

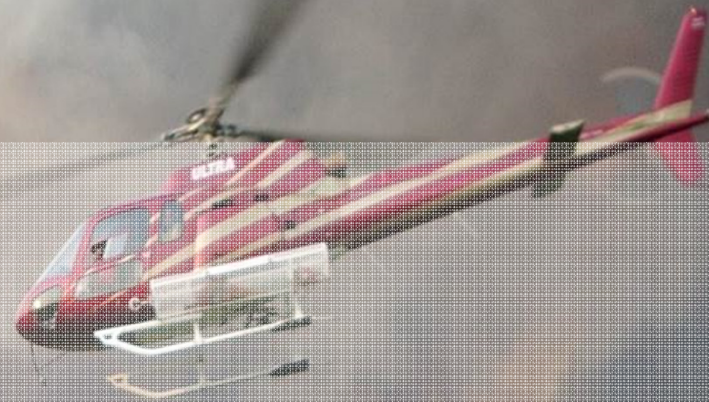
Taming the Beast

Fort McMurray Wildfire

AER and AEMA

Presentation to the Government of Northwest Territories

March 16, 2017



Agenda

- 》 Video - [2016 YMM Strong](#)
- 》 Fort McMurray
 - Setting the stage
- 》 Introduction
 - AER
 - AEMA
- 》 Timeline
- 》 Lessons learned



RMWB

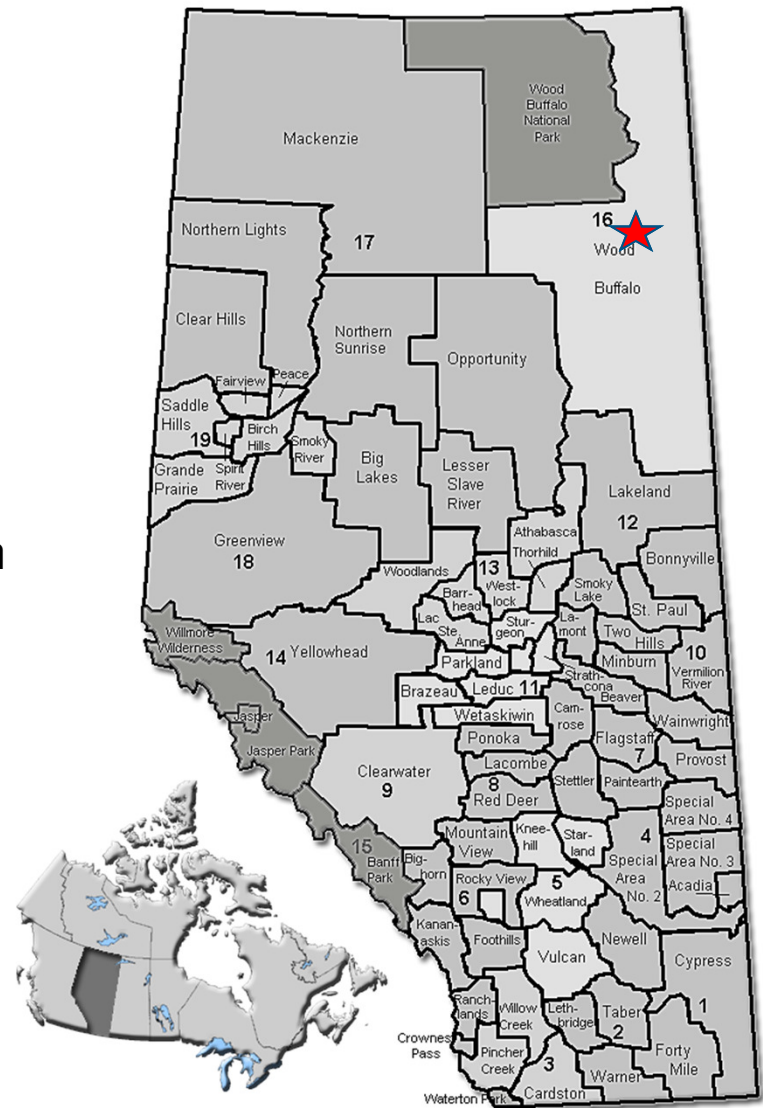
66 361 km²

geographic area

430 km

NE of Edmonton

**Fur,
Transportation,
Salt & Oil**



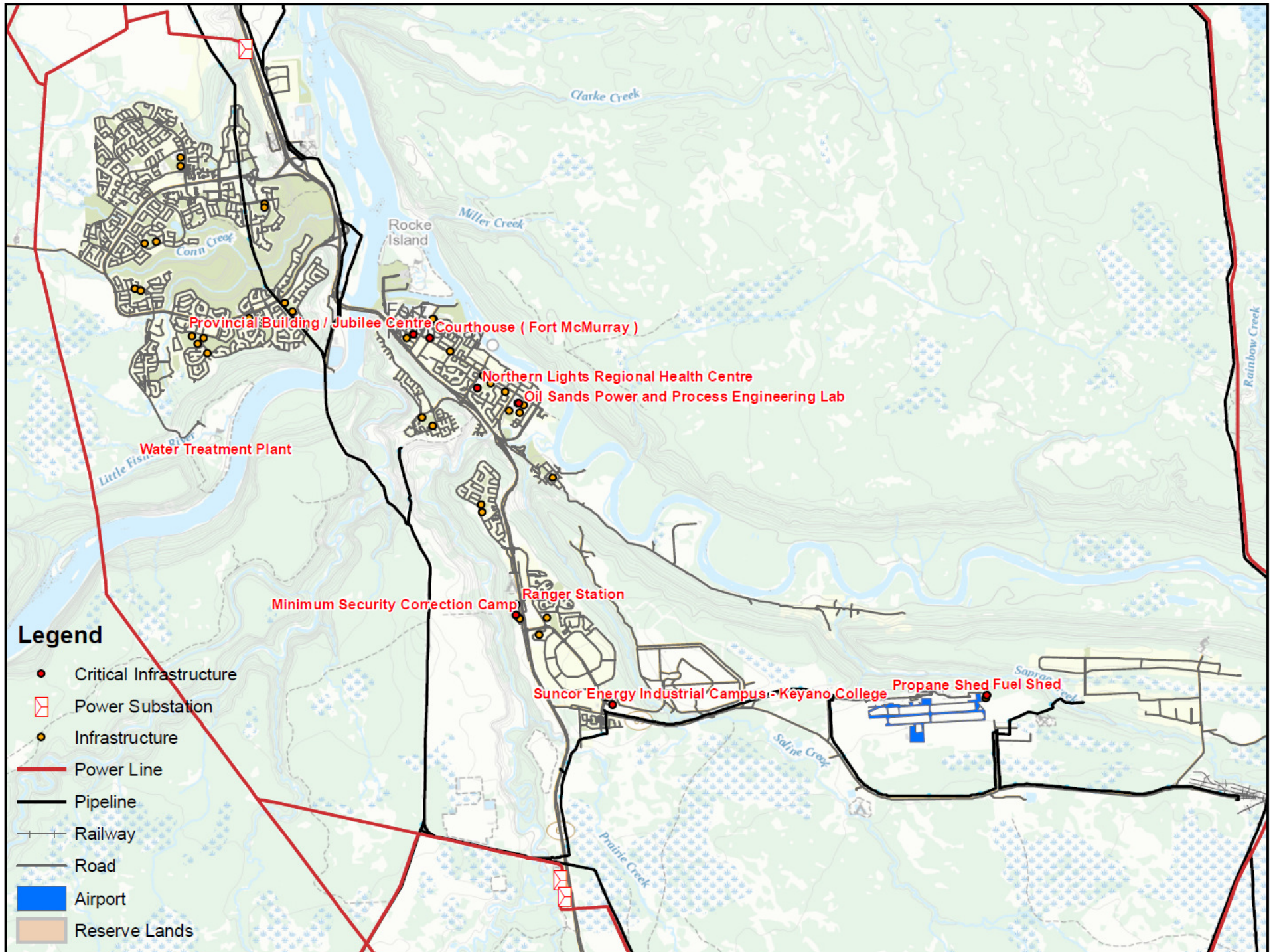
Rural Municipality of Wood Buffalo



<http://www.rmwb.ca/living/Communities.htm>







One province. One regulator.



AER Mandate

- » The Alberta Energy Regulator ensures the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle. This includes allocating and conserving water resources, managing public lands, and protecting the environment while providing economic benefits for all.

