Credit: Metro Vancouver (2013)

Emergency Preparedness and Business Continuity Conference 2015
November 18, 2015

Presenter: Clarence Lai, Senior Project Manager

1

Focus of today

1) Understand the role of IPREM

2) Recognize the importance on IPREM's Regional Concept of Operations model during regional emergency events

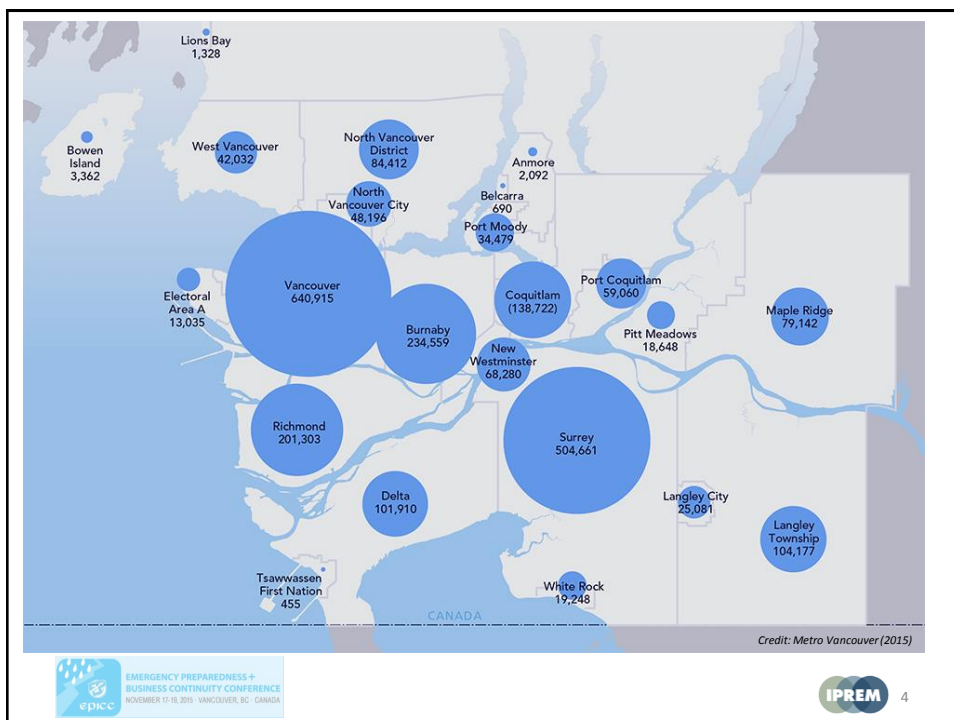3) Explore emergency communications and some of its building blocks (*Presenter – Chad Pacholik*)

2

IPREM OVERVIEW

❑ Metro Vancouver region
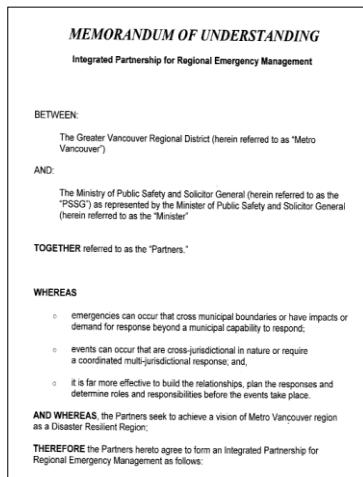❑ The Partnership
❑ Role in regional emergency management

IPREM 3

Lions Bay
1,328

Bowen
Island
3,362

West Vancouver
42,032

North Vancouver
District
84,412

Anmore
2,092

North
Vancouver City
48,196

Belcarra
690

Port Moody
34,479

Electoral
Area A
13,035

Vancouver
640,915

Coquitlam
(138,722)

Port Coquitlam
59,060

Maple Ridge
79,142

Burnaby
234,559

Pitt Meadows
18,648

New
Westminster
68,280

Richmond
201,303

Surrey
504,661

Delta
101,910

Langley City
25,081

Langley
Township
104,177

Tsawwassen
First Nation
455

White Rock
19,248

CANADA

Credit: Metro Vancouver (2015)

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IPREM 4

The Partnership

MEMORANDUM OF UNDERSTANDING

Integrated Partnership for Regional Emergency Management

BETWEEN:

The Greater Vancouver Regional District (herein referred to as "Metro Vancouver")

AND:

The Ministry of Public Safety and Solicitor General (herein referred to as the "PSSG") as represented by the Minister of Public Safety and Solicitor General (herein referred to as the "Minister")

TOGETHER referred to as the "Partners."

WHEREAS

○ emergencies can occur that cross municipal boundaries or have impacts or demand for response beyond a municipal capability to respond;

○ events can occur that are cross-jurisdictional in nature or require a coordinated multi-jurisdictional response; and,

○ it is far more effective to build the relationships, plan the responses and determine roles and responsibilities before the events take place.

