



**Commission for Environmental Cooperation (CEC):**

**Development of a Framework  
to Improve the Environmental Health  
of Vulnerable Communities in  
North America**

TRI National Training Conference

May 2014

FOR CONFERENCE/TRAINING PURPOSES ONLY



## Background

- Fall of 2010: Commission for Environmental Cooperation (CEC) announced it would fund projects to improve environmental health of vulnerable communities in North America.
  - Done under CEC's 2010-2015 Operation Plan (OP).
  - A priority OP area is healthy communities and ecosystems.
    - A major theme of which is protection of human health (particularly vulnerable subpopulations) and strengthening of communities.
- CEC solicited project proposals to fund under its OP priority areas.



## Background

- EPA submitted a project proposal related to vulnerable communities:
  - Develop a framework for building capacity among individuals throughout North America to make more informed decisions about how to protect their health from environmental contaminants and global hazards.
  - Place particular emphasis on vulnerable populations.



## Background

- Proposed framework would:
  - Identify/discuss factors necessary to assess a community's vulnerability to environmental contamination.
  - Be used as the foundation for developing different types of products and tools for accessing and analyzing data, and making informed decisions.



## Background

- Framework must have trilateral utility.
- Intended end users of the Framework:
  - Government organizations
  - Risk assessors
  - Tool developers
  - Public interest groups
  - Individuals



## Background

- Project was approved and funded.
- Project was among those discussed in July 2012 at CEC's Joint Public Advisory Committee (JPAC) meeting and Council Session to North America's environmental ministers:
  - Peter Kent (Canada's Environment Minister)
  - Juan Elivra Quesada (Mexico's Environment Secretary)
  - Lisa P. Jackson (U.S. EPA Administrator)
- Was well received at JPAC/Council Session meeting.



## Development of Framework

- Conducted by CEC, under CEC's procedures
  - Steering Committee (trilateral representation)
    - Canadian, Mexican, U.S. governments
  - Advisory Group (trilateral representation)
    - NGOs from Canada, Mexico and U.S.
  - Analytical Blueprint



## Framework Development: Workshop

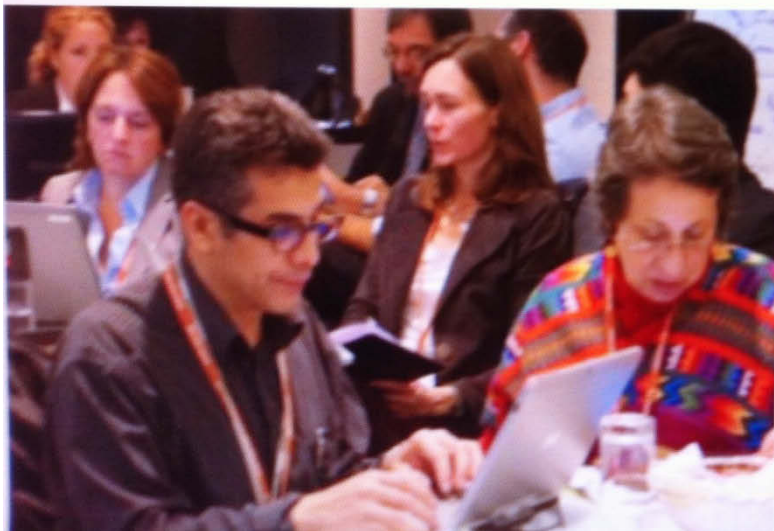
- Stakeholder workshop held Nov. 1-2, 2012
  - Involved 20 participants
    - Diverse regions of North America
    - Range of professional backgrounds
- The group collaborated to:
  - Identify and discuss possibilities for the framework's key objectives, audiences, form and content.
  - Identify the factors necessary to assess a community's vulnerability to environmental contamination.





# Workshop Process Overview

What was the experience?











