

ECONOMIC RESILIENCY:
HELPING NORTHERN COMMUNITIES AND
BUSINESSES PREPARE FOR & RECOVER FROM
DISASTERS

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AGENDA

Module 1 (*Leann Hackman-Carty*)

- Current situation and challenges of existing disaster response models

Module 2 (*Ray Wanuch*)

- Lessons learned from Fort McMurray
- Implications and challenges for Indigenous/Northern/rural communities

Module 3 (*Stephen Jordan*)




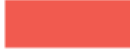






- Emergent strategies and approaches

Wrap-Up

MODULE #1: SETTING THE TABLE

- The Current Landscape
- Common Challenges
- Valuable Tools and Resources
- Economic Supports

10 COSTLIEST NATURAL DISASTERS IN CANADA

EVENT	LOCATION	DATE	LOSS*	*Fort McMurray \$3.58B
Windstorm/thunderstorm	Southern Alberta	June 2013		\$1,827M
Icestorm	Southern Quebec/eastern Ontario	Jan. 1998		\$1,574M
Windstorm/thunderstorm	Toronto, southern Ontario	July 2013		\$1,000M
Fire	Slave Lake, Alberta	May 2011		\$742M
Windstorm/rainstorm	Ontario	Aug. 2005		\$625M
Windstorm/thunderstorm	Alberta	Aug. 2014		\$569M
Windstorm/thunderstorm	Calgary and region	Aug. 2012		\$562M
Wind/thunderstorm	Calgary/southern Alberta	July 2010		\$530M
Windstorm	Calgary	Aug. 2009		\$376M
Hailstorm	Calgary	Sept. 1991		\$363M

*Loss and loss adjustment expense. Not adjusted for inflation.

