further overview the \$5 million dollar investment by the Province to make progress on EEW as well as the plan to achieve operational readiness at project completion.

Carlos Ventura will discuss the work being done at UBC's Earthquake Engineering Research Facility including the BC Smart Infrastructure Monitoring System (BCSIMS), a collaborative project between BCMOT and UBC. Seismic data collected from network sensors is used to build dot and shake maps on the BCSIMS website. Engineers use the maps to compare an earthquake event with the seismic threshold that specific structures are designed to withstand. The initiative includes schools and also health facilities in the future.

14:30 - 15:00

Coffee Break

15:00 - 16:00

Plenary 2

*Heather Lyle,
A/Executive Director, Plans and Mitigation, EMBC Surrey
Stan Bates, Provincial Duty Manager, EMBC Victoria*

Integrated Response during Catastrophic Events: Concept for a Provincial Earthquake Response & Recovery Centre

This presentation addresses next steps with the Province's Earthquake Immediate Response Plan (IRP) which details how the Province will lead and coordinate response activity immediately following a significant earthquake. The Province is now undertaking sustained response planning. British Columbia Emergency Management System (BCEMS) will form the structural foundation and guide the sustained response; however, due to the complexity of an earthquake event, enhanced integration and flexibility will be required with decision makers from all levels of government, CI owners, NGOs and other stakeholders collaborating on innovative solutions, merging decision-making and sharing information networks all aimed at achieving unity of effort by synchronizing effects and resources.

This unity of effort will be realized by having a centralized location for elected officials and decision-makers, agency co-location, provision of liaisons, and integrated planning and coordination. Collaboration will be required at multiple levels, including local government Emergency Operations Centres (EOCs), Stakeholder EOC's, Provincial Regional Emergency Operations Centres (PREOCs), and the Provincial Emergency Coordination Centre (PECC), with integration across all levels being addressed through the establishment of a Provincial Earthquake Response and Recovery Centre --- PERRC.

Similar to the development of the IRP, the structure and concept of operations for the PERRC has been accomplished through EMBC's leadership and collaboration with the BC Earthquake Planning Team. This multi-agency/multi-jurisdictional team is comprised of local, regional, provincial and federal agency representatives, Emergency Management Stakeholders and NGO's.

16:00 - 17:00

Networking Reception for BCAEM

17:00 - 18:00

Annual General Meeting of the BC Association of
Emergency Managers

Wednesday, November 9th 2016

08:30 - 10:00

Plenary 3

*Dr. Richard Frank,
Assistant Professor, School of Criminology & Associate Director,
International CyberCrime Research Centre SFU, Surrey Campus*

Targeting by Cybercriminals – How cybercrime is shifting from large to small

This session will cover many aspects of cybercrime/security including current trends and future threats. Dr. Frank will discuss how online hacker discussion forums were used to identify threats against Canadian critical infrastructure generally, and aviation specifically. Although the threats against large critical infrastructure continue, recent trends indicate that an increasingly large portion of the threats are directed towards small businesses and local government. With each year, more and more of our lives, and devices in our lives, are connected to the Internet, and if these trends continue, we would expect to see an increasing exploitation of individuals with our own devices being locked and held for ransom. For example, how much would you pay to be let back into your own vehicle? There are valuable gains achieved with this trend, but without proper security and understanding, this will leave us increasingly vulnerable against attacks. Awareness of these threats is key to preventing them from occurring.

10:00 - 10:30

Coffee Break

10:30 - 12:00

Sessions C

C1: Aboriginal Disaster Resilience Planning

Bettina Falloon¹

¹Justice Institute of BC, New Westminster, BC

This breakout will include two Aboriginal Emergency Management topics

Building disaster resilience across all phases of a disaster from planning, response to recovery is the cornerstone of effective emergency management. Resilience allows for increased capacity to absorb a shock to the system (such as a disaster) without disrupting structure and function, requiring adequate preparation and planning prior to any disturbance. The process of building resilient communities requires the community to work together to identify community capacity, and to foster a collaborative environment where community cohesion is strengthened through building on strengths. Planning for resilience is enhanced when local communities are empowered to be actively involved in the planning process and when broader structures and regulations contribute to, and support, resilience efforts.