AER Vision

- » The Alberta Energy Regulator is recognized for regulatory excellence, ensuring the safe, environmentally responsible development of energy resources for the benefit of all Albertans.

Full Lifecycle

- » The AER oversees all oil and gas, oil sands, and coal development throughout the entire life cycle:
 - From initial exploration, to operation, through to closure including reclamation and remediation.

The AER Regulates:

MORE
THAN
50

thermal/enhanced
in situ projects

9

oil sands
mines

5

bitumen
upgraders

4

coal processing
plants



7

producing
coal mines

OVER 200 AND 13

primary/enhanced
recovery projects
(in situ)

experimental
projects



OVER 431 000

kilometres of pipelines

797

gas processing plants



OVER 174 000

operating natural gas and oil wells

MORE THAN 30 000 AND CLOSE TO 21 000

oil facilities

gas facilities

The Alberta Emergency Management Agency (AEMA)



Alberta 
Government

Alberta  Alberta Emergency
Management Agency



Threats

» Major

- Summer storms
- Petro-Chemical
- Public Health
- Flooding
- Tornadoes
- Fires
- Cyber Attacks
- Terrorism
- Earthquakes

» Minor

- Public order
- Flash flooding



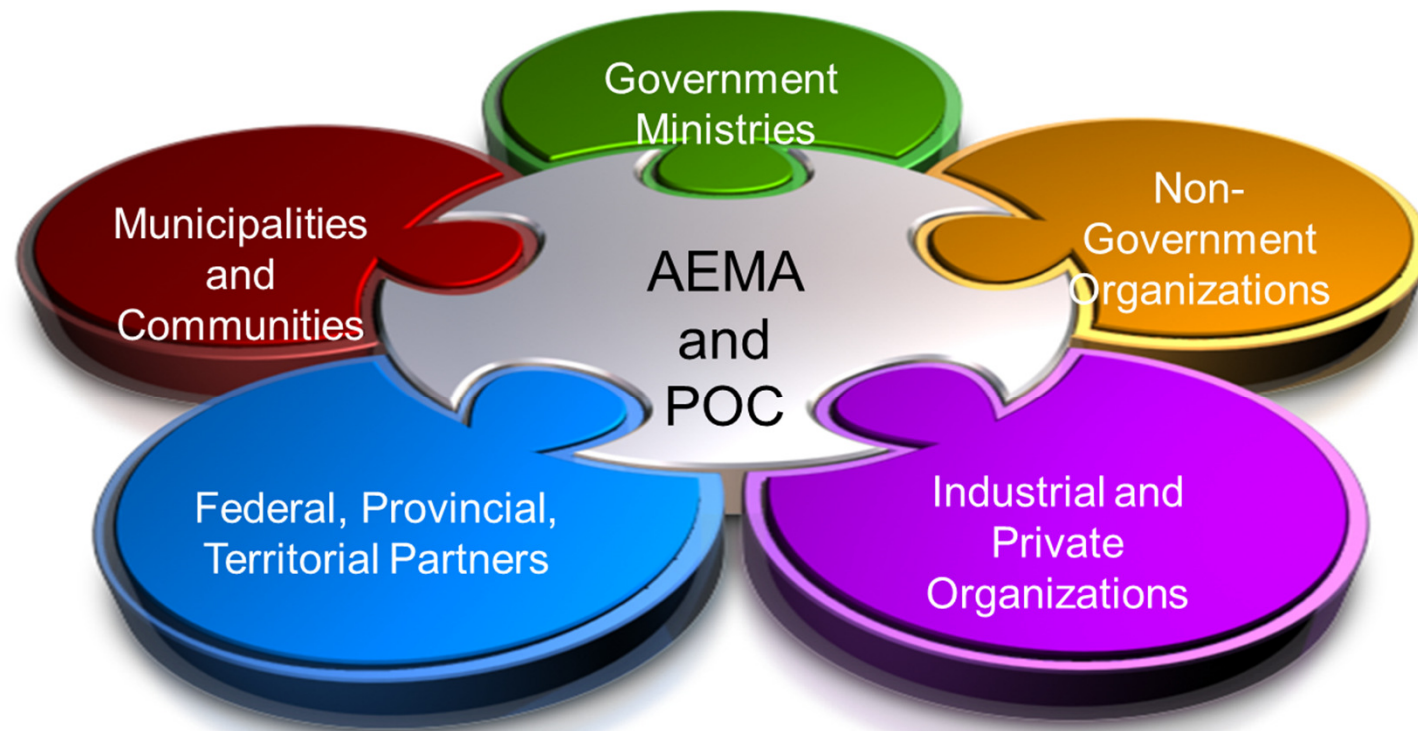
Response Protocols

- » Local authority or select industry manages the response
- » Government of Alberta (GOA) is responsible:
 - Wildfires
 - Health-related emergency
 - Counter- terrorism incident
 - When the situation has the potential to, or is, disrupting community functioning

AB Emergency Management System

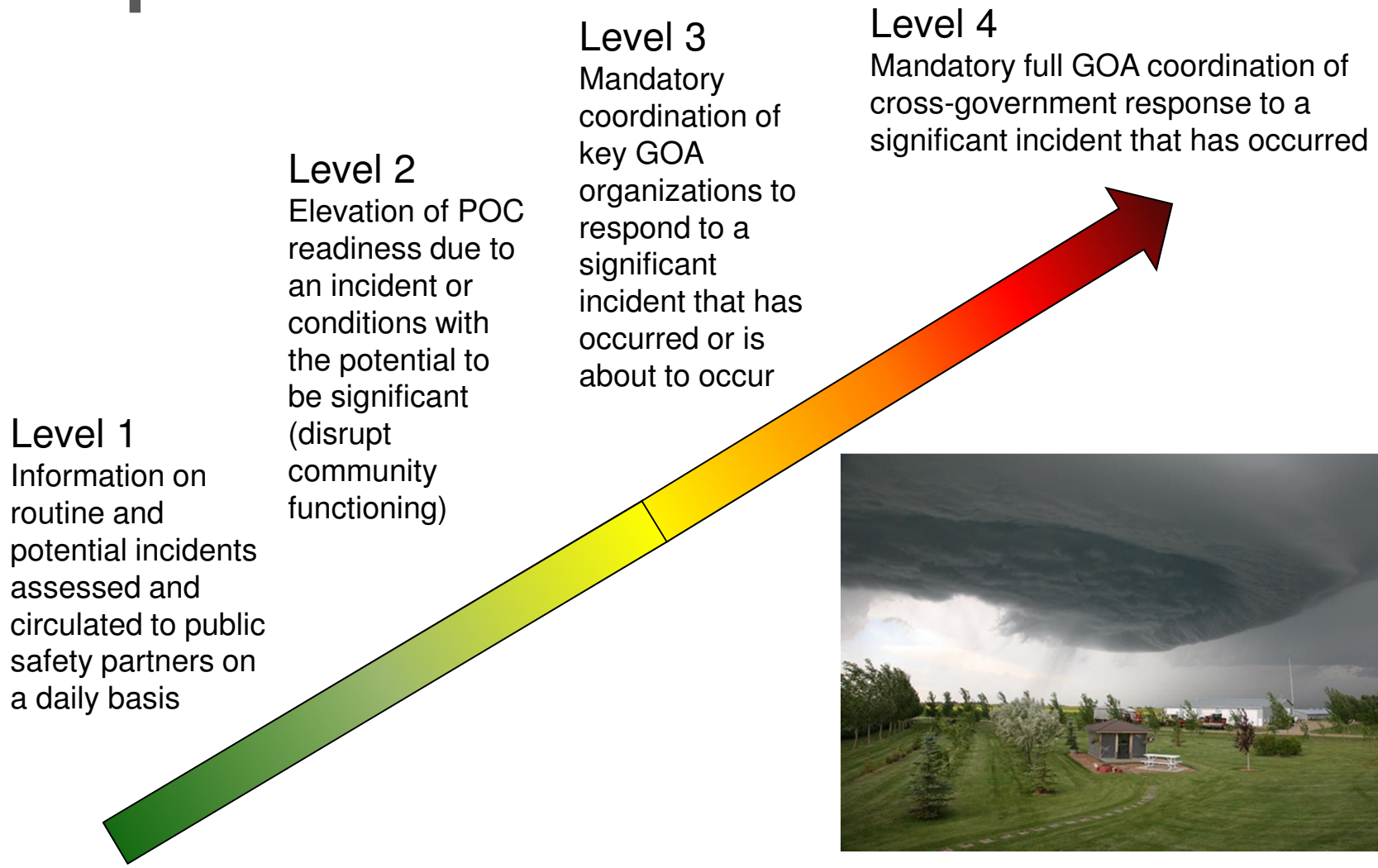
- » Lead Agency
- » Support Agency
- » Coordinating Agency
 - AEMA – Provincial
 - Public Safety Canada - Federal