SOURCE: STANDARD AND POOR'S

NATIONAL POST

**reflects insurable loss, not overall cost*

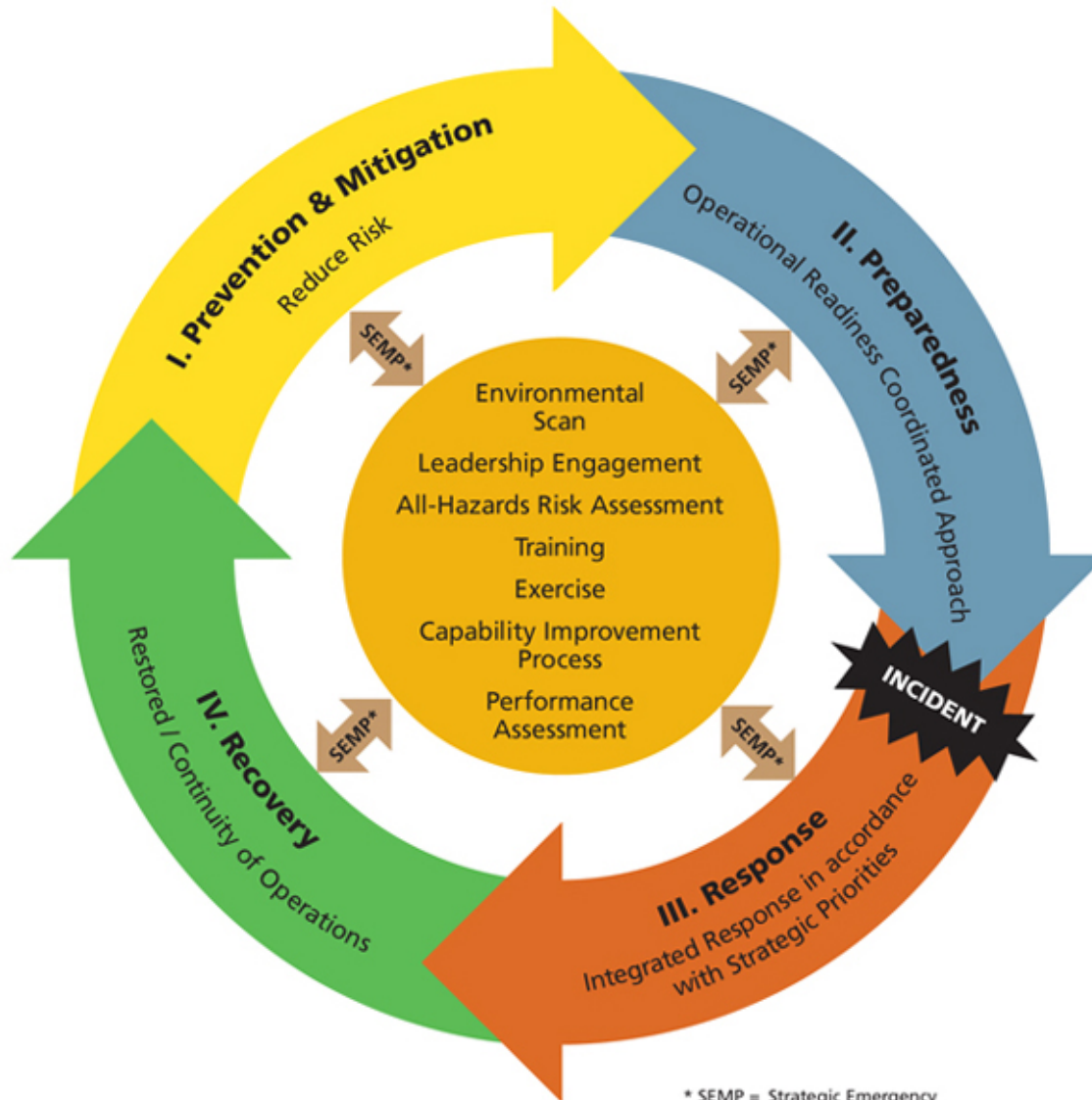
MOST COSTLY NORTHERN DISASTERS

EVENT START DATE	EVENT TYPE	PLACE	ESTIMATED TOTAL COST
June 2014	Wildfire	Northwest Territories	\$55,000,000
July 1998	Wildfire	Tibbet Lake NT	\$12,044,118
July 1990	Wildfire	Old Crow YT	\$7,925,848
January 1999	Avalanche	Kangiqsualujuaq QC	\$6,400,400
June 2008	Flood	Pangnirtung NU	\$4,507,509
June 1995	Wildfire	Sahtu Region of the Northwest Territories	\$3,432,310
May 2006	Flood	Aklavik NT	\$3,140,829
May 1979	Flood	Dawson YT	\$1,854,000
June 2012	Flood	Yukon, Northwest Territories and British Columbia	\$1,503,748
May 1989	Flood	Liard River NT	\$1,094,778

Source: *The Canadian Disaster Database*

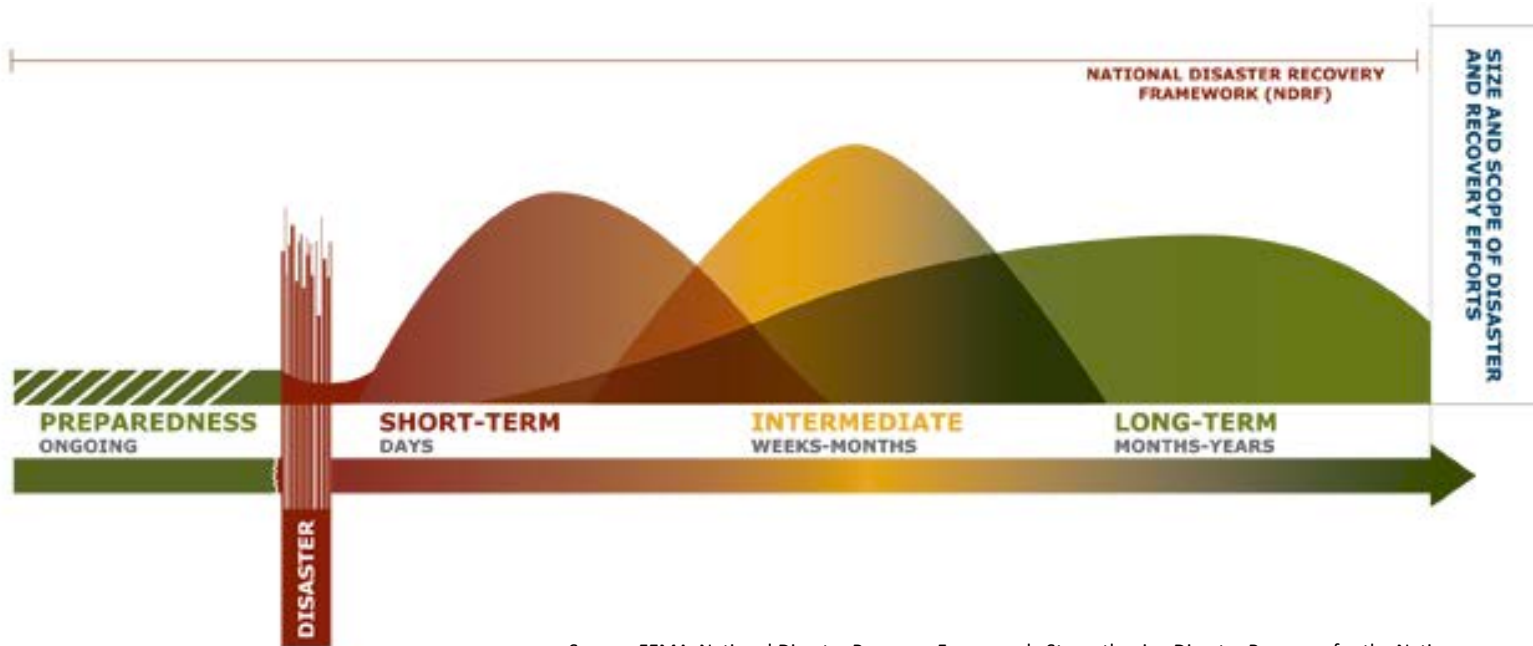
** Note: The chart doesn't include costs covered from sources like Canada's Emergency Management Assistance Program for on-reserve emergency events which have surpassed the costs listed above for a number of recent disasters such as the 2011 Manitoba Flood and seasonal spring flooding in Northern Ontario.*