AND WHEREAS, the Partners seek to achieve a vision of Metro Vancouver region as a Disaster Resilient Region;

THEREFORE the Partners hereto agree to form an Integrated Partnership for Regional Emergency Management as follows:

- Integrated Partnership for Regional Emergency Management (IPREM)

- Partnership between the Province of BC and Metro Vancouver member municipalities for regional emergency planning

- Established through a MOU (2009) to improve emergency management across Metro Vancouver region

- Jointly funded (50/50) between the partners where each contributes $150,000 annually

- Website: http://www.iprem.ca

5

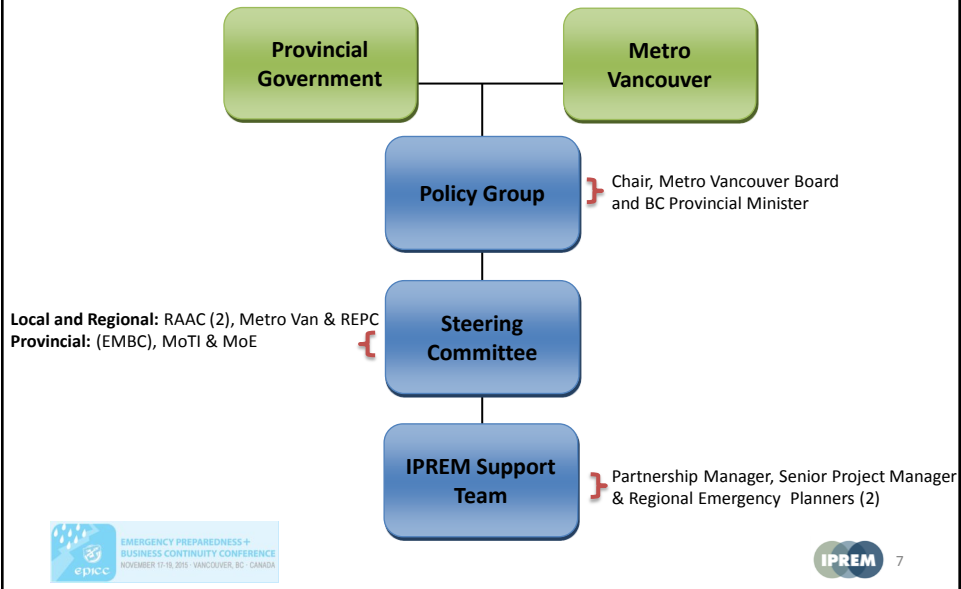
Role in emergency management

Current Role:

- Improve regional emergency management in the Metro Vancouver region through continued and increased provincial and regional cooperation

- To provide sub-regional and regional emergency planning for major events, which are, or have the potential to be, cross jurisdictional in nature

- IPREM **does not** have an operational role during an emergency

Current Projects:

- **Regional Concept of Operations (Model)**

- Regional Emergency Communications Strategy

6

Governance structure

```
Provincial                Metro
Government               Vancouver
```

Policy Group — Chair, Metro Vancouver Board and BC Provincial Minister

Local and Regional: RAAC (2), Metro Van & REPC
Provincial: (EMBC), MoTI & MoE — **Steering Committee**

IPREM Support Team — Partnership Manager, Senior Project Manager & Regional Emergency Planners (2)

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IPREM 7

ALL HAZARD INTEGRATED REGIONAL CONCEPT OF OPERATIONS MODEL

❑ Model overview
❑ Metro Vancouver Regional Emergency Advisory Group
❑ Value to the region

IPREM 8

Definition: Event of Regional Emergency Significance

A major event that has (or has the potential to have) an extraordinary level of risk to lives, property, environment, social and/or economic wellbeing across jurisdictional boundaries in the region, which could require one or more of the following:

- Non routine levels of coordination
- Sharing of situational awareness information
- Joint decision making
- Prioritizing resources
- Allocating resources
- Response by multiple stakeholders
  (agencies and jurisdictions)

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Regional Concept of Operations (Model)

Purpose:
- Collectively agree on how local authorities will share information, collaborate on decisions and coordinate resources during regional emergencies

Background:
- Tabletop Exercise confirmed regional gap in 2012
- Working group established (led by seven Chief Administrative Officers (CAOs))
- Developed and tested Model over three years
- Utilize the Model during the next regional emergency event that involves regional issues or requirement for critical information sharing to be used in a real time emergency event (Approved on Sep 2015)