# Framework Outline

Draft document structure

# 3



# Framework Content

Key ideas for the  
document's sections  
and sub-sections

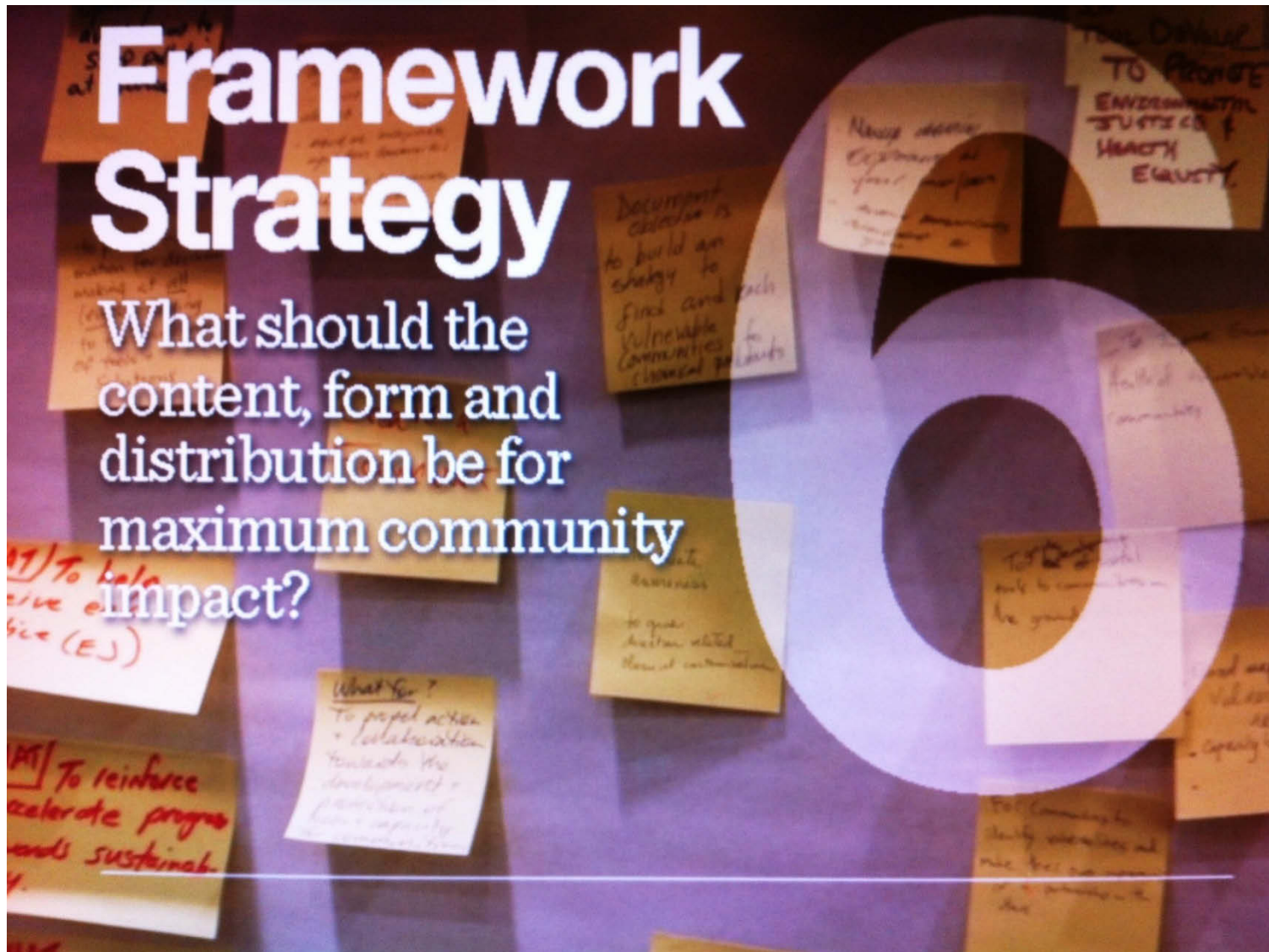
# Framework User Personas

Who might use this and  
what would they need?  
How might the  
document be structured  
and distributed?