Emergency Management Continuum



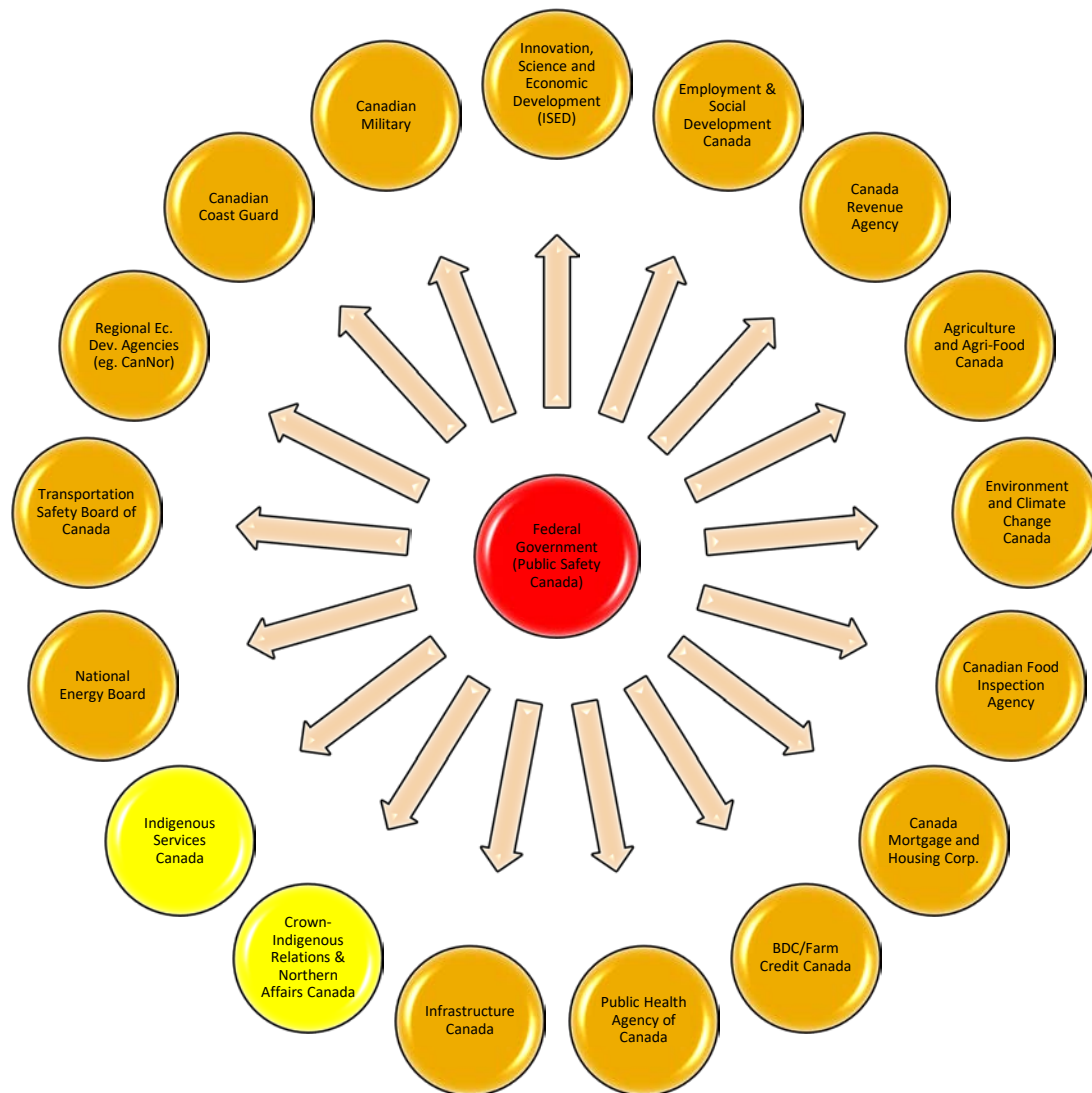
* SEMP = Strategic Emergency Management Plan

RECOVERY CONTINUUM



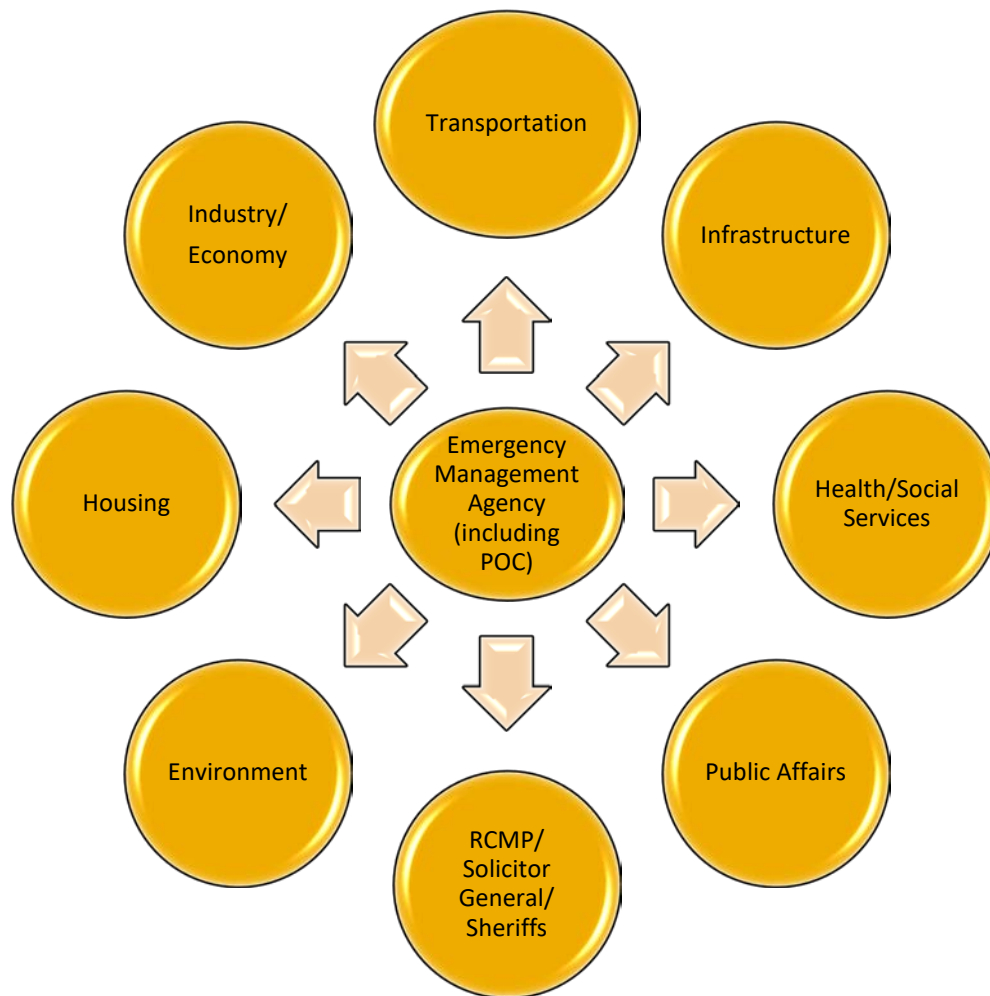
Source: FEMA, National Disaster Recovery Framework: Strengthening Disaster Recovery for the Nation