10

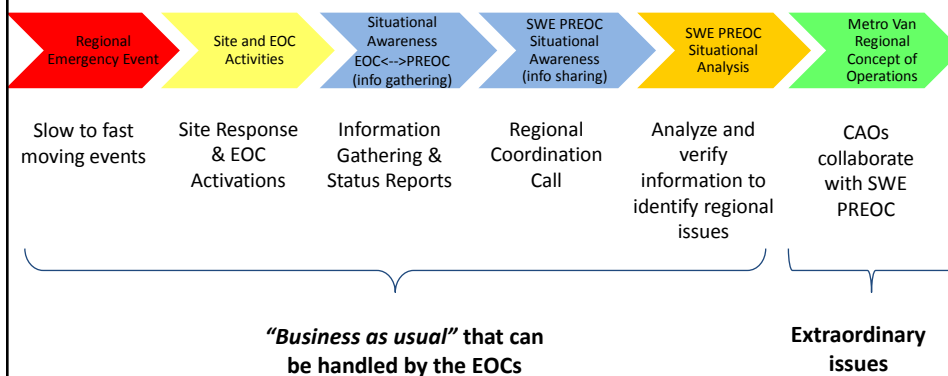# BC Emergency Management Structure
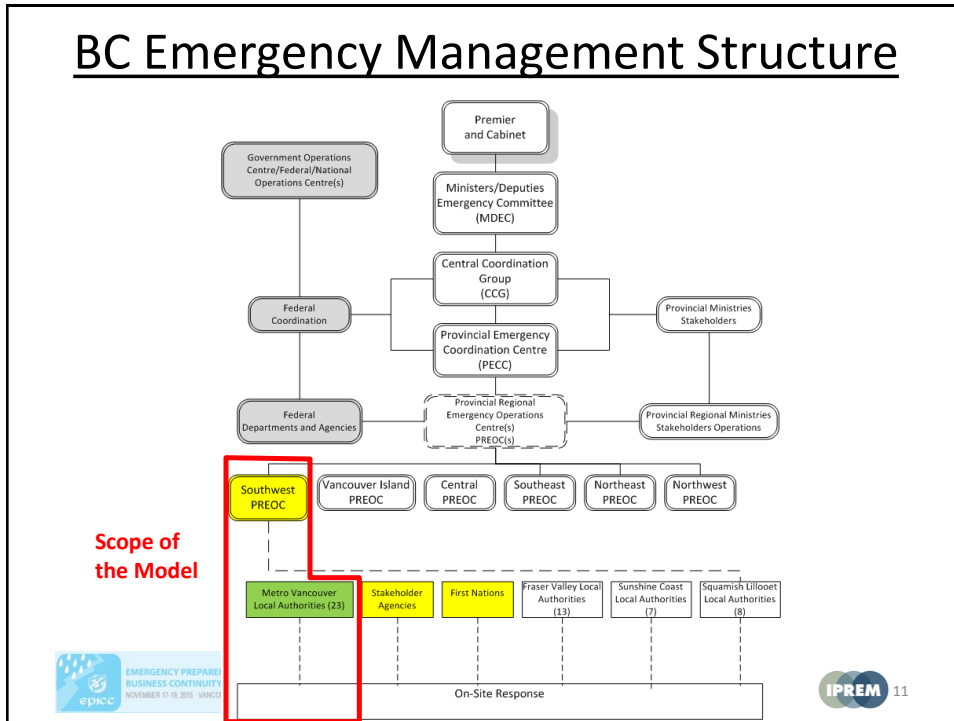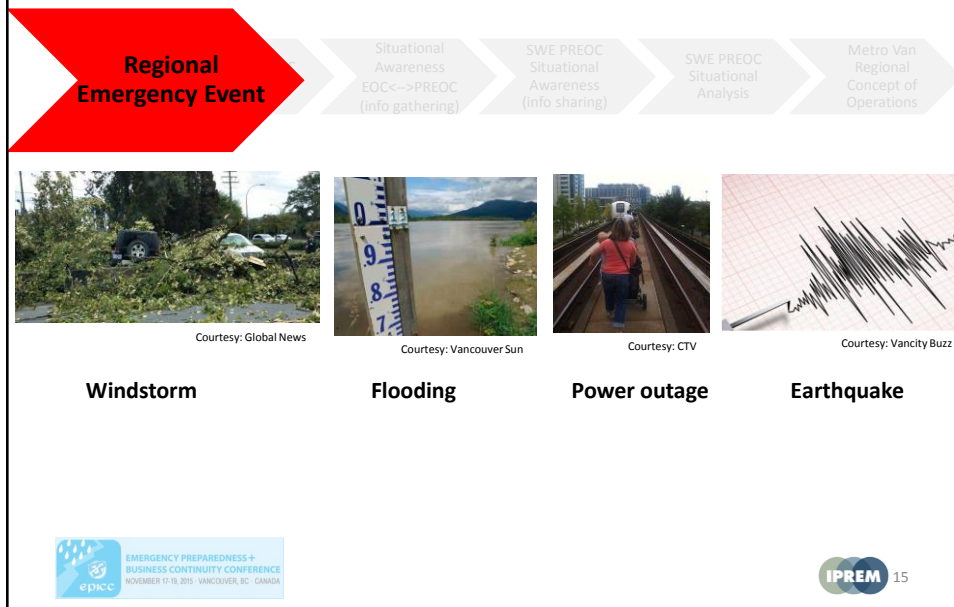

EMBC's South West Region
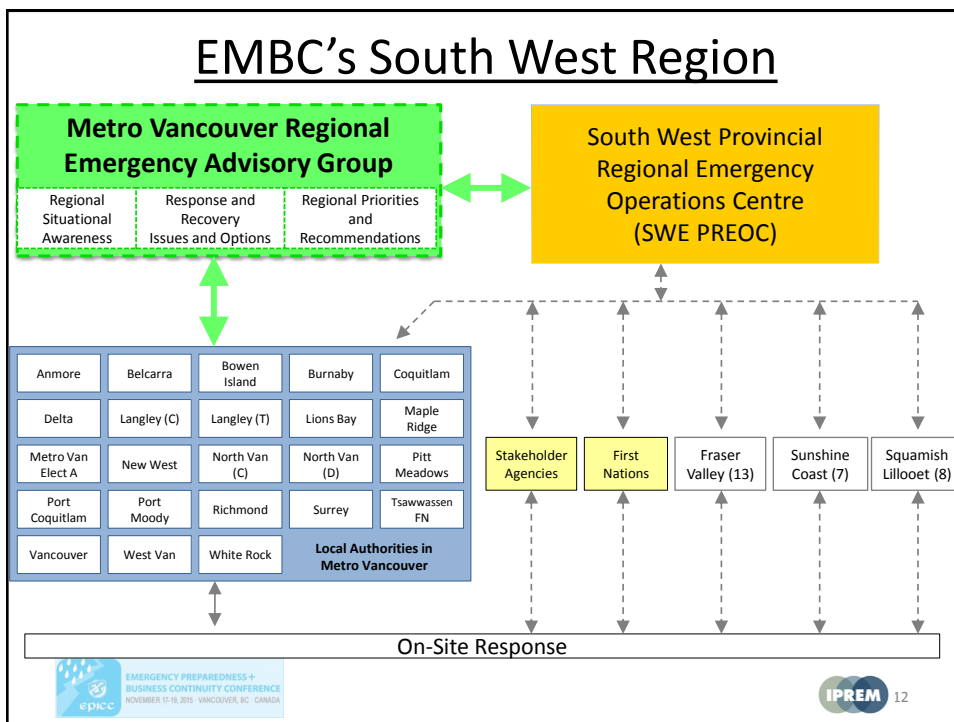
Guiding Principles