Through funding provided by Indigenous and Northern Affairs Canada (INAC), the Justice Institute of BC (JIBC) developed the tool and provided initial training workshops across Canada. The Aboriginal Disaster Resilience Planning (ADRP) was developed as a web-based disaster resilience planning framework and tool to support emergency management planning within Canadian First Nations and Aboriginal communities. The project built on the success of the existing Defence Research and Development Canada (DRDC) funded Rural Disaster Resilience Planning Framework and website, with modifications to address Aboriginal contexts, culture, and community needs.

Participants will learn about:

- An overview of the project;
- An overview of the website and the Four Steps for disaster resilience planning;
- A review of the tools and resources to enhance the community's ability to move through the process and develop a Disaster Resilience Plan;
- Next steps of project initiatives and opportunities

Materials will include a copy of the Facilitators Guide and brief overview of the Four Steps.

C1 Continued: Creating a Forum for Informed Best Practice: A dialogue on First Nations Emergency Management across Canada

Emily Dicken¹, Lilia Yumagulova², Bettina Falloon³

¹University of Victoria, ²University of British Columbia, and the ³Justice Institute of BC

Across Canada, Emergency management programs at the local, provincial and federal levels are moving towards a new model for First Nations Emergency Management. Through the support and funding mechanisms of Aboriginal Affairs and Northern Development Canada, provincial and territorial governments are working to update and develop agreements related to the delivery of emergency management services to First Nations.

Like all communities across Canada, First Nations communities are equally diverse and as a result, the needs for emergency management resources can vary greatly. As the provinces and territories move forward with the creation of new First Nations Emergency Management programs, successes and limitations are being realized. This session will be an opportunity to listen, learn and share through an open forum discussion with community members, practitioners and academics. The session will highlight the relationship between key conference streams (health, emergency preparedness and management, emergency social services) within a First Nations context. Cross-cutting themes such as community engagement, communication, planning/response practices and cultural inclusion would be proposed and a semi-facilitated dialogue would be encouraged. Aligning with an Indigenous approach, circle sharing methods would be employed within this session.

As an outcome to this session, a white paper may be published exploring mechanisms to enhance professional development in the field of First Nations Emergency Management. This paper will specifically explore current practice within best practices in Canada and internationally; while specifically bringing focus to key themes addressed throughout the session. This white paper will be used as a vehicle to share the ideas explored within this session to a broader audience of emergency management practitioners across Canada.

C2: Regional Partnerships - A Collaborative Discussion

Robert Lapham¹, Denise Barratt², Ian Cummings³, Clarence Lai (Moderator)

COA CRD, Victoria, BC¹, Regional Preparedness Organization Portland Oregon², EMBC Surrey, BC³, IPREM, Surrey, BC⁴

The Integrated Partnership for Regional Emergency Management (IPREM) in Metro Vancouver, BC, the newly established Regional Emergency Management Partnership (REMP) in Capital Regional District, BC, and Regional Disaster Preparedness Organization (RDPO) Portland Metropolitan Region, Oregon share a unique quality. They support Regional partnerships.

Designed to collaboratively engage all levels of government and private sector agencies in regional emergency management planning initiatives, the three partnerships and their respective programs each strive for high levels of preparedness, education, training and flexible, strategic plans from the regional emergency management perspective.

Emergency events do not recognize boundaries and can affect multiple jurisdictions simultaneously, requiring resources, decisions and support beyond the capacity and capability of any one entity. In a collaborative panel discussion, the partnership entities will discuss their programs, the drivers involved in their launch, benefits and challenges to date and the road map for the future to address emergency events effectively as a region.