FEDERAL RESPONSE

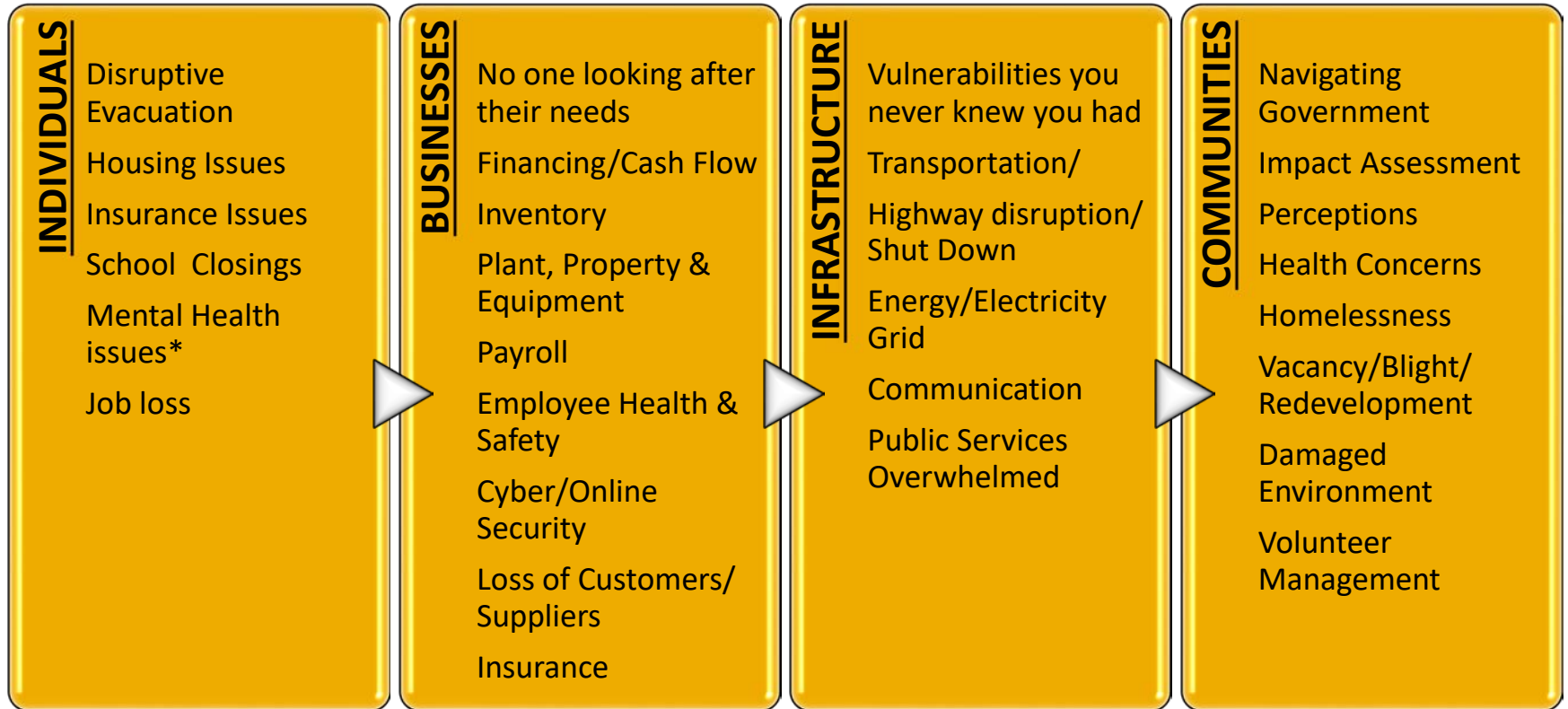


What about Recovery?