Alberta Emergency Management Agency (AEMA)



Provincial Operations Centre

Operational Levels



Whole of Society Response

- › AER
- › Public Safety Canada
- › RCMP
- › Department of National Defence (DND)
- › Environment and Climate Change Canada
- › Indigenous and Northern Affairs Canada (INAC)
- › Public Health Agency of Canada (PHAC)
- › Service Canada (SC)
- › Immigration, Refugees and Citizenship
- › Oil & Gas Industry Partners
- › Municipality/Community
- › NGO Organizations
- › Canadian Red Cross
- › ATCO Gas and Electric
- › Retail Council of Canada
- › Public Works Association
- › West Jet & Northern Air
- › Post Secondary Institutions
- › Canada Revenue Agency
- › NAV Canada
- › Service Industry
- › Social Media

Involvement in FMM Response

» AER's role

- Regional Emergency Operations Centre (REOC)
- Emergency Coordination Centre (ECC)
- Provincial Operations Centre (POC)

» Experiences from FMM wildfire

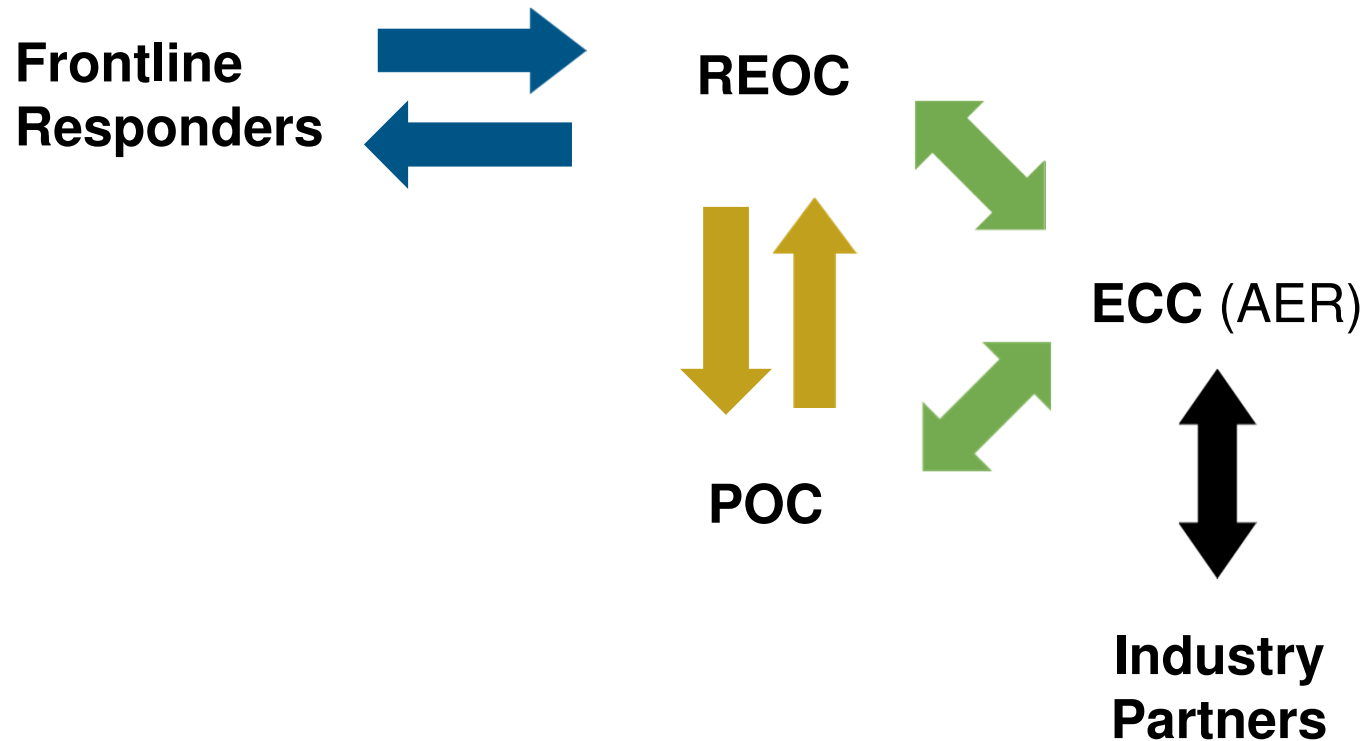


REOC

Regional Emergency Operations Centre

- » Local level master coordination and control point for an emergency/disaster response.
 - Responsible for immediate prevention, preparedness, response, and recovery activities.

AER Communication Pathways



REOC War Room



AER REOC Experience







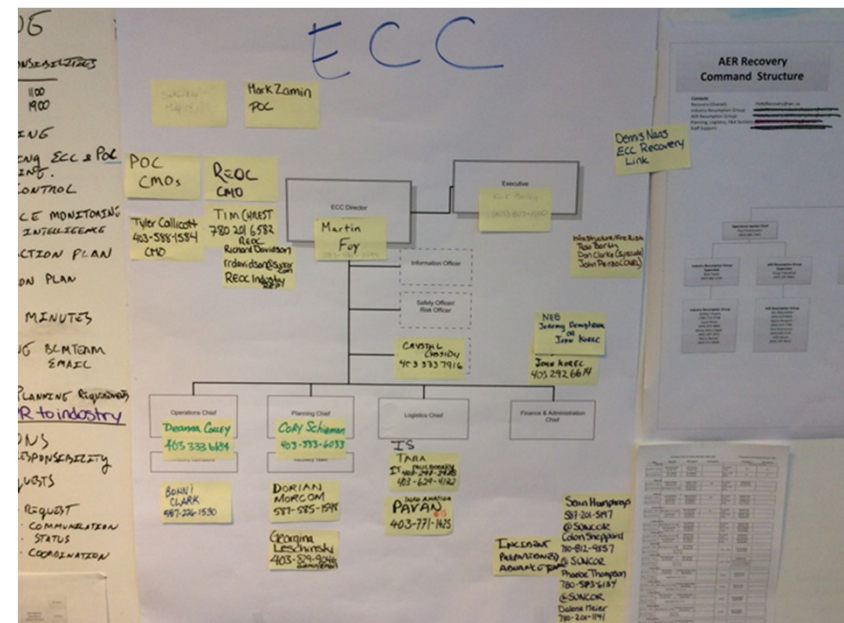




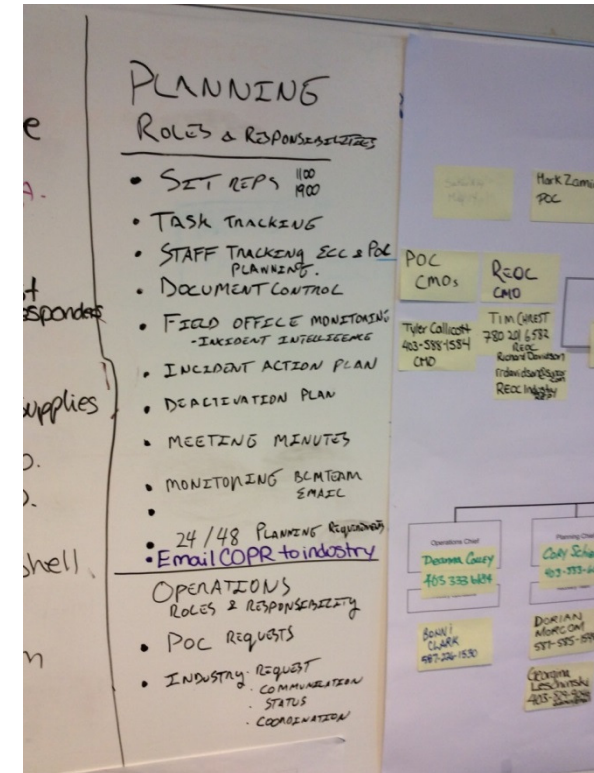


AER - Emergency Coordination Centre

- » Follows ICS model
- » Support the incident
 - » Coordinate incident resource requirements
 - » Facilitate communication
- » Increase effectiveness of AER's response