A distinctive look at each of the programs, the discussion will explore how regional emergency management gaps are addressed through planning, decision making and engagement of all levels of government and stakeholders. Participants will learn the benefits to regional partnerships, the types of

regional issues they address and take away a clear understanding of why regional emergency management planning is important.

C3: The Emergency Response Guidebook (2016)

Jean-Guy Cormier¹

¹CANUTEC, Ottawa, Ontario

A new version of the Emergency Response Guidebook (ERG) is being released in early 2016. There have been several changes to this new edition of the ERG. In order to raise awareness about these changes and to help first responders become comfortable with the modifications, a CANUTEC (Canadian Transport Emergency Centre) representative will present on the ERG, with a focus on the modifications made to the 2016 edition. The session will provide attendees / first responders with the opportunity to ask questions and increase their familiarity with the ERG.

C4: Training Busy Staff to Succeed with Volunteers - The 55 Minute Training Series

Lynn Orstad¹

¹ Chilliwack, BC

A Unique Perspective

The majority of literature in the field of volunteer leadership is written to "educate" the person designated as the organization's manager/coordinator of volunteers. The 55 Minute Training Series can be used both to train leaders of volunteers from different agencies and to train all staff who interface with volunteers within one agency.

The "Module" Design

The 55 Minute Training Series consists of 12 individual "modules" which single out a specific topic such as interviewing, delegation, recognition, etc., and focuses the content around four key concepts. Each module can be shared in one of three ways:

1. Information sharing primarily by the trainer.
2. A combination of information sharing and facilitation of group exercises and discussions
3. A facilitated discussion surrounding one of all of the key concepts in the topic

The modules may be expanded through additional activities or several modules can be grouped together for a retreat or seminar.

Module Components:

Each module of The 55 Minute Training Series includes four components:

1. A Trainer's Guide for Presenting the Topic
2. A PowerPoint slide presentation
3. Participant Handouts
4. Participant Evaluation Forms

Participants at this session will receive a "jump" drive which contains all 12 modules and their four components ready to be used in the participants' agency or community.

C5: Community Business Continuity / Recovery – Reaching Small Business Owners

Sybille Sanderson¹

¹Cowichan Valley Regional District, Duncan, BC

Business Continuity / Disaster Recovery are critical to re-establish a community following a major emergency or disaster. The backbone of many communities is small businesses. These are sometimes the

hardest to reach for emergency preparedness, business continuity and recovery planning. The benefits are invaluable to community recovery.

Sybille Sanderson will outline some practical steps and tools for Emergency Managers to reach this important resource and work with them to build community resilience. Topics include:

- Identifying small businesses in your community
- Marketing Business Continuity/Recovery to Small Business Owners
- Practical tools to assist the Business Continuity/Recovery process
- Developing accountability and follow-up to ensure ongoing success
- Participants are encouraged to share their successes and lessons learned

C6: Can Technology Improve the Event Board

¹**Dan Erikson**¹, Steve Newton²

¹Truvian Labs, Kamloops, BC, ²Emergency Management BC, Kamloops, BC

In modern event response, technology can play a critical role in communications and data management. Although the Incident Command System (ICS) can be applied in the absence of technology, it is reasonable to expect that, when available, technology can increase efficiency and therefore, positively affect both short and long term impacts. Despite this expectation, in many organizations, emergency program staff are challenged to find operationally proven, economical, and volunteer-appropriate ways to integrate technology into their Emergency Operations Centres.

This presentation will summarize the results of a province-wide study examining the degree to which technology is currently used in emergency response for various local governments, agencies, utilities, and private companies. We will explore best practices for effectively recording and sharing information between ICS sections, especially in the context of large-scale events, where the volume of information will quickly overwhelm manual processes.

Participants will be guided through an evaluation of their current use of technology, with a focus on resilience, communication protocols, and decision making processes. We will also provide an overview of emerging technology in this field and examine possible benefits from a practitioner's point of view.

