

# Thematic Discussion 2: Enhancing the CEC flood-costing method

2nd CEC Virtual Expert Workshop





## Welcome and Logistics

- Welcome all!
- Please introduce yourself in the "Chat" window
- Please remember to select your language under the "Interpretation" button
  - Bottom of screen
  - Can also mute background audio
- Meeting is being recorded
- Please speak slowly for the interpreters
- Please mute your audio when you are listening
- During discussion, feel free to use "chat" feature, "raise hand", or unmute yourself to continue the conversation



# Recap from Thematic Discussion 1

- Thematic Discussion 1: CEC flood project preliminary findings
  - Presentations
    - Renee McPherson (University of Oklahoma)
    - Orland Cabrera Rivera (CEC Secretariat)
    - Zafar Adeel (Simon Frasier University)
    - Hirmand Saffari (Simon Frasier University)
    - Ana María Alarcón Ferreira (Universidad Nacional Autónoma de México)
    - Lynn M. Rae (University of Arizona)
    - Xin Wen (Simon Frasier University)
  - Questions
    - 1) How do we address these data gaps and knowledge gaps?
    - 2) What are the common lessons for the CEC flood costing project?



- Differences in data availability across countries (2013-2017)
  - Canada (8 events)
    - » Method: 1) Rough estimates of costs, 2) Collect insured losses, 3) Data disaggregation
    - » Evolving approach needs flexibility, public and private collection
    - » Challenges
      - » Lack of data and data granularity, including uninsured losses
      - » Scarcity of data from remote areas and Indigenous communities
    - » Ongoing activities across multiple levels of government to improve data situation
  - Mexico (7 events)
    - » Most complete data availability and index coverage
      - » Already use adaptation of UN ECLAC CEPAL methodology since 1999
      - » Data collected in multiple areas including public infrastructure damages, damages and losses in agriculture, industry/sectors, and the environment and health
      - » >25 agencies collecting data across Mexico
    - » Challenges
      - » Incorporation of private insurance
      - » Increasing transparency and data sharing mechanisms
      - » Need for centralized data platform
      - » Local and regional personnel trainings for increased data provision



- Differences in data availability across countries (2013-2017)
  - United States (2 events collected, 7 flood-only events identified)
    - » Many federal datasets covering different data areas
    - » Data Challenges
      - » Differences in spatial and temporal scales
      - » Multi-hazard events (e.g., hurricane)
      - » Insured vs uninsured losses, losses based on participation in public program
      - » Differing definitions of loss/damage categories across datasets and CEC method
      - » Market value of loss vs replacement cost
      - » Data access or availability issues
      - » Some state, local, and Indigenous data not currently included
- Database
  - Extreme Events Economic Impact Database (E<sup>3</sup>ID)
  - 105 data indicators but data gaps remain
- → How can we best overcome these data challenges?



- Data privacy concerns
  - Tension between increasing granularity and preserving anonymity
  - Security concerns about critical infrastructure
- Missing data
  - Indigenous, highly vulnerable populations, private data, etc.
  - Multi-hazard data not incorporated
  - Further downstream costs (e.g., supply chain)
- Including multiple scales of data collection
  - Federal but also provincial/state, municipal/county, local data representation
- Ability to "reverse engineer" damage estimates?
  - Insured to uninsured
  - Federal to local
- Can be an expense to collect data
  - Resources limited directly following a disaster
  - Additional resources may be needed, cooperation important, data interpretation needed
- WMO extreme weather event catalogue
  - National and then global scale



- Representation of Indigenous and Tribal impacts
  - Desire to include important losses that can sometime be omitted in official records
  - Need for inclusive, non-extractive, collaborative relationships
  - Requires time, trust, and learning
  - Need a protocol to exchange knowledge and collect data, especially on intangible assets
  - Some Indigenous groups collect data that can be higher quality than is collected nationally
    - Example: Guerrero flood (September 2013, Mexico)
- → How best can we include flood damages from the Indigenous communities?
  - Best to empower and allow Indigenous groups in data gathering process
  - Currently have a category but no data
  - Connect with case study selection?



#### Thematic Discussion 2: Enhancing the CEC flood-costing method - Part 1

Session Chair: Laura Bakkensen (University of Arizona)

Rapporteur: Lynn Rae and Hirmand Saffari

Time	Topic	Speaker
12:20 - 12:30 (PT)	Welcome remarks and introductions	Laura Bakkensen
14:20 - 14:30 (CT)	welcome remarks and introductions	(University of Arizona)
15:20 - 15:30 (ET)		Expert representatives
12:30 - 12:40 (PT)	Re-cap of discussions from Thematic	Laura Bakkensen
14:30 - 14:40 (PT)	Discussion 1	(University of Arizona)
15:30 - 15:40 (ET)	Discussion 1	(Chiversity of Arizona)
	Fodoral correspond consequentative	Niela Hastings
12:40 - 12:55(PT) 14:40 - 14:55 (CT)	Federal government representative presentation	Nicky Hastings (Natural Resources Canada)
` '	presentation	(Natural Resources Callada)
15:40 - 15:55 (ET) 12:55 - 13:10 (PT)	Local government representative presentation	Kevin Stewart
14:55 - 15:10 (PT)	Local government representative presentation	
` /		(Urban Drainage and Flood
15:55 - 16:10 (ET)		Control District, Denver, CO, USA)
12-10 12-15 (DT)	D ele	USA)
13:10 - 13:15 (PT)	Break	
15:10 - 15:15 (CT)		
16:10 - 16:15 (ET)	Towns and the second of the se	Towns Contains
13:15 - 13:30 (PT)	Insurance representative presentation	Laura Twidle
15:15 - 15:30 (CT)		(Catastrophe Indices &
16:15 - 16:30 (ET)		Quantification Inc., Canada)
13:30 – 13:45 (PT)	Indigenous Concepts of Value and Ethical	Maurice Cruz
15:30 - 15:45 (CT)	Community Engagement	(South Central Climate
16:30 - 16:45 (ET)		Adaptation Science Center,
		U.S.)
13:45 - 14:30 (PT)	Open discussion	
15:45 - 16:30 (CT)	1) How best can we prioritize the various elements of the CEC method?	
16:45 - 17:30 (ET)	2) How can we address knowledge and data gaps?	
	3) What are the potential challenges in real-world implementation?	



### Some Hopes for This Afternoon

- Listen to additional perspectives in presentations
- Continue stimulating discussion
  - From morning
  - From first two workshops
- Hear stakeholder perspectives
- Actionable recommendations to improve the CEC methodology and data collection efforts
  - Methodological improvements
    - Incorporation of Indigenous perspectives in an inclusive, collaborative manner
  - Future data collection priorities
    - Current data gaps
    - Case studies
- Key questions
  - 1) How best can we prioritize the various elements of the CEC method?
  - 2) How can we address knowledge and data gaps?
  - 3) What are the potential challenges in real-world implementation?