1) **Local Authorities maintain autonomy**
2) **Utilize existing structures to achieve regional coordination**
3) Utilize existing resources
4) Pro-active leadership
5) **Scalable, flexible and layered approach**
6) Model(s) focus on process(es) to determine outcomes
7) Local Authorities' commitment
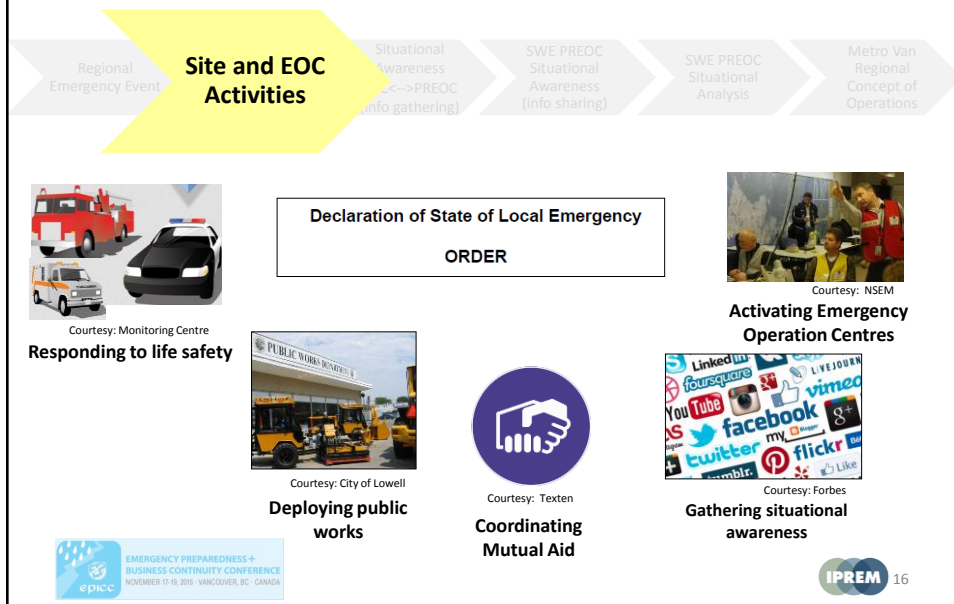8) Collaborative decision making
9) Preparedness, training and exercises

13

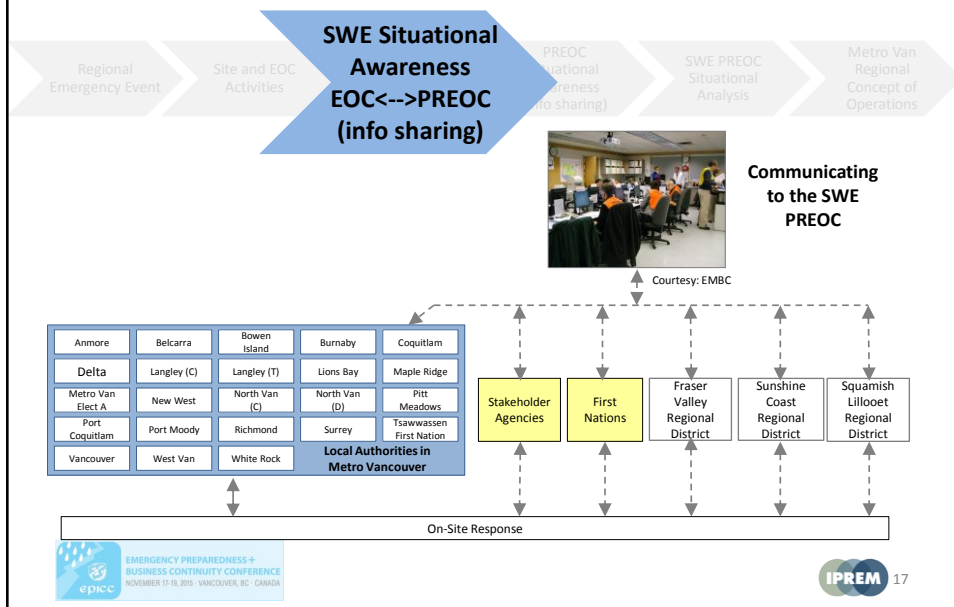# How the Model interfaces with the SWE PREOC

Regional Emergency Event	Site and EOC Activities	Situational Awareness EOC<-->PREOC (info gathering)	SWE PREOC Situational Awareness (info sharing)	SWE PREOC Situational Analysis	Metro Van Regional Concept of Operations
Slow to fast moving events	Site Response & EOC Activations	Information Gathering & Status Reports	Regional Coordination Call	Analyze and verify information to identify regional issues	CAOs collaborate with SWE PREOC

"Business as usual" **that can be handled by the EOCs**

Extraordinary issues

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How the Model interfaces with the SWE PREOC

Regional
Emergency Event

Situational
Awareness
EOC<-->PREOC
(info gathering)

SWE PREOC
Situational
Awareness
(info sharing)

SWE PREOC
Situational
Analysis

Metro Van
Regional
Concept of
Operations

Courtesy: Global News

Courtesy: Vancouver Sun

Courtesy: CTV

Courtesy: Vancity Buzz

Windstorm

Flooding

Power outage

Earthquake

IPREM 15

How the Model interfaces with the SWE PREOC

Regional
Emergency Event

**Site and EOC
Activities**

Situational
Awareness
EOC<-->PREOC
(info gathering)

SWE PREOC
Situational
Awareness
(info sharing)