ECC Operations



AER's role at the POC

- » Provide details for internal/external briefings
- » Link between Province and industry
- » Provide maps and asset details
- » Messages for media

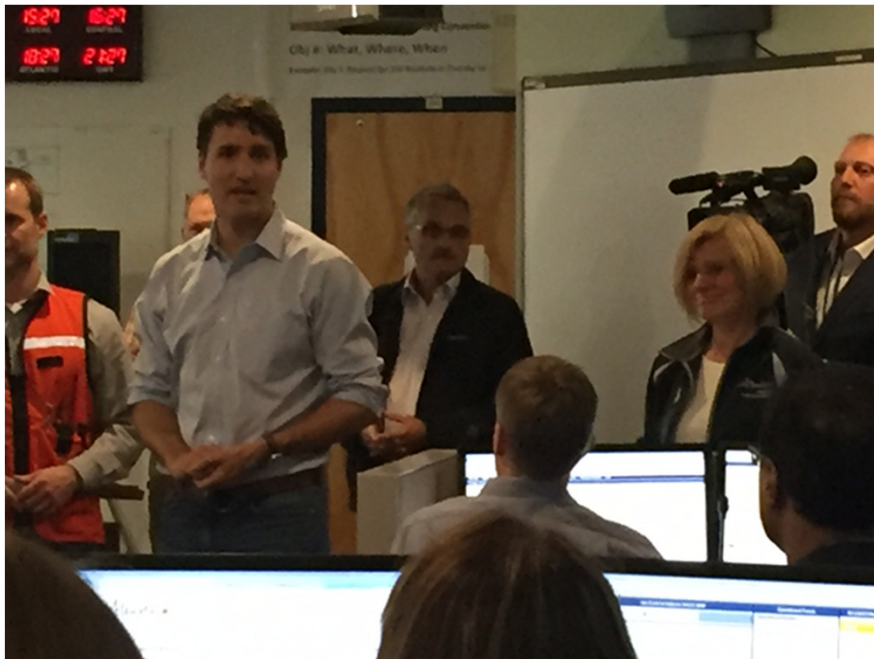
AER's role at the POC

- » Provide timely updates
- » Ensure follow up is completed
- » Chair/attend meetings/calls with industry
- » Debrief shift change

Information Sharing

Company	Evacuated Yesterday	Evacuation Planned Today	Remaining Evacuees	Notes
Suncor	2368	3676	2477	
Shell	3044	300		<ul style="list-style-type: none"> • 1800 capacity
IOL/Esso	110	200	0	
CNRL	640	630	400	
Syncrude	600	200	1160	<ul style="list-style-type: none"> • 1160 remain while safe • 200 non-essential