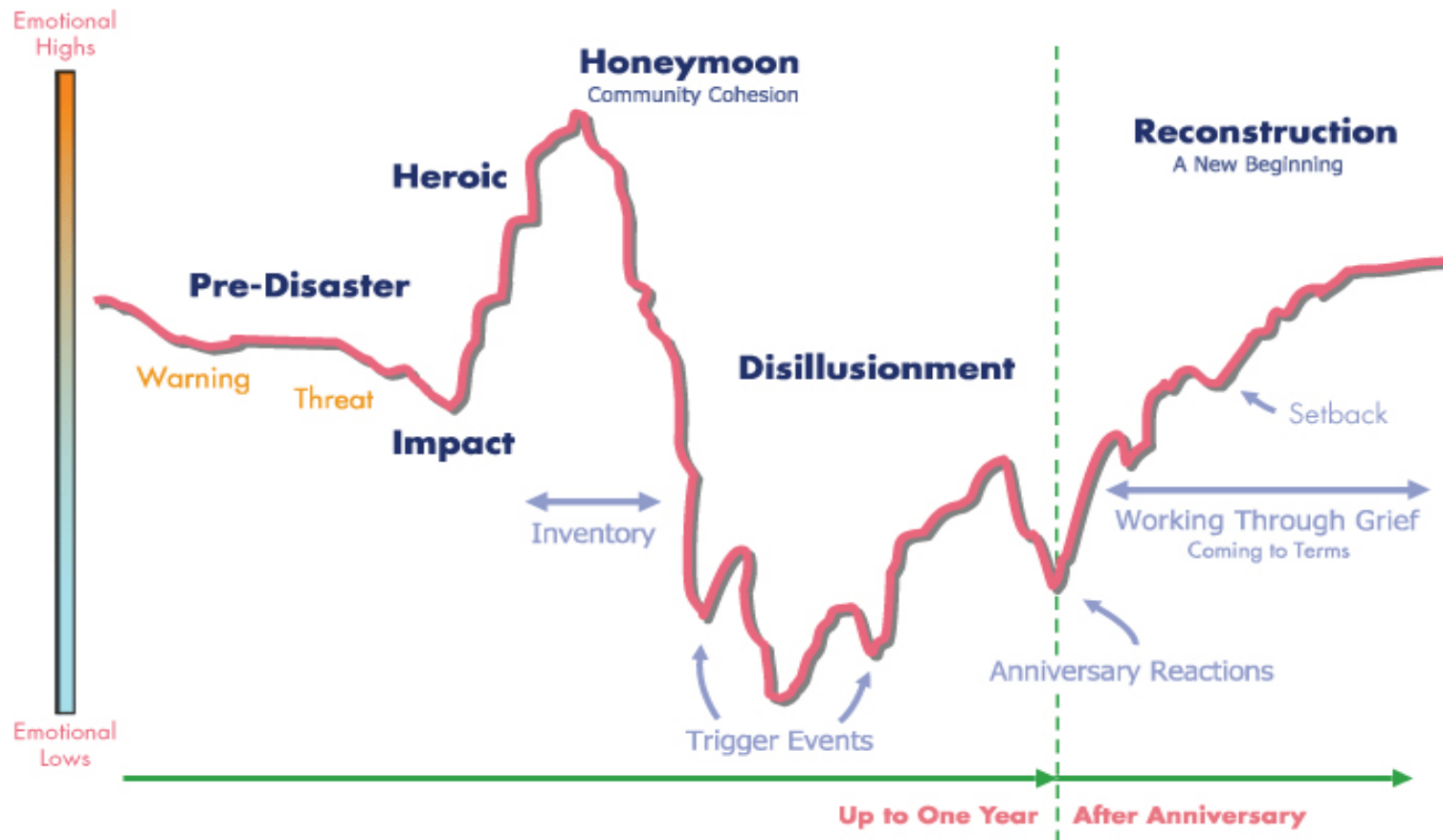
PROVINCIAL/TERRITORIAL RESPONSE



COMMON POST-DISASTER CHALLENGES



COMMON POST-DISASTER CHALLENGES



Source: Adapted from *Disaster Mental Health Services: a Primer for Practitioners* (Myers D, & Wee D.F., 2004)

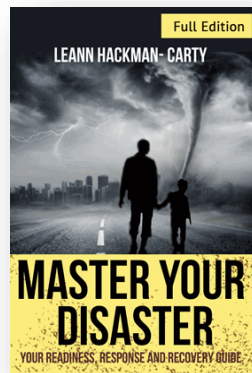
ECONOMIC TOOLS & RESOURCES



www.restoreyoureconomy.org



www.edaalberta.ca



www.masteryourdisaster.ca



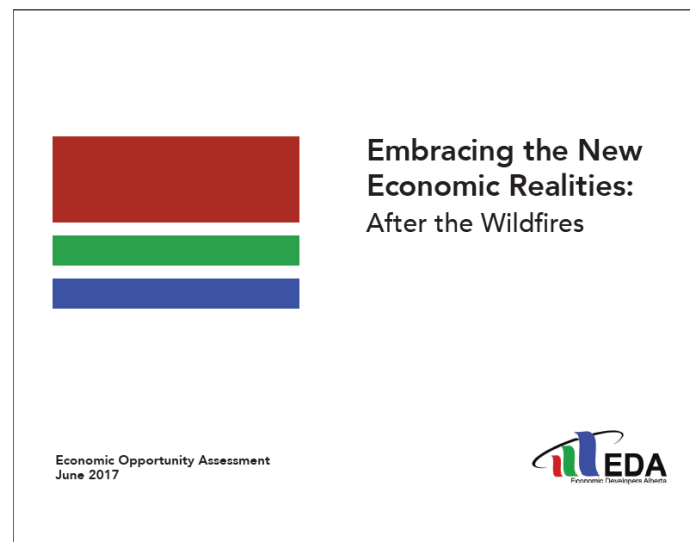
www.isdus.org

ECONOMIC SUPPORTS

- Business retention and expansion (BRE) program
- Business emergency hotline
- Business recovery centre (BRC)
- Case management
- Business database system
- Integrated business assistance resources
- Resiliency/business continuity training
- Topically-focused workshops