12:00 - 13:30 Lunch

12:00 - 13:30

Award Presentations from:

EPICC – Friends of EPICC Award

Pacific Northwest Preparedness Society

- Awards of Excellence

- Marie Rogan Lifetime Achievement Award

13:30 - 14:30

Sessions D

D1: Hospital Evacuation, Fort McMurray Fire

David Matear¹

¹Northern Lights Regional Health Centre, Alberta Health Services, Fort McMurray, Alberta

On May 3rd, the residents of Fort McMurray were forced to evacuate and leave behind their homes when a wildfire tore through the city. Alberta Health Services staff at the Northern Lights Regional Health Centre stayed the course and despite their own personal circumstances, courageously and selflessly saw to it that every patient at the hospital was safely evacuated and cared for. David Matear's discussion will go over the day of the evacuation, the staff and patient

relocation north to a nearby oils and company's base, the subsequent evacuation from that site as well as the reestablishment and reactivation of all health services in the city as re-entry of staff and residents began almost a month later.

D2: Developing a Community-focused Emergency Management Program

Charles Bowerman¹

¹Calgary Emergency Management Agency (CEMA), Calgary, Alberta

Calgary, arguably the disaster capital of Canada, witnessed the costliest disaster in Canadian history with the 2013 Southern Alberta floods. In the aftermath, The Conference Board of Canada's independent review of the overall performance of Calgary's Recovery Operations Centre (ROC) recommended an increase in pre-event situational awareness for those citizens who lack the ability to request assistance through regular channels. As a result, the Calgary Emergency Management Agency (CEMA) sought to develop an all-hazards emergency management program for community leaders and citizens. Following a comprehensive year of research and development, CEMA launched its new program in the spring of 2015, READYCALGARY.

READYCALGARY is designed to inform, educate and build resiliency to the impacts of emergencies and disasters. It aims to support emergency services personnel in safeguarding citizens through an awareness of the crucial benefits of being better prepared, ready to respond, and how to support recovery efforts at a community level. Developed in collaboration with key stakeholders, community focus groups and through industry research and best practice, READYCALGARY has been purposefully designed to reflect the diverse needs of its participants by dividing course material into two distinct sections; Section 1: Individuals and Households and Section 2: Community. Participants who complete the program become Community Facilitators to share this material with others, creating a network of resilient communities across Calgary. This presentation examines the key concept of community resilience in emergency management in both practice and theory and presents the methodology and development process that informed the creation of this community-based initiative.

D3: Regional District Kootenay Boundary 2015 Interface Fire Season - Our Experience, Lessons and Ideas

Dan Derby¹

¹Regional District Kootenay Boundary, Trail, BC

The Regional District Kootenay Boundary is in the south east of British Columbia. In this session, Dan Derby, the Deputy Regional Fire Chief, will provide an overview of the Regional District Kootenay Boundary's Regional Emergency Planning to date, and will share many some of their experiences, lessons learned from the 2015 Interface fire season, and some ideas that worked for them. By the end of the fire season they had experienced 44 fires in three weeks, six of which were fires of note that affected communities. The Rock Creek / Westbridge area was hit the worst with 30 homes lost.

D4: Building Resilience on Salt Spring Island through Implementation of a Neighbourhood Preparedness Program

Elizabeth Zook¹, L Hanley

¹Capital Regional District, Salt Spring Island, BC

This presentation will focus on Salt Spring Island's rural neighbourhood emergency program called POD. The program was developed to help prepare residents to ensure self-reliance after a disaster. The key issues driving the program were: Salt Spring has geographic challenges of being on an island, and, there are limited first responder and emergency management resources.

Currently there are 52 geographic POD areas on the island and within each POD there is a resident team identified consisting of: POD and Neighbourhood leaders, Communications liaison, Medical personnel and Shelter/Care givers. The POD organizational structure has flexibility and evolves within each of the areas as need arises. Currently the program has 91 POD Leaders and 249 Neighbourhood Leaders for approximately 10,000+ residents. The program provides information on: emergency communications, self-preparedness, evacuation, disaster first aid and fire-smart. Table top and full functional exercises are also now coordinated with responders and the POD program leaders.