At the POC



At the POC



Some of the AER team

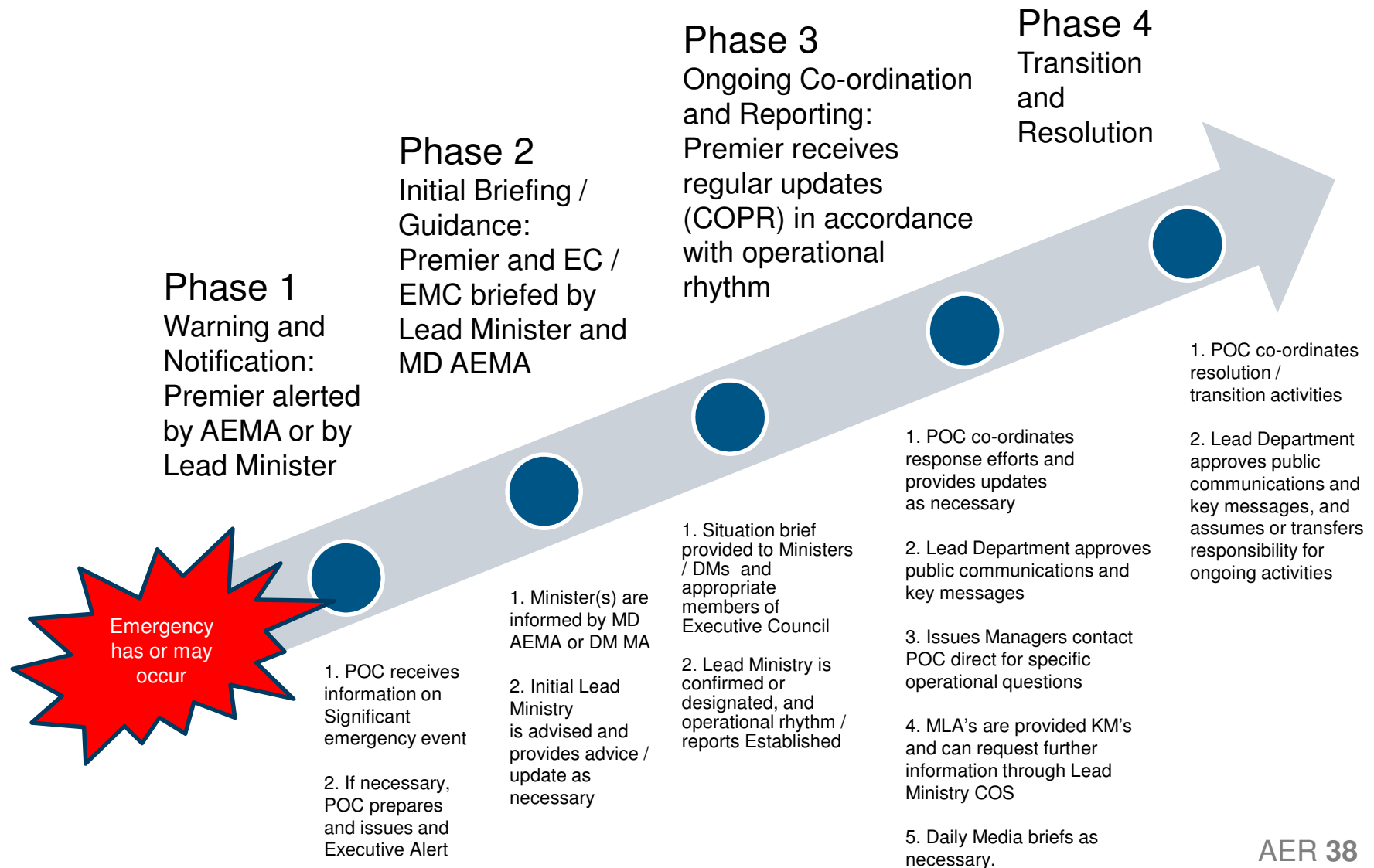


MIC Trailer



Location for daily
conference calls

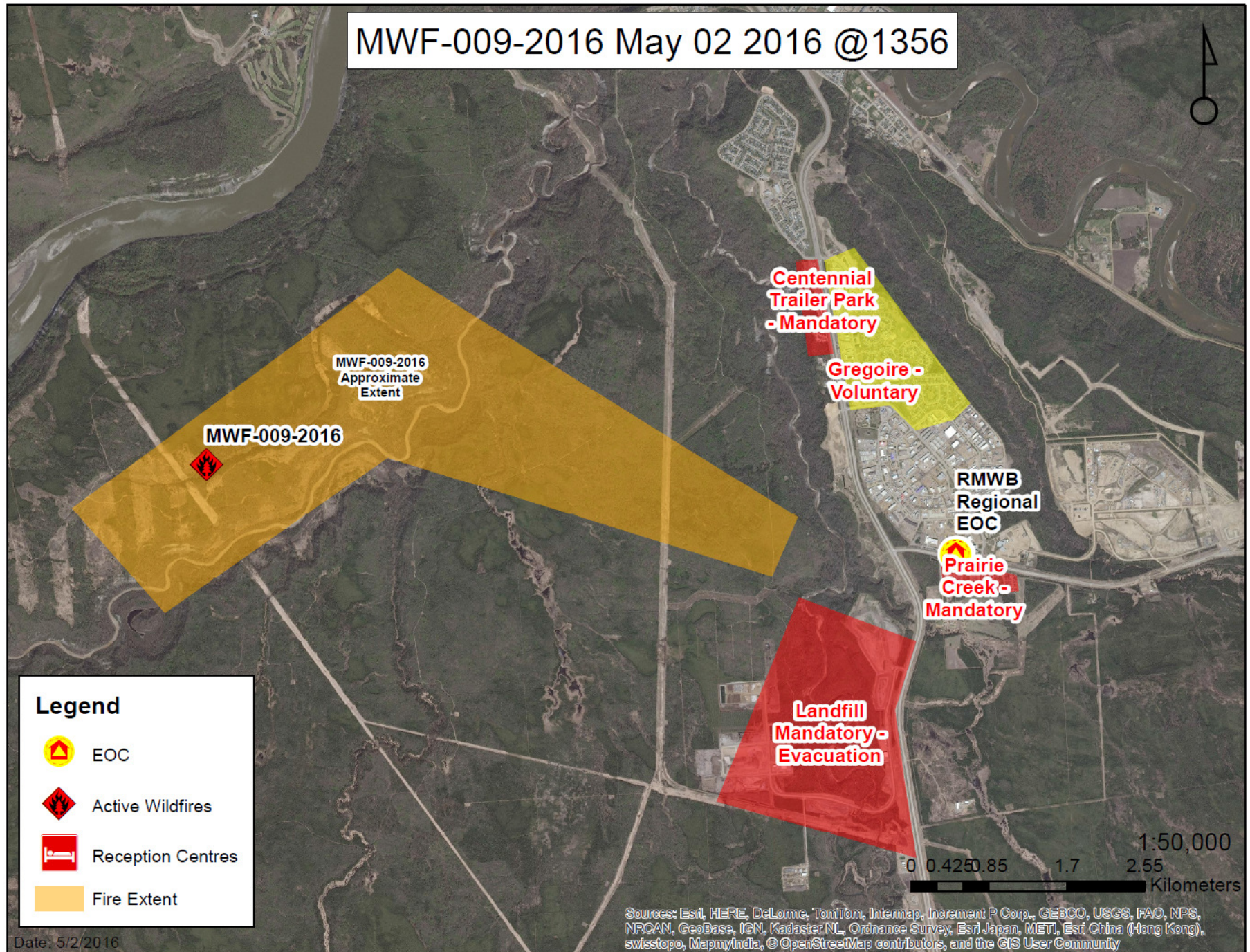
Response Flowchart



Timeline Fort McMurray Wildfire



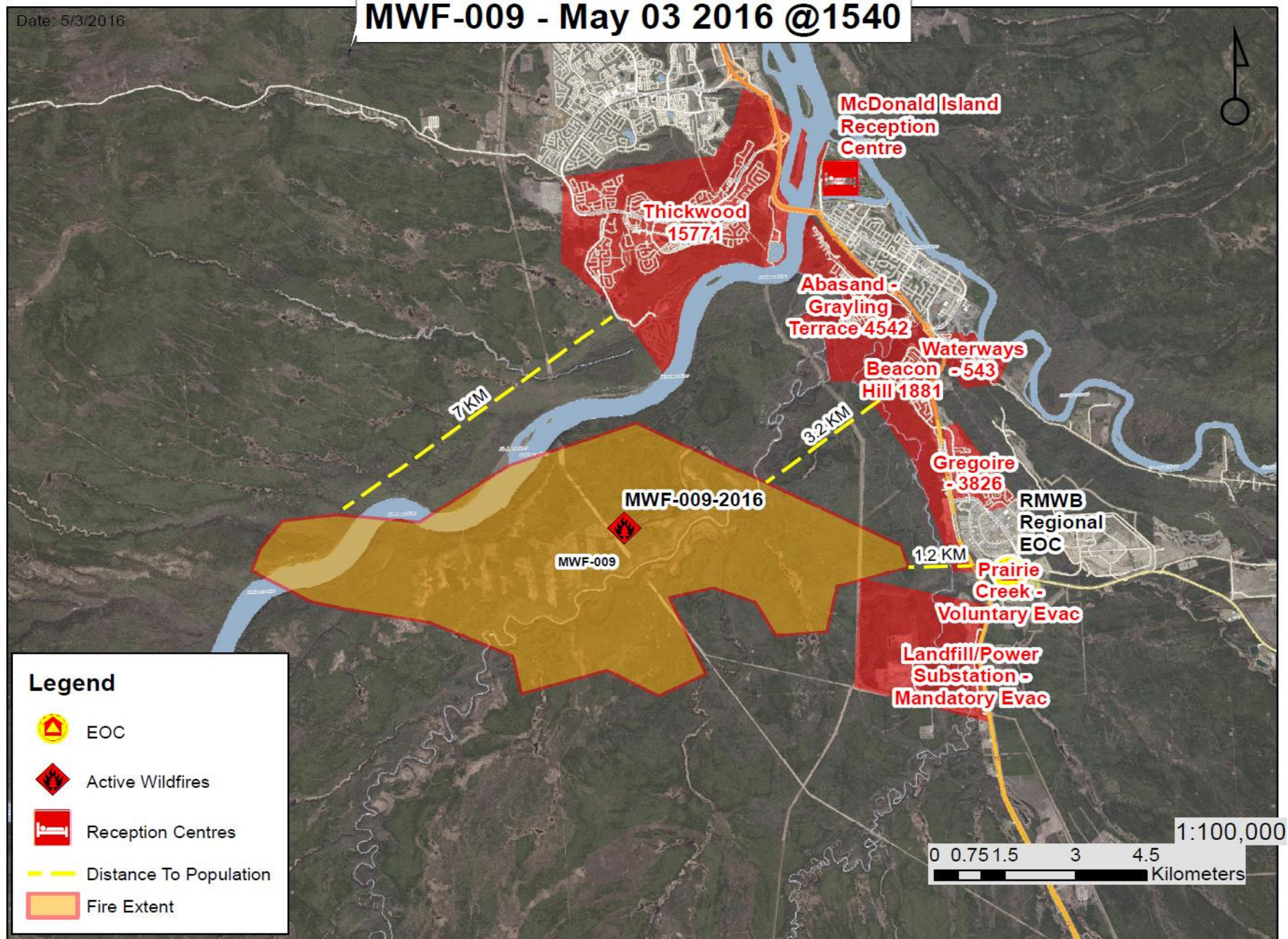
MWF-009-2016 May 02 2016 @1356



Date: 5/2/2016

Date: 5/3/2016

MWF-009 - May 03 2016 @1540



Tuesday May 3rd, 2016 - Noon





POC Concept of Operations