MODULE #2: LESSONS LEARNED

- The Fort McMurray experience
- Indigenous/Rural/Northern challenges identified



THE FORT MCMURRAY EXPERIENCE



FORT MCMURRAY CHALLENGES

- Geographically large region, small population
- Regulations, processes and governance
- Insurance
- Lack of business supports
- Workforce
- Unresolved forest safety issues
- Limited economic base/diversification

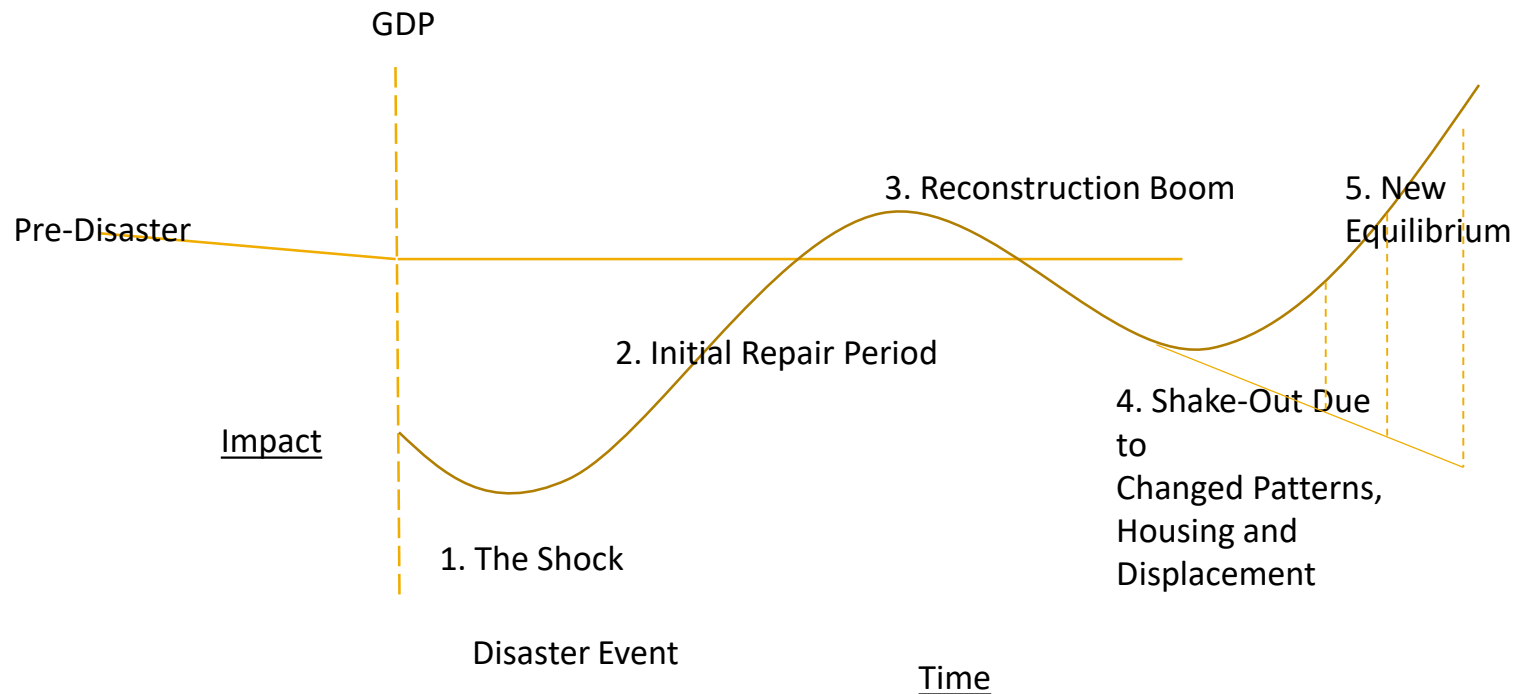
FORT MCMURRAY CHALLENGES

- Lack of inclusion and connectivity
- Food security
- Recognition in their response role
- Social impacts
- Communication
- Real estate

MODULE #3: GOING FORWARD

- Emergent Strategies and Solutions
 - For Resilience Readiness
 - For Long-Term Recovery
 - Leveraging Private Sector Capabilities
- Sample Tools

ALESCH MODEL OF DISASTER RECOVERY



UNPACKING GOALS OF EXTREME WCGH MANAGEMENT



RESILIENCE FUNCTIONS

Built/Natural

- Needs Assessments
- Planning
- Investments
- Re-Skinning & Hardening
- “Defense in Depth”

Social

- Communication–
Coordination–
Collaboration
- Trust-Building
- Information
Sharing
- Practice/Exercises