SWE PREOC
Situational
Analysis

Metro Van
Regional
Concept of
Operations

Declaration of State of Local Emergency

ORDER

Courtesy: NSEM

**Activating Emergency
Operation Centres**

Courtesy: Monitoring Centre

Responding to life safety

Courtesy: City of Lowell

**Deploying public
works**

Courtesy: Texten

**Coordinating
Mutual Aid**

Courtesy: Forbes

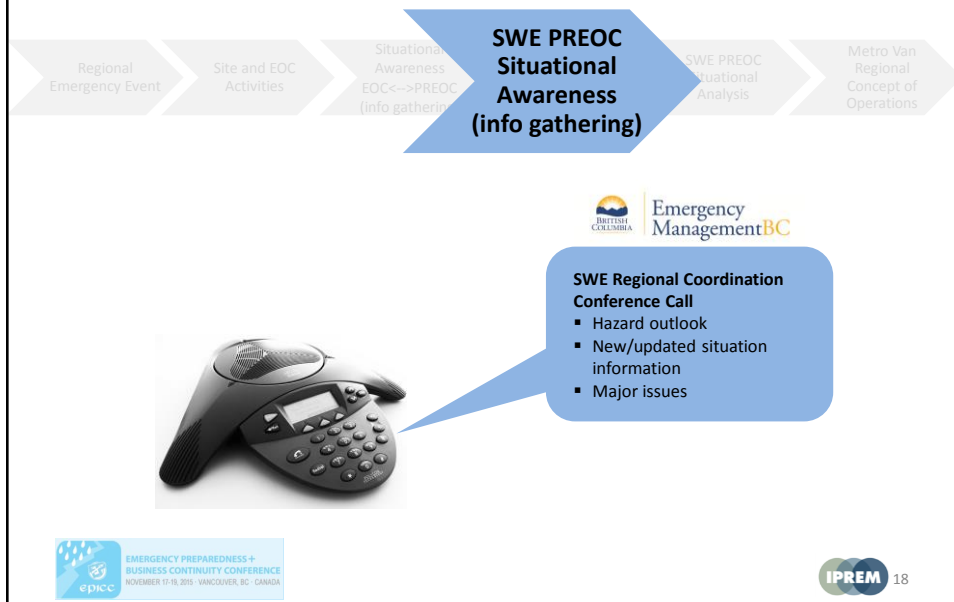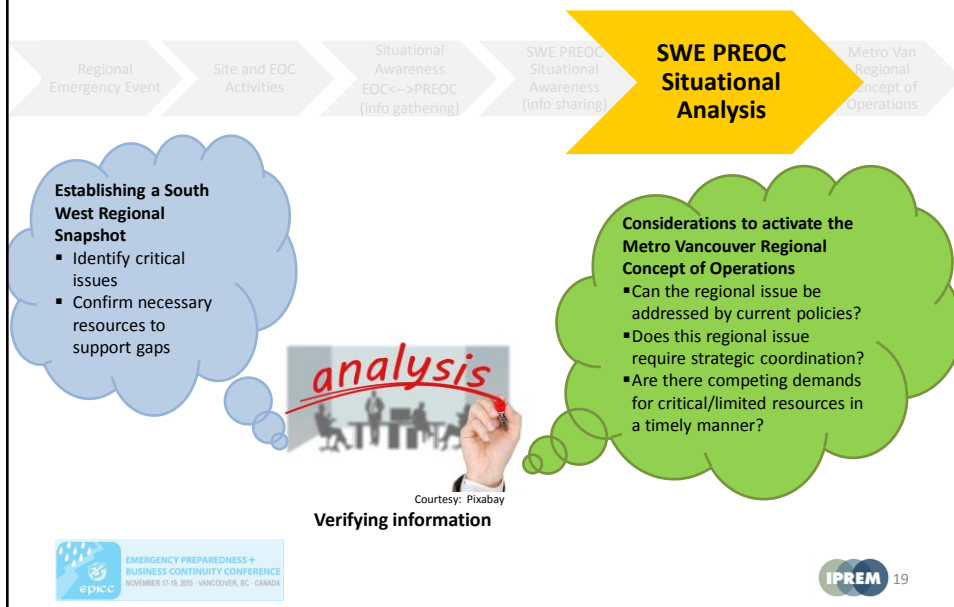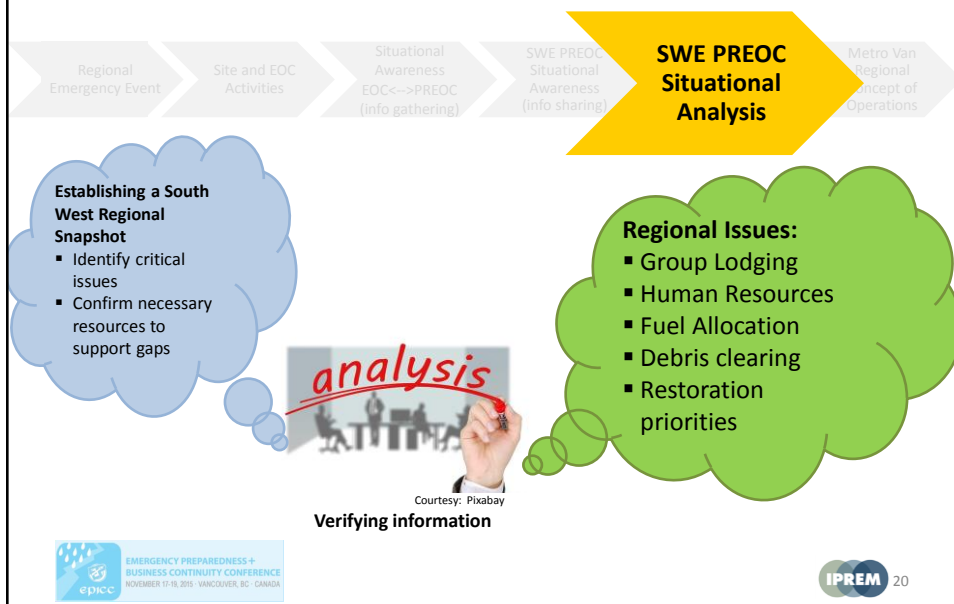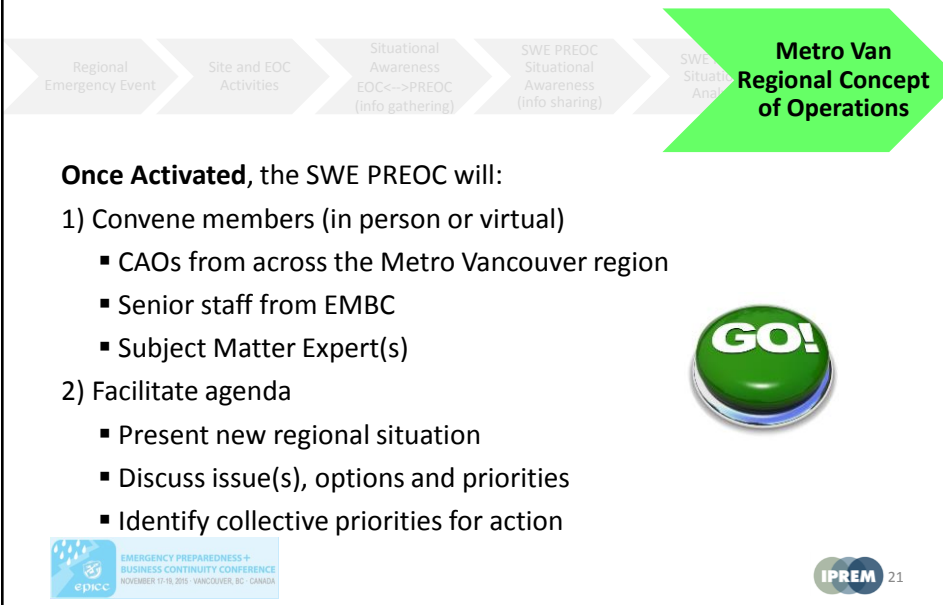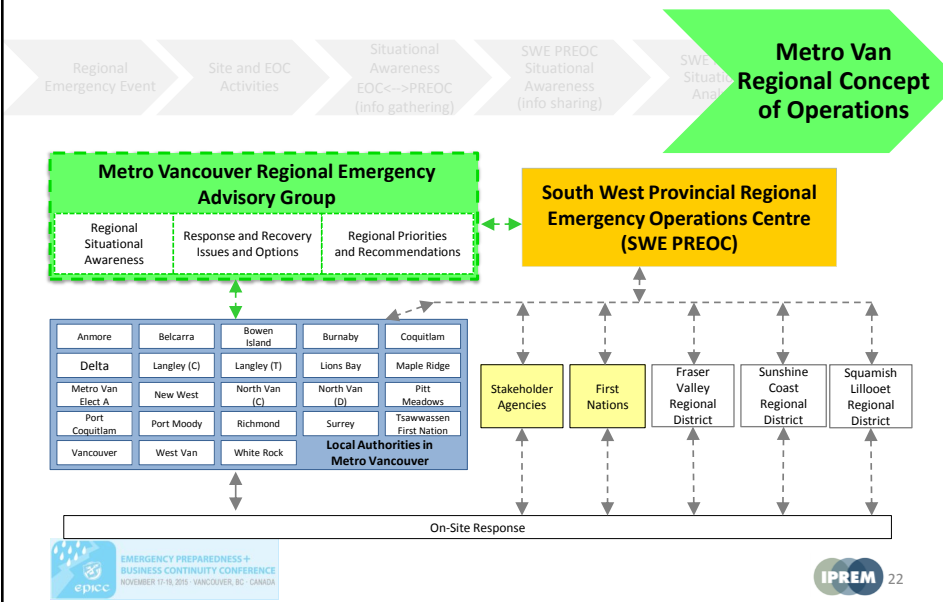**Gathering situational
awareness**