》 Phase 1 – Response – **People Safe**

- Priority 1 – Fight/Control Fire
- Priority 2 - Support Evacuations

》 Phase 2 – Stabilization/Re-entry – **People “Home”**

- Priority 1 – Make communities safe
- Priority 2 – Safe and expeditious returns

POC Concept of Operations

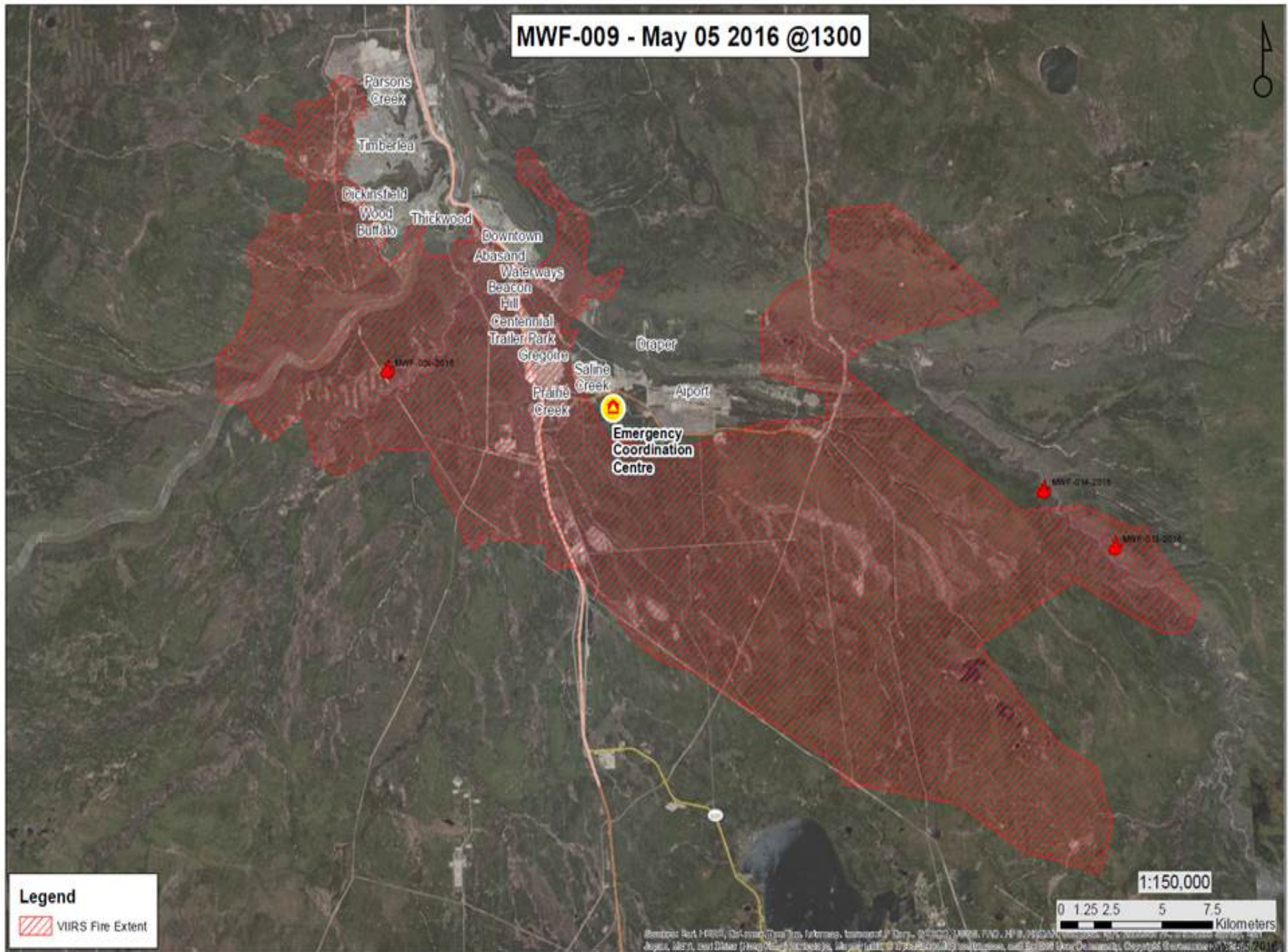
» Phase 3 – Short Term Recovery – **Community Functioning**

- Priority 1 – Community life support
- Priority 2 – Medium term Interim accommodations