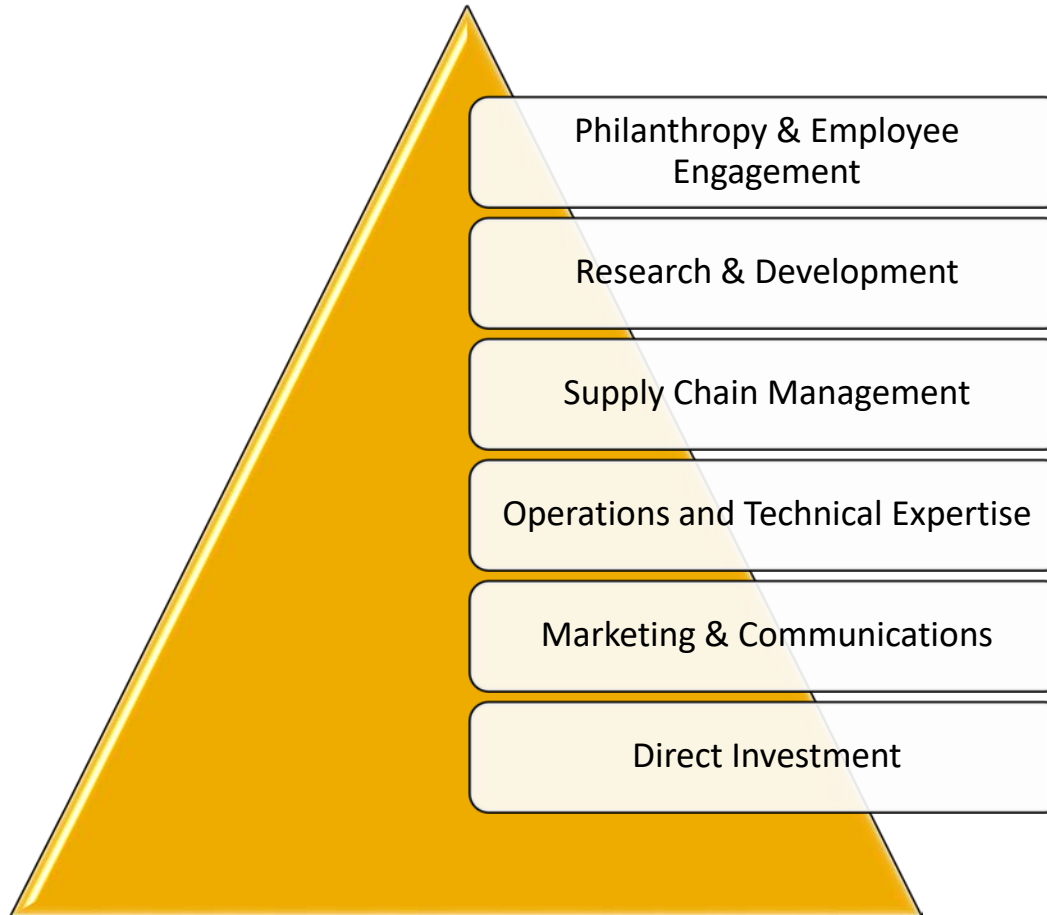
R&D

- Technology
- Data Gathering &
Evaluation
- Benchmarking
- Issue/Policy
Development

RECOVERY FUNCTIONS

- Planning & Design
 - Establishment of Mileposts and Goals
- Communication–Coordination–Collaboration
- Capacity Building
 - Capital
 - Expertise
 - Manpower and Resources
 - Short-Term Surge Capacity and Long-Term Empowerment