IPREM 16

How the Model interfaces with the SWE PREOC

How the Model interfaces with the SWE PREOC

How the Model interfaces with the SWE PREOC

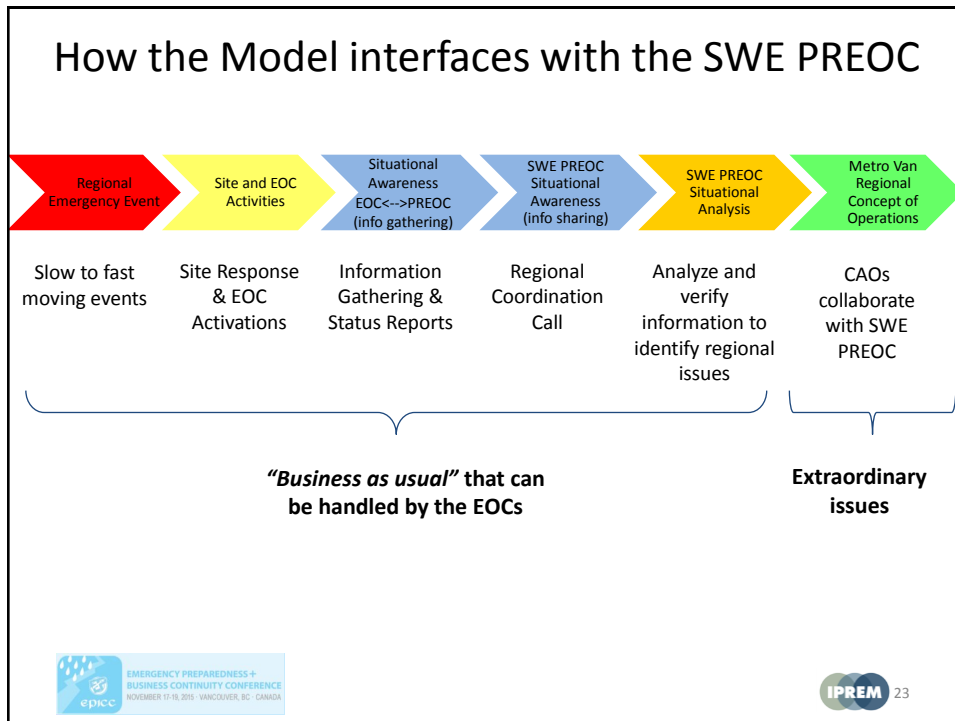| Regional Emergency Event | Site and EOC Activities | Situational Awareness EOC<-->PREOC (info gathering) | SWE PREOC Situational Awareness (info sharing) | SWE Situational Analysis | **Metro Van Regional Concept of Operations** |