Demographics, proximity to neighbours, limited resources and personal attitudes have all been a challenge for the POD program and yet the program has island-wide success. Even though the program is supported by Capital Regional District Emergency Management, the growth of the program is attributed to residents themselves and their desire to develop community disaster resilience. This evolving resilience model could well be applicable to other small rural and remote communities throughout Canada and throughout the world.

D5: Business and Employer EP / BCP

Ayesha Renyard¹, Dorit Mason²

North Shore Emergency Management

¹City of North Vancouver, Districts of North Vancouver and West Vancouver, BC

Businesses survival after disaster is critical to the overall recovery of any community. The majority of North Shore businesses are small to medium-sized which are at higher risk for business failure, often situated in older buildings, and may be located in areas that are either known or suspected to have liquefiable soils. NSEM developed a Business and Employer Emergency Preparedness (BEEP) initiative to help business owners plan for unexpected disruptions by creating business continuity plans (BCP) which will help to and protect employees and assets and enable their business to continue operating after a disaster.

An obvious obstacle is convincing business owners that implementing this guide, or attending a course, and taking the recommended steps are worth their time and money. In the summer of 2016, NSEM created additional tools ranging from a 2 minute preparedness questionnaire, a 10 minute 'mini' BCP, and more in-depth business continuity template. Direct outreach then occurred to develop this initiative into something more tangible for North Shore business communities.

This presentation outlines the piloted strategies for better reaching business owners, which includes expanding the network of partners, designing new resources and tools, and experimenting with outreach methods. Findings include whether or not face-to-face outreach is more effective, and if it is, which preparedness steps were taken by business owners and which NSEM tools they preferred. Through the presentation and discussion, attendees will leave with ideas on how to further their own community business preparedness and continuity initiatives.

D6: The new Dam Emergency Plan – What does this mean for Dam Owners and Local Authorities?

William R Jolley¹

¹Dam Safety Section, Water Management Branch, Victoria, BC

Emergency planning and response is an important component of the BC Provincial Dam Safety Program. Under the 2016 Water Sustainability Act a new Dam Safety Regulation was proclaimed and the new Dam Emergency Plan (DEP) provisions are now in place. Dam owners have been required to prepare

emergency plans for their dams for many years, but now they will be sending a portion of their DEP to the local emergency authorities. In due course, DEPs for approximately one thousand dams will be sent to local authorities around the province. This presentation will cover what the local emergency authorities can expect to receive from dam owners and suggestions as to what the local emergency authorities should do to incorporate the DEPs into their local emergency plans.

In addition, this presentation will look at:

- the history of dams in BC (including notable incidents, failures and removals)
- how many dam incidents and failures occur in BC every year
- new and existing provisions of the Dam Safety Regulations
- What impact could global warming and new seismic standards have on dams in BC?

14:30 - 15:00

Coffee Break

15:00 – 16:00

Sessions E

E1: Hands Across the Provinces: A Psycho-Social Response to Fort McMurray, Alberta

Carolyn Sinclair¹, Andrew Day²

¹Vancouver, BC

The Disaster Psychosocial Program's DPS volunteers will share their experiences and lessons learned from providing a five week integrated mutual aid response to Alberta Health Services. The task was to assist responders, those impacted, and the community at large. The discussion will include challenges and successes experienced during the coordination and response for this out of province deployment.

E2: Mount Meager Rumbblings – Status of the Mount Meager Volcanic Complex

Dr. Glyn Williams-Jones¹

¹Assistant Professor of Volcanology, SFU, Burnaby, BC

Mt. Meager, a large volcanic complex located 65 km northwest of Pemberton, BC, is the site of long-lived volcanic activity and significant landslide events. Importantly, Mt. Meager has been the target of extensive geothermal energy exploration and significant infrastructure in the form a run-of-river hydroelectric project is currently under development on the upper Lillooet River. Recent observations of low-level volcanic degassing through the Job glacier on the NW flank of Mt. Meager bring to light the fact that Canada hosts potentially active volcanoes. This talk will present an overview of the volcanic history, current status and monitoring of the Mt. Meager Volcanic Complex while also considering the possible hazards associated with any potential future activity.