» Phase 4 – Medium Term Recovery – **Community Rebuilt**

- Recovery Task Force

MWF-009 - May 05 2016 @1300



Legend

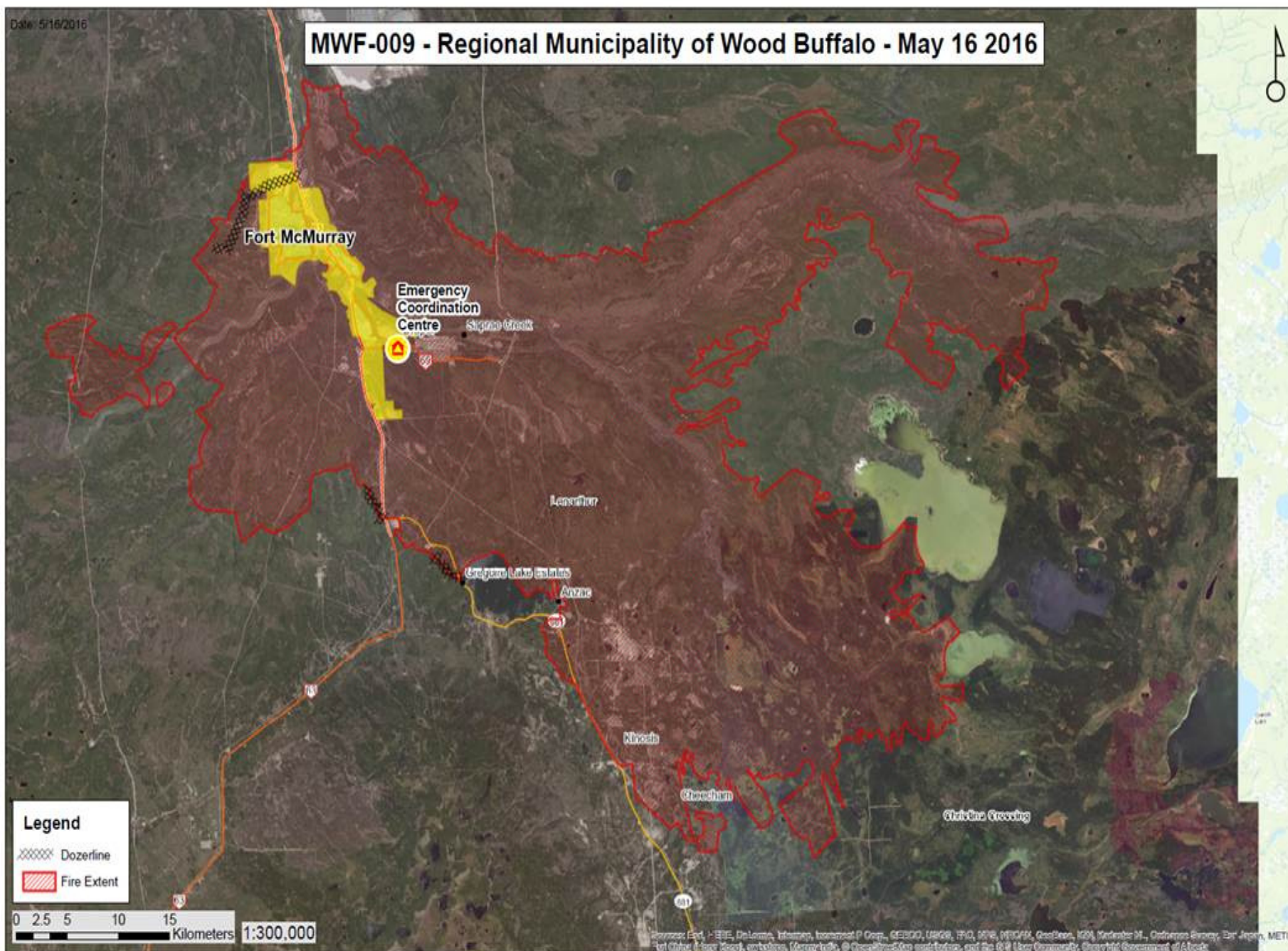
 VIIRS Fire Extent

1:150,000

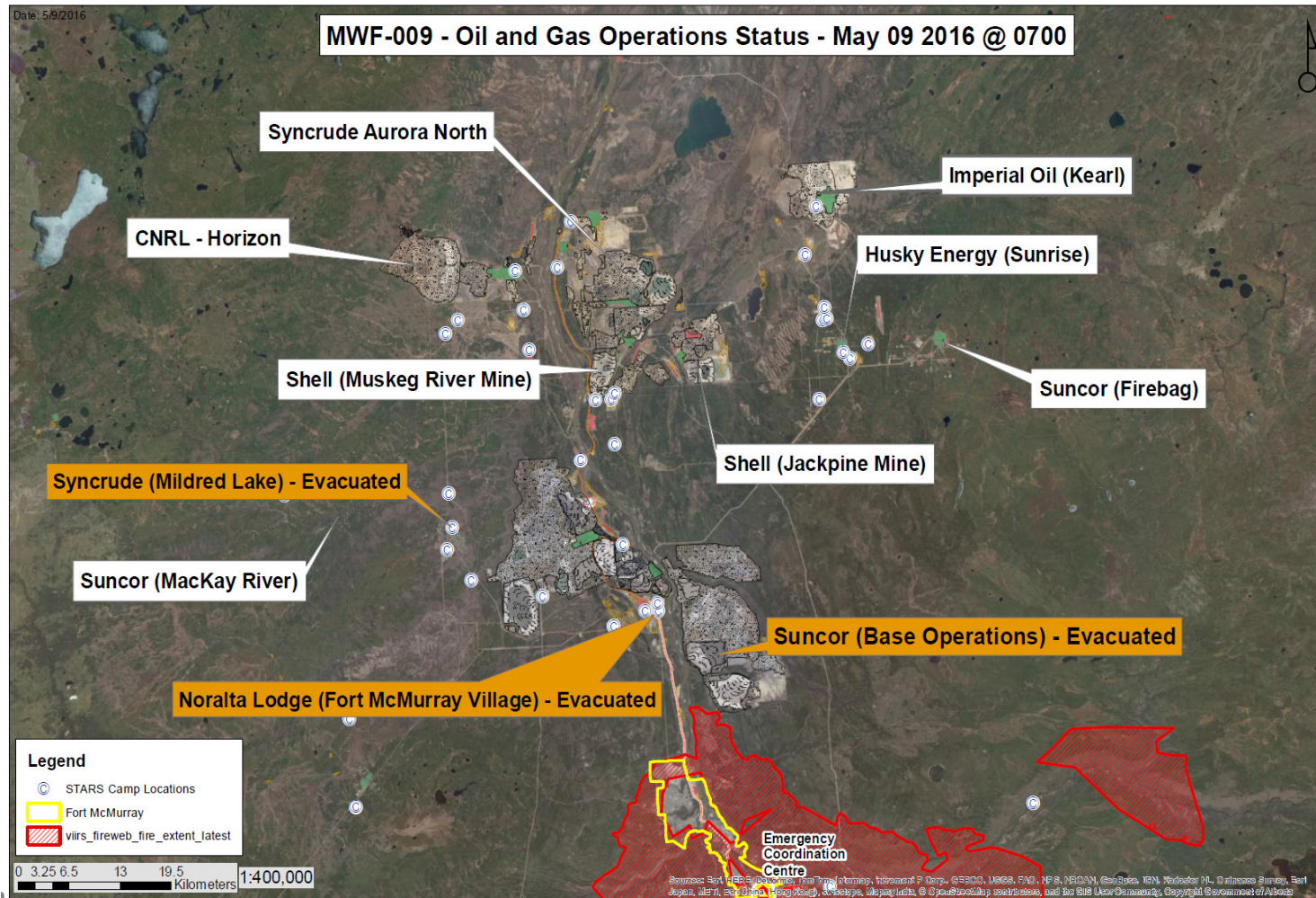
0 1.25 2.5 5 7.5
Kilometers

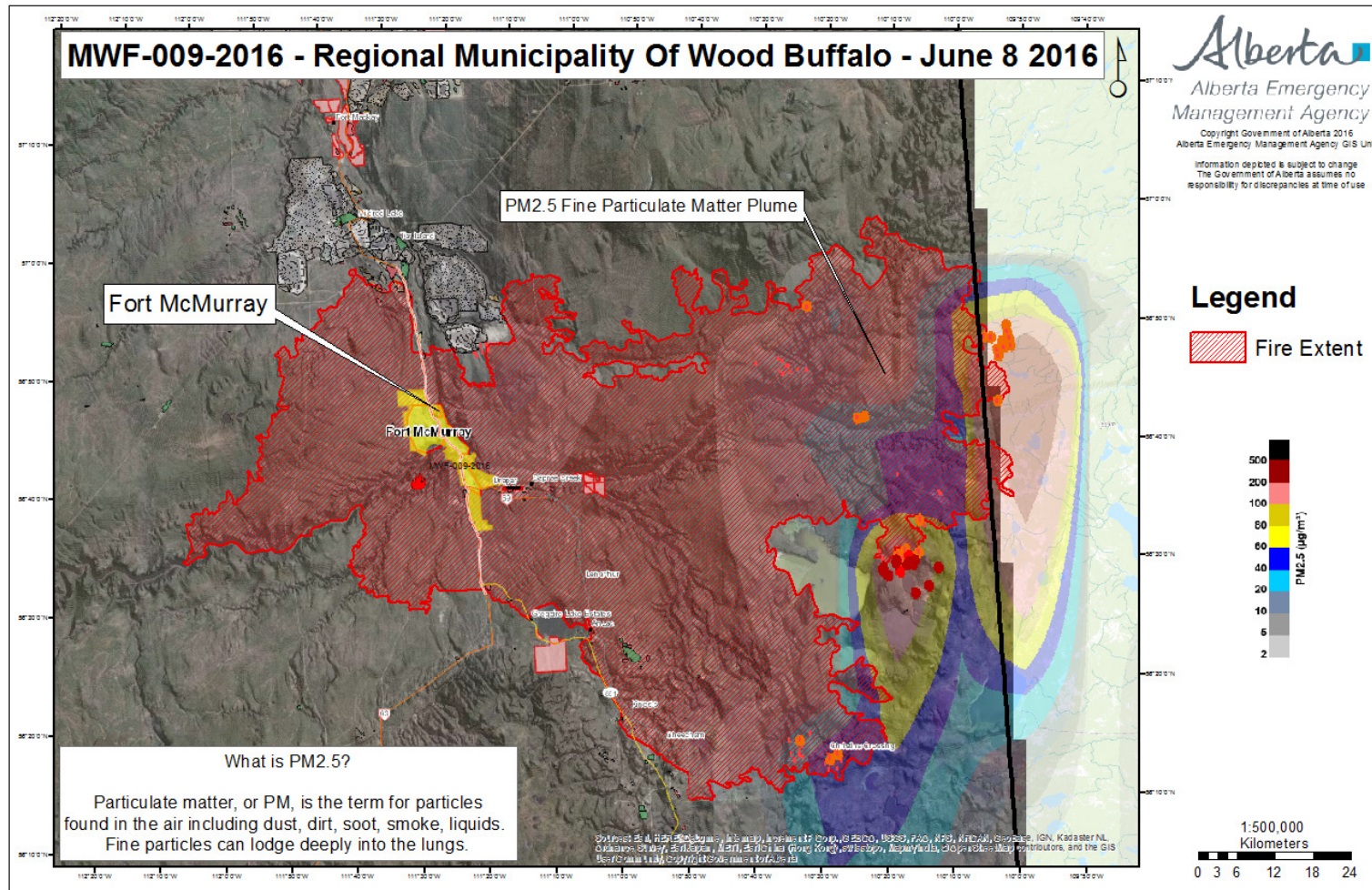
Source: NASA, USGS, and other data sources. Map data: © 2016 Google Earth, and other data sources. Copyright: 2016 Google Earth.