Once Activated, the SWE PREOC will:

1) Convene members (in person or virtual)
 - CAOs from across the Metro Vancouver region
 - Senior staff from EMBC
 - Subject Matter Expert(s)

2) Facilitate agenda
 - Present new regional situation
 - Discuss issue(s), options and priorities
 - Identify collective priorities for action

GO!

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How the Model interfaces with the SWE PREOC

| Regional Emergency Event | Site and EOC Activities | Situational Awareness EOC<-->PREOC (info gathering) | SWE PREOC Situational Awareness (info sharing) | SWE Situational Analysis | **Metro Van Regional Concept of Operations** |

Metro Vancouver Regional Emergency Advisory Group

| Regional Situational Awareness | Response and Recovery Issues and Options | Regional Priorities and Recommendations |

South West Provincial Regional Emergency Operations Centre (SWE PREOC)

Anmore	Belcarra	Bowen Island	Burnaby	Coquitlam
Delta	Langley (C)	Langley (T)	Lions Bay	Maple Ridge
Metro Van Elect A	New West	North Van (C)	North Van (D)	Pitt Meadows
Port Coquitlam	Port Moody	Richmond	Surrey	Tsawwassen First Nation
Vancouver	West Van	White Rock		

Local Authorities in Metro Vancouver

Stakeholder Agencies | First Nations | Fraser Valley Regional District | Sunshine Coast Regional District | Squamish Lillooet Regional District

On-Site Response

22

11

How the Model interfaces with the SWE PREOC

Regional Emergency Event	Site and EOC Activities	Situational Awareness EOC<-->PREOC (info gathering)	SWE PREOC Situational Awareness (info sharing)	SWE PREOC Situational Analysis	Metro Van Regional Concept of Operations
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"Business as usual" that can be handled by the EOCs

Extraordinary issues

23

Context on the Model

What is the model?

- Collectively agree on how local authorities will share information, collaborate on decisions and coordinate resources during regional emergencies

Why is it needed and __only focused__ in the Metro Van region?

- Absence of a regional voice in the province`s decision making process (identified by the CAOs within Metro Vancouver region)
- IPREM's MOU outlines member municipalities within the Metro Vancouver

Who are the members?

- Metro Van Regional Emergency Advisory Group (23 CAOs and EMBC Senior staff, and Subject Matter Experts as required) – **Not "*their EOC Director hats*"**

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Context on the Model

When does it get activated?

- Event crosses or has the potential to cross jurisdictional boundaries
- Event can have a negative impact or heightened risk to other jurisdictions
- Competing demands for critical/limited resources in a timely manner
- Can be activated by either CAO(s) or SWE PREOC

Where do the outcomes from this model go to?

- Input into the SWE PREOC decision making process

How will members convene?

- In person, virtual or a combination of both

Value of the Model

- Enhanced CAO engagement in emergency management
- Learning about regional capabilities and capacity—highlighting regional gaps
- Identification of regional issues and working towards established policies
- Regional collaboration and coordination – effective and efficient decision making

2015-12-04

Closing

IPREM:

- Planning arm for regional emergency management for the Metro Vancouver region
- Partnership between the Province of BC and Metro Vancouver

Regional Concept of Operations:

- First model in BC (potentially nationally)
- Established Metro Van REAG (CAOs and Senior EMBC staff)
- Flexible to meet in person or participate virtually
- Address regional issues that are extraordinary
- Model is ready to be used

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Questions?

Project: Regional
Concept of Operations

Clarence Lai

Senior Project Manager

E: Clarence.Lai@gov.bc.ca

T: (604) 586-4341

*Is Interoperability the Elusive Unicorn
of Emergency Communications?*

Presenter: Chad Pacholik

Interoperability: an elusive unicorn?

What is interoperability?

Is the ability of a system or a product to work with other systems or products without special effort on the part of the customer.

31

What is interoperability?

The ability of emergency personnel to communicate between jurisdictions, disciplines, and levels of government, using a variety of systems, as needed and as authorized.

(Communications Interoperability Strategy for Canada)

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Communication

Crisis Communication

Vs.

Emergency Communication

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IPREM

Sender   Receiver

Audience

- Can be internal and external
- Different information needs at various levels of an organization

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IPREM 34

Means of Transmission

A pipeline between the sender and receiver

How will communication occur?