E3: Exercise Black Fault - Ethics, Opportunities and Challenges in Decision Making

Laurie Pearce¹

¹JIBC, New Westminster, BC, Canada

Exercise Black Fault, held in 2015, was an opportunity for communities to test their EOC Emergency Response Plans when faced with a major earthquake in a simulated exercise. Many of the participants stated that this exercise was one of the most realistic that they had ever participated in.

Based on the Canterbury earthquakes, and starting 18 hours after the first shock, EOC members were faced with major communication breakdowns, power outages, aftershocks, an incapacitated EOC, and having to make high risk/high consequence decisions with scarce resources. How were those difficult

decisions made? The safety of first responders is always a priority. Or is it? Is the life of one first responder a priority over 20 or more civilians? Is the "greatest good for the greatest number" the best ethical framework to use when making difficult decisions? What do you do when there is no "right" decision? In the midst of dealing with an unprecedented disaster how are differences of opinion handled? How are masses of data and information sorted and prioritized? How are errors acknowledged and dealt with?

This presentation will provide conference attendees with these and other questions and issues that faced exercise Black Fault participants. Various ethical frameworks will be presented and discussed, framing the situations that EOC members faced. Strategies and solutions will be suggested for handling the various issues which arose during the exercise, strategies which can be applied to other disaster events. *This project is funded by the Canadian Safety and Security Program, Defence Research and Development Canada's Centre for Security Sciences and our Project Champion is Health Canada's Employee Assistance Services Bureau.*

E4: People of the Safe Harbour – Ucluelet Evacuation Exercise

Karla Robison¹

¹District of Ucluelet, Ucluelet, BC

Ucluelet means "people of the safe harbour" in the indigenous Nuu-chah-nulth language. The District of Ucluelet has supported this meaning through the Emergency Service Department's vision to showcase the municipality as a leader with innovative emergency management initiatives. Ucluelet is situated on the edge of the wild Pacific Ocean and offers visitors and residents the opportunity to live in and explore one of the world's most pristine coastlines. This rugged seaside is becoming well-known to both geoscientists and the public of its potential to unleash a devastating megathrust earthquake and tsunami.

Annually, during Emergency Preparedness Week, the Emergency Department coordinates a community tsunami evacuation drill where first responders practice evacuation procedures and citizens respond by vacating to one of the six designated Community Safe Zones. This spring, the Department chose to organize the evacuation drill during Exercise Coastal Response. Evacuation was a component of this co-operative full-scale exercise where first responders, local and regional emergency personnel, Emergency Management BC and the Canadian Armed Forces simulated a coordinated response to a catastrophic earthquake and subsequent tsunami. The community at large participated and emergency personnel were able to test a variety of procedures, such as: communications, rapid damage assessments, medical triage, and evacuee provisions. Seldom-used resources, such as: SAR teams, a Maritime Coastal Defense Vessel and a military helicopter were deployed for the exercise as well.

Over the summer, the Department designed and initiated the installment of six Community Safe Zone kiosks and associated signage at the recognized high safe points. The innovative shelters have incorporated solar power features for charging cell phones, Japan Tsunami Marine Debris timbers, and educational material on the 'Big One' and the 4 levels of messaging for a tsunami.

E5: Selecting Alternate Worksites

Rian Jones¹, Brenda McKinley²

¹Business Continuity Management Program, Emergency Management BC, Victoria, BC

Alternate sites are a cornerstone of business continuity planning. This session explores the development of alternate site requirements, considerations for evaluation and the incorporation of site information into continuity plans

Participants will be provided with the following materials:

- Alternate Worksite Assessment Tool; and
- A Memorandum of Understanding template.