# Framework Strategy

What should the content, form and distribution be for maximum community impact?





# Development of a Framework Document

to Assist Communities in the  
Characterization of Vulnerability to  
Environmental Contamination



Documentation from the multi-stakeholder  
workshop organized by the CEC Secretariat

Toronto, Ontario, Canada  
Nov. 1-2, 2012

Event hosted by:  
Commission for Environmental Cooperation  
[www.cec.org](http://www.cec.org)

Collaborative process and report document designed by:  
**The Moment**  
[www.TheMoment.ca](http://www.TheMoment.ca)



## Framework Development: Drafting

- Drafting of Framework followed the workshop:
  - Led by Dr Mario E Rivero-Huguet
    - Used the workshop summary document as the basis
    - Many workshop participants contributed



## Framework Development: Release

- Final version of Framework document translated into:
  - English
  - Spanish
  - French
- Scheduled to be released by CEC by May 2014.



## A Framework Document:

Factors to Consider in Characterizing Vulnerability  
to Environmental Contamination Across North  
America

April 2014



Commission for Environmental Cooperation

<http://www3.cec.org/islandora/en/item/11492-framework-document-factors-consider-in-characterizing-vulnerability-environmental>

May 2014



## Framework Highlights

- Factors are grouped under four key properties of vulnerability to contaminants:
  - Degree of exposure
  - Susceptibility to the harmful effects caused by a chemical
  - Preparedness
  - Responsiveness (ability to recover)

A light blue map of North America, including the United States, Canada, and Mexico, is centered on a solid blue background. The map shows state and provincial boundaries. Overlaid on the map are four large, bold text labels in different colors: 'Preparedness' in purple at the top, 'Exposure' in orange in the upper right, 'Susceptibility' in dark blue in the lower left, and 'Responsiveness' in dark green at the bottom. Each text label has a subtle drop shadow.

**Preparedness**

**Exposure**

**Susceptibility**

**Responsiveness**

**Preparedness**

**Exposure**  
**Susceptibility**

**Responsiveness**



Biological stressors

Noise  
Employment

Occupational  
Crime

Substance abuse

Air

Pollutants

Health

Housing  
Chemicals

Local Economy

Nutrition

Language

Segregation

Race

Ethnicity

Community

Empowerment

Socioeconomics

Climate

Gender Roles

Land Use



**Preparedness**

**Susceptibility**

**Exposure**

**Responsiveness**

Biological stressors

Employment

Occupational

Noise

Crime

Substance abuse

Self-efficacy

Pollutants

Health

Chemicals

Air

Nutrition

Socioeconomics

Language

Race

Segregation

Housing

Local Economy

Sanitation

Genetic factors

Traffic

Empowerment

Climate

Gender Roles

Land Use



## Framework Highlights

- Emphasizes the importance of considering:
  - Chemical stressors
  - Non-chemical stressors
  - Community priorities
- Appendix B provides a list of tools that can be used to:
  - Assess vulnerability
  - Serve as models to develop new, targeted tools to assess vulnerability



## Framework Highlights

- Examples of some of the factors:
  - Proximity to chemical release
  - Age
  - Sex
  - Race/ethnicity
  - Genetic susceptibility
  - Income
  - Socioeconomic status
  - Many more included in Framework document



## Next Steps

- CEC will:
  - Promote availability of the Framework
  - Encourage its use/application
- Consider proposing new project(s) under future CEC operation plans to apply the Framework to new versions of existing tools, or to build new tools.
- Possibly accompany our TRI data/tools with the Framework.
  - Link from “TRI Resources for Communities” webpage.
- Consider using the Framework as an information source in future modifications to our analytical tools.



# CONTACT:

Steve DeVito  
devito.steve@epa.gov  
202-566-0755