- In person
- By email
- By phone
- By radio

35

Control mechanisms

Procedures
- When to send? who to send to?
- When to receive? who to receive from?
- Templates
- Software

Training/Exercise
- Familiarity
- Understanding
- Practice

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Network Architecture
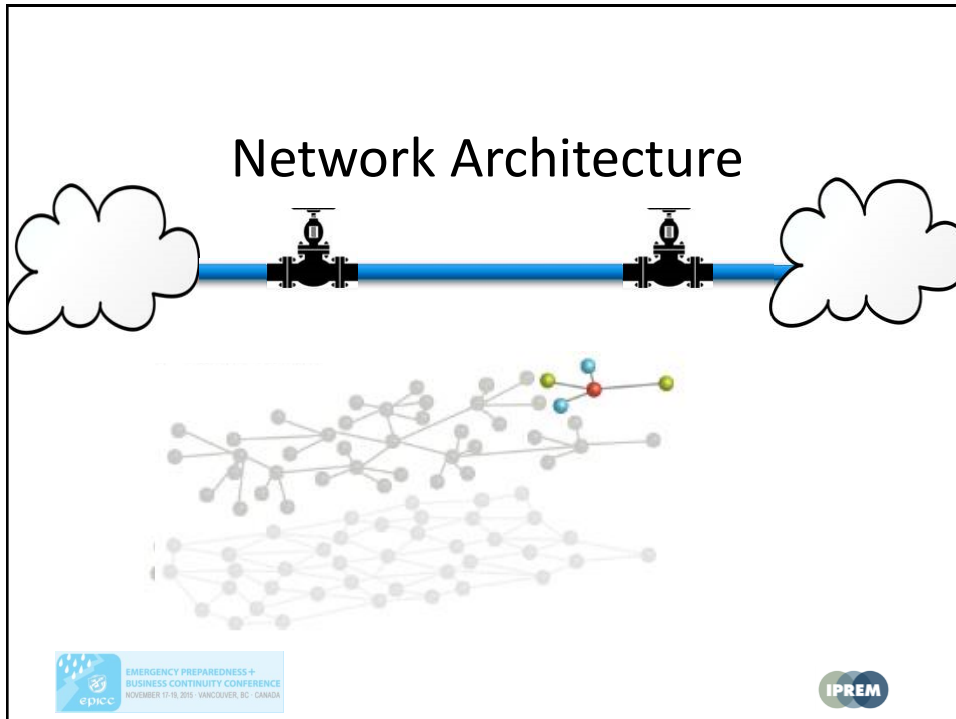
Message

- **What** are we sending?
- **What** are we receiving?
- **What** level of detail is required?

Why?

What's in a message?

Data	Information
• "Raw facts" • W5 questions	• Analysis of "raw facts" • So What?
Example	Example
• Number of people evacuated	• Percentage of the population • Capacity to support evacuees

IPREM 39

Critical Information Requirements

- What data do you need?
- What information do you need?
- What level of detail is required
- Why is it being sent?
- How will it be used?

IPREM 40

Communication: Coming and Going

Collection plan

- Where will you get your data/information from?
- Confirm their expectations
- Confirm their ability to provide that information

Distribution plan

- Where will you send data/information to?
- Confirm expectations
- Confirm your ability to provide that information
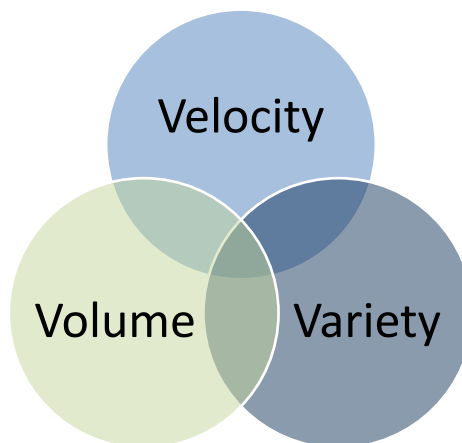
41

Problems with Data

- Void

42

Problems with Data

- Tsunami

Problems with Data

Velocity

Volume   Variety

Challenges

- Unclear information needs
- Differing expectations
- Information Tsunami (Velocity, Volume and Variety)

- Chicken and Egg quandaries
- Organizational Culture(s)

- Focus on technology
- Focus on Governance
- Fear of large capital expenses

IPREM 45

(A selection of) Successes

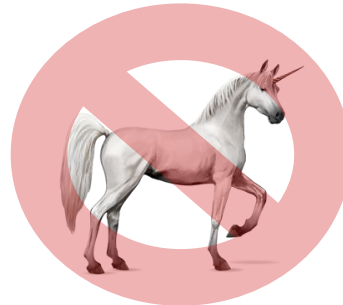|	
Ontario Interoperability Task Group:	OASIS tool
California EMO:	Incident Rating Matrix
Puget Sound Region:	Situational Status and Medical Surge Support Tool
Digital Humanitarian Network:	Decision Makers Needs
E-Comm:	Combined Events Channels
IPREM:	Regional Emergency Communications Strategy

IPREM 46

Is Interoperability an Elusive Unicorn?

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"The true goals of interoperability are shared information and ultimately shared understanding."

"The importance of interoperability is not at the connectivity of systems... rather, its importance is manifested at the information and cognitive levels."

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What can you do?

- Set goals
  - What capacities do you want to have?
  - By when?

- Build time into your work plan for emergency communications/interoperability
  - It will never get done if you do not allocate time for it

- Define your Critical Information Requirements
  - Identify and confirm the sources of your CIRs
  - Identify what level of detail is required by you and of you

- Train and Educate yourself and your staff
  - If you don't use it you lose it!

IPREM 49

Questions?

Project: Regional Communications Strategy

Clarence Lai

Senior Project Manager

E: Clarence.Lai@gov.bc.ca

T: (604) 586-4341

IPREM