E6: Gender and the 2013 Alberta Flood

Chris Lammiman¹

¹Graduate, Royal Roads University, Cochrane, Alberta

Due to the historical social constructs of gender, women have experienced higher levels of disaster vulnerability and suffered more from disaster impacts than men. This presentation examines the gendered dynamics of the 2013 flooding of the Bow and Elbow Rivers in Southern Alberta. The research presented involved generic qualitative research conducted through a series of semi-structured interviews with professionals in social service, mental health, and community organizations. The study discovered that women experienced unique economic, psychological, physical and social impacts as a result of the flooding. These included changes to household dynamics, heightened risk of domestic violence, and financial strain. The report found that cultural attitudes and beliefs about women's status and roles were a significant factor in these impacts. A lack of gender-perspective from responding agencies also compounded disaster impacts on women. However women also played an important role in response and recovery activities, pointing to gendered capacities and resilience in disasters.

16:30 – 19:00

Social Night

Thursday, November 10th 2016

08:30: - 10:00

Plenary 4

Dale Bendfeld, Director of Municipal Law Enforcement and Emergency Management Recovery, Regional Municipality of Wood Buffalo **and**
Shane Schreiber, Managing Director, Alberta Emergency Management

Fort McMurray Fire

In this plenary we are fortunate to hear both the local and provincial response to this disaster. The wildfires that impacted the Regional Municipality of Wood Buffalo (RMWB) in May 2016, resulted in one of the largest disasters in the history of Alberta. Over 100,000 people were evacuated from Fort McMurray, four regional villages and nine oil sands facilities. In total 2,700 structures and residences were lost. Dale Bendfeld played a key role throughout the crisis and into the recovery. He will walk us through all aspects of this event: the progression of the fire, emergency, services response, activation of the Regional Emergency Operations Centre, the declaration of a local state of emergency through to the provincial state of emergency. The decision and actions from the crisis to stabilization, re-entry and recovery will be discussed.

Shane Schreiber will provide the provincial perspective of this disaster. He will discuss the many levels of support and coordination required for an event so large and how the AEM played a support role in some areas and lead in others. The topics of governance, command and control, emergency social services, interactions / co-ordination between all levels of government and industry, and public communications will be reviewed.

10:00 - 10:30

Coffee Break

10:30 - 12:00

Plenary 5

Carol McClintock, Emergency Management BC

Russell Dyson, CAO, Alberni-Clayoquot Regional District

Exercise Coastal Response

Carol McClintock¹, Russell Dyson²,

¹Emergency Management BC, Saanichton, BC, ²Alberni-Clayoquot Regional District

British Columbia is vulnerable to a catastrophic earthquake with the potential of major impacts to public safety and significant loss of life in addition to billions of dollars in damage to critical infrastructure.

This presentation will outline the exercise creation, design, and conduct of Exercise Coastal Response 2016, a provincial-level exercise which brought together provincial ministries, federal departments, Local Authorities, First Nations and non-government organizations to test the British Columbia Immediate Response Plan. The exercise focused on each organization's ability to jointly respond to a Cascadia Subduction earthquake along the western edge of the North American continent with live exercise play occurring in the Alberni-Clayoquot Regional District and the City of Port Alberni.

Exercise Coastal Response was one of the critical priorities identified by the province to be conducted in 2016 and presented an excellent public education and outreach opportunity to strengthen the preparedness of all British Columbians. Carol McClintock was the exercise director while Russell Dyson is the Chief Administrative Officer for the ACRD.

12:00 - 12:45

Lunch

12:45 - 13:00

Lac-Mégantic Recovery Update (video)

*Marie-Claude Arguin, Deputy City Manager,
Lac-Mégantic, Quebec*

13:00 - 13:45

Plenary 6

Robert Turner, ADM, Emergency Management BC

Emergency Management BC - Year in Review

13:45 - 14:15

Wrap and Closing & Prizes