MWF-009 - Regional Municipality of Wood Buffalo - May 16 2016



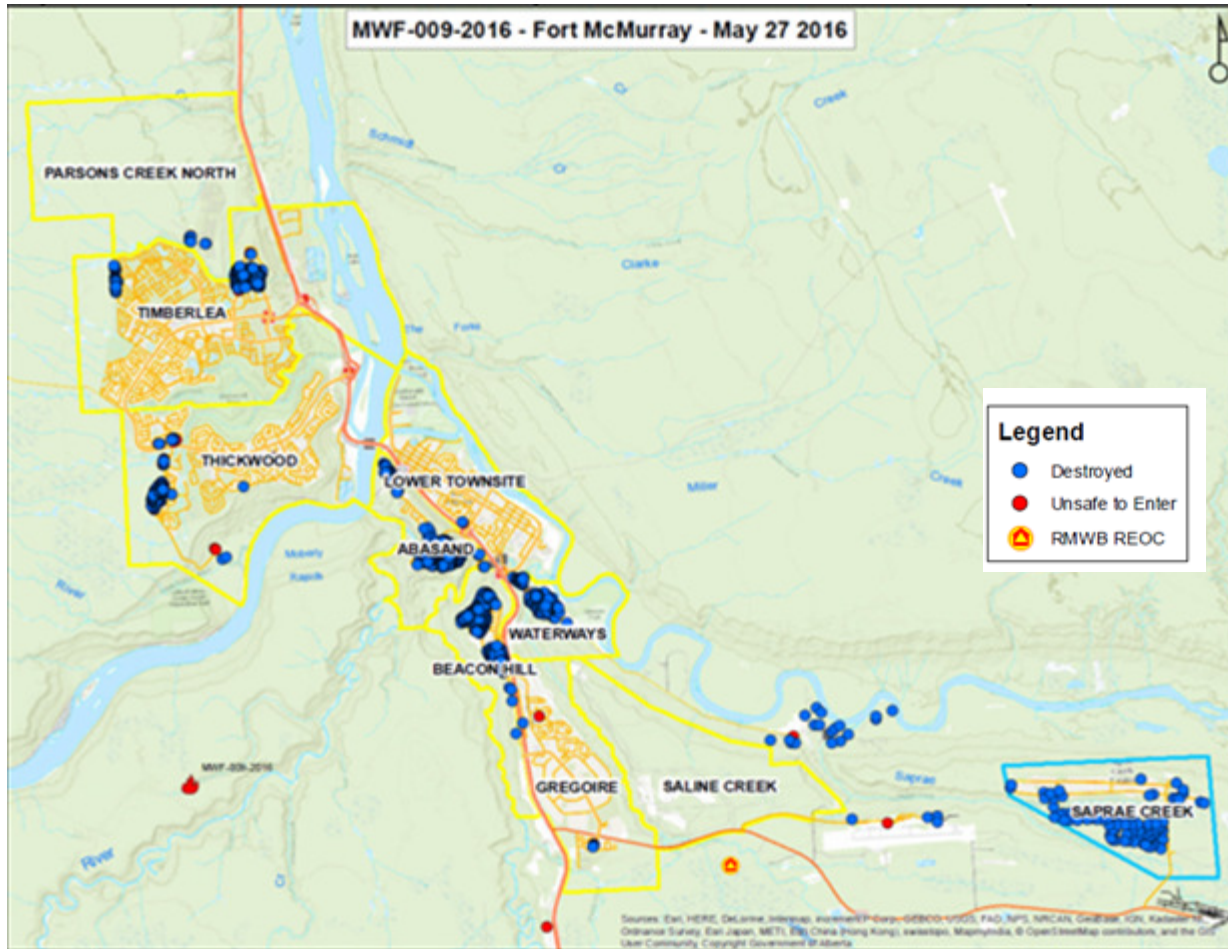
Industry Camps





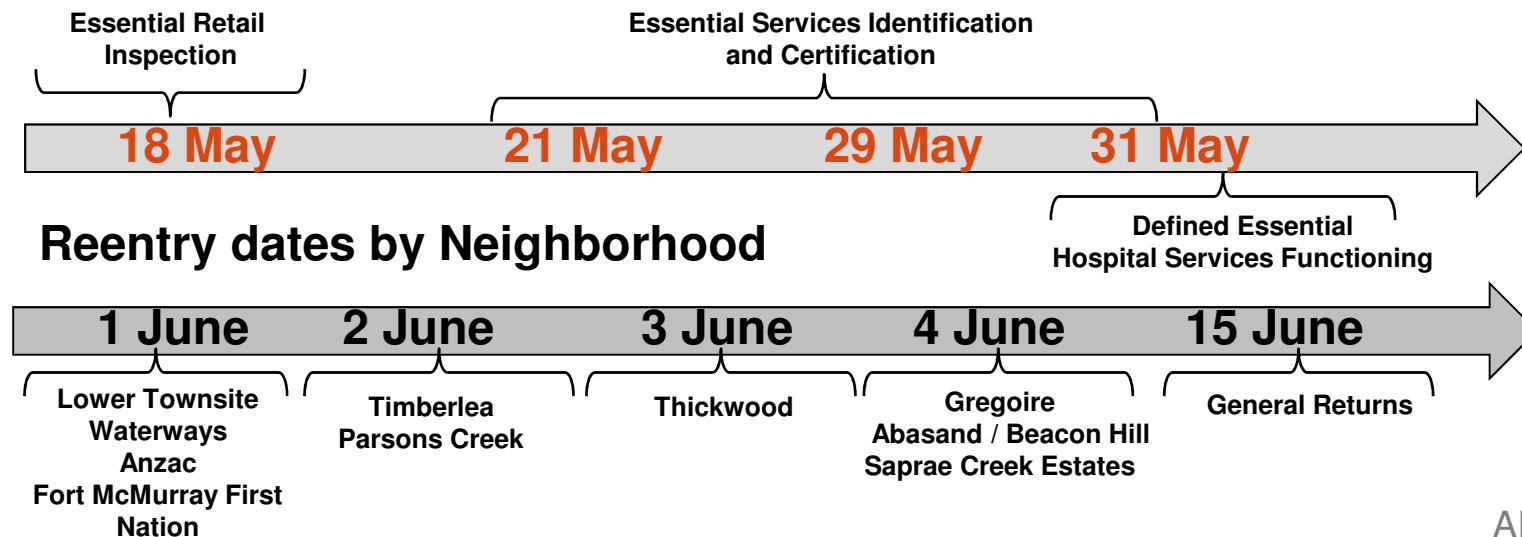
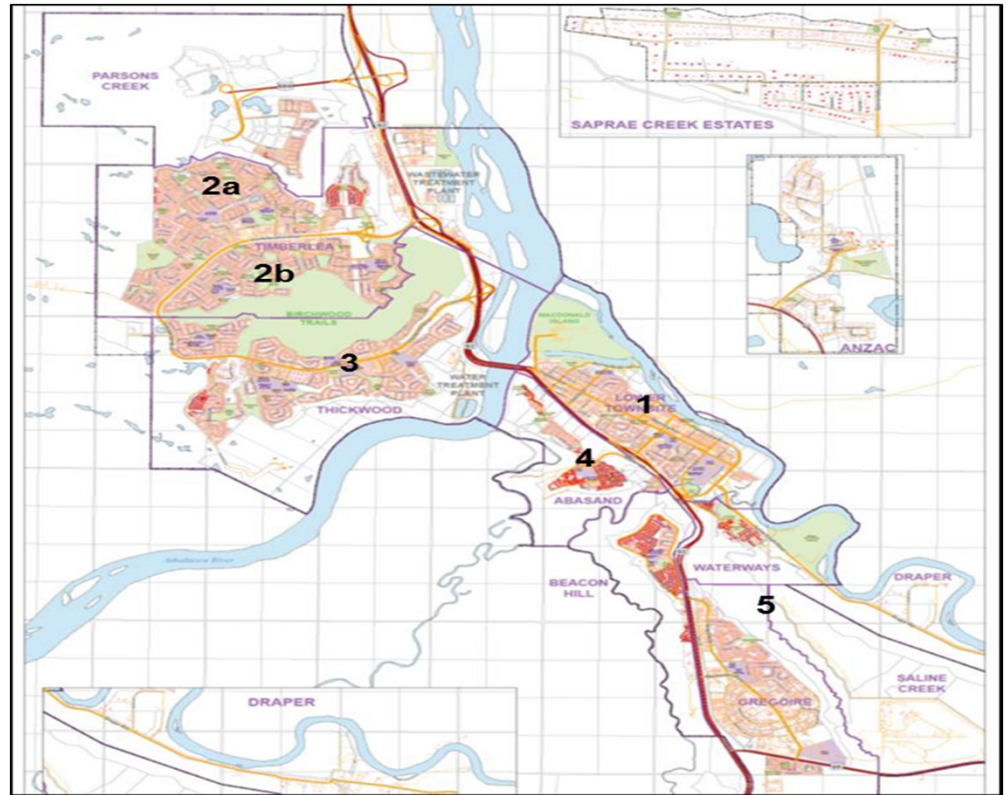
- Minimal growth – 581,586 Hectares
- 70 % contained

Destroyed Homes - May 27, 2016



- Damage Assessment
- Safe to Occupy: 16,801
 - Restricted Use: 113
 - Unsafe to Enter/Occupy: 643
 - Destroyed: 1,929

Re-Entry Plan for Fort McMurray





Lessons Learned



REOC Lessons Learned

- › Incident rhythm
- › Staffing of the REOC
- › Ability to maintain routine operations

AER Lessons Learned

- » ICS structure within AER needs to evolve
- » Clear role identification
- » GIS Mapping Compatibility
- » Involve industry early
- » Importance of clear communication

Industry Lessons Learned

- » Comprehensive regional response plan
- » Build on established relationships
 - Best practice model

Lessons Learned Provincial Level

- 》 Importance of Crisis Communications
- 》 Designation of Critical Infrastructure
- 》 Synched and exercised Emergency Social Services (ESS) Plans
- 》 Community Evacuation Plan – Care, Stabilize and Evacuate Pets
- 》 ICS is the System
- 》 Incident Management Teams (IMTS)

Common Theme

- » Building of relationships and networking outside of an incident which allows us to move at the speed of trust during crisis

Questions?



Thank you.

Website Materials

AEMA: www.aema.alberta.ca

Public Safety Canada: www.publicsafety.gc.ca

Canadian Centre for Emergency Preparedness:
www.ccep.ca

Public Safety Canada website:
www.publicsafety.gc.ca

AER: www.aer.ca