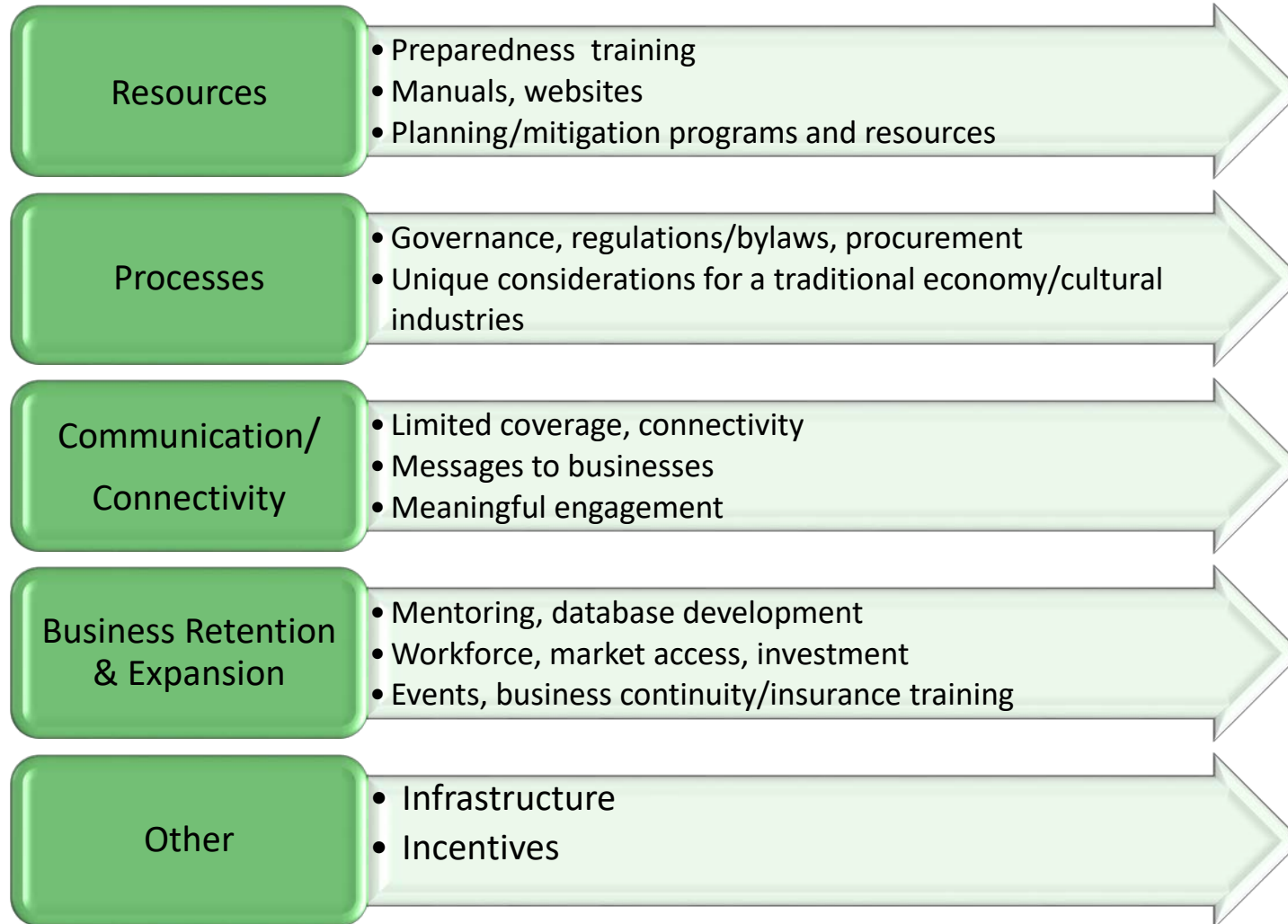
LEVERAGING PRIVATE SECTOR CAPABILITY



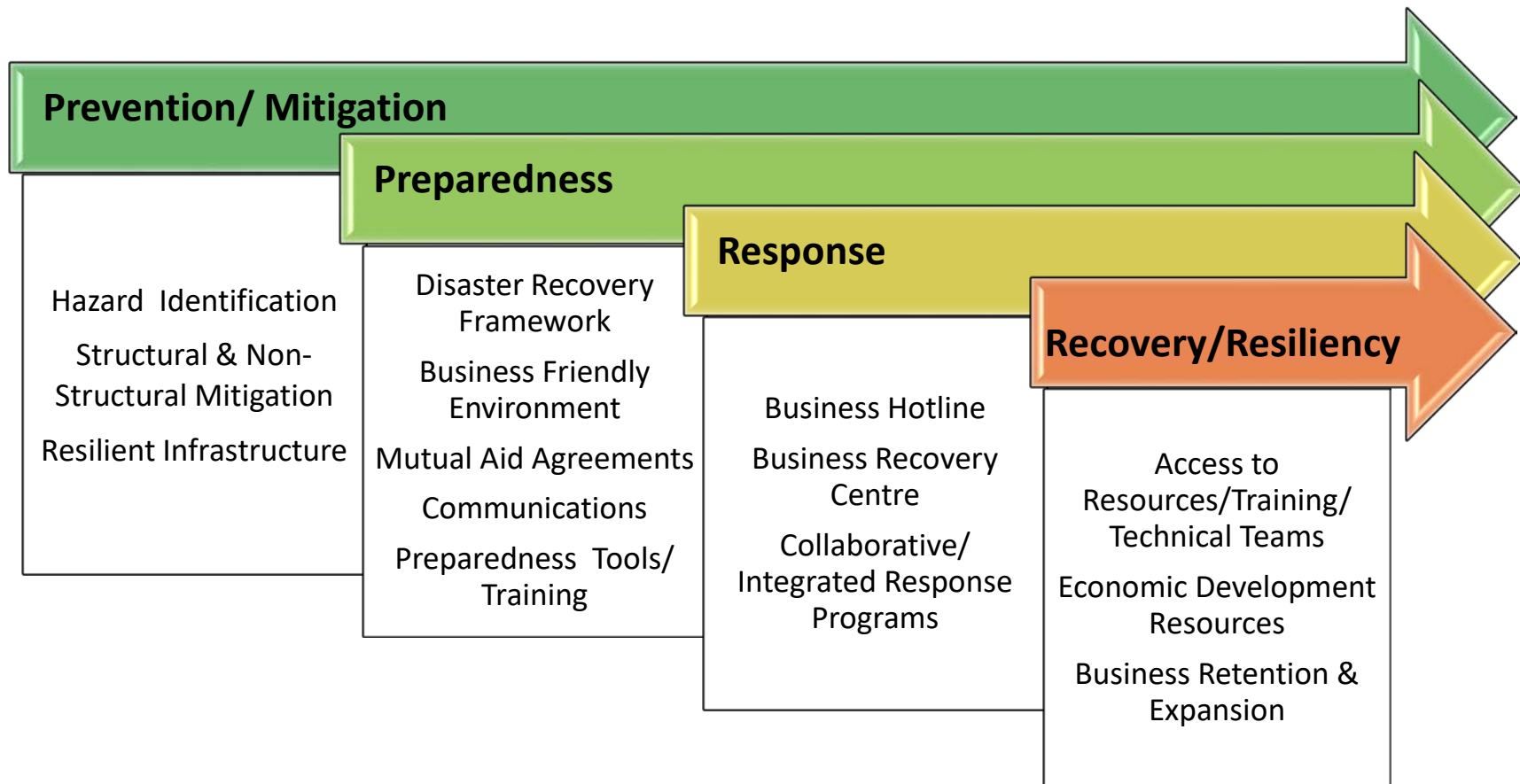
NEXT STEPS



POTENTIAL GAPS



POTENTIAL OPPORTUNITIES



QUESTIONS



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