

Risk and Resilience in the Face of Global Change

*Climate Adaptation
Disaster Risk Reduction
Natural Hazard Mitigation*

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Howdy!



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This presentation is not and cannot be legal advice, nor does this portion necessarily represent the views of anyone other the presenter.

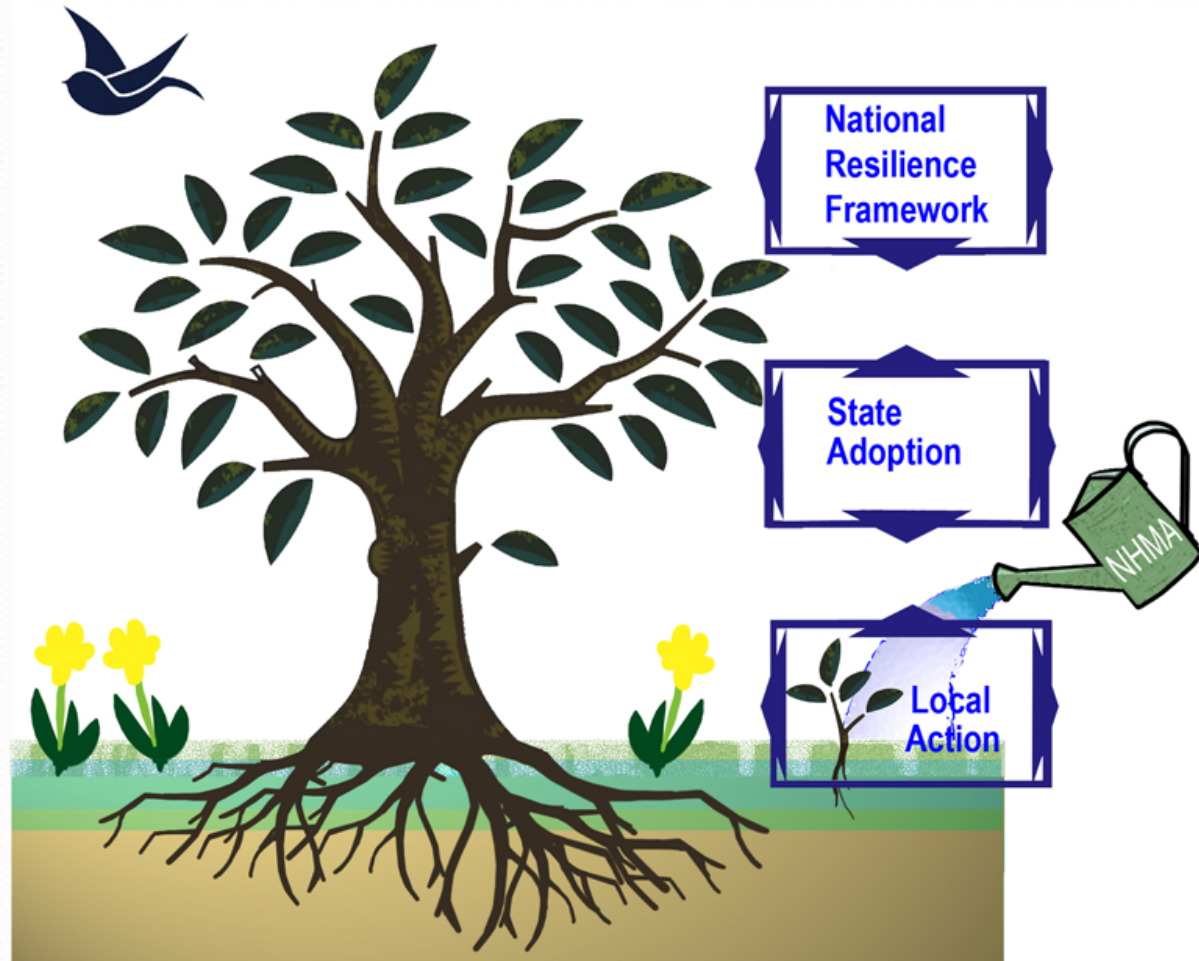
Hazard Mitigation: Plain Common Sense

- *"Disaster risk reduction is not a luxury. It's an essential insurance policy for a more disaster-prone world, and one of the smartest, most cost-effective investments we can make in our common future. The benefits of this investment will be calculated not only in dollars saved, but most importantly, in saved lives."*
- *Jan Egeland, Former U.N. Under-Secretary General for Humanitarian Affairs and Emergency Relief Coordinator*

What is NHMA?

Created in 2008

To bring together
individuals &
organizations
interested in
Hazard Mitigation
and
Climate Adaptation



NHMA

Natural Hazard Mitigation Association



"NHMA is a national organization of practitioners committed to natural hazard disaster risk reduction in the context of climate adaptation and mitigation."



DEVELOP STRONG PARTNERSHIPS

Partner with public & private sectors in support of mitigation, adaptation & resilience goals

Connect practitioners & leaders to facilitate effective cross-functional mitigation & adaptation practices

WWW.NHMA.INFO



PROMOTE EFFECTIVE PRACTICES

Identify, develop, & encourage best practices

Provide user-friendly guidance to plan & implement long-term resilience strategies

Promote awareness of social, economic & environmental benefits of resilient development



FACILITATE EDUCATION & TRAINING

Create & disseminate technical information on natural hazard mitigation & climate change adaptation

Host webinars, training courses, & annual symposiums

Reach out & engage the community from residents to leaders on hazard risk reduction



ADVOCATE FOR SOUND POLICY

Provide expertise to guide decision makers

Identify techniques & tools to empower decision makers

Support community, regional, state & federal initiatives

Work with insurance, code, energy associations for whole community resiliency

Resilience and Disaster Risk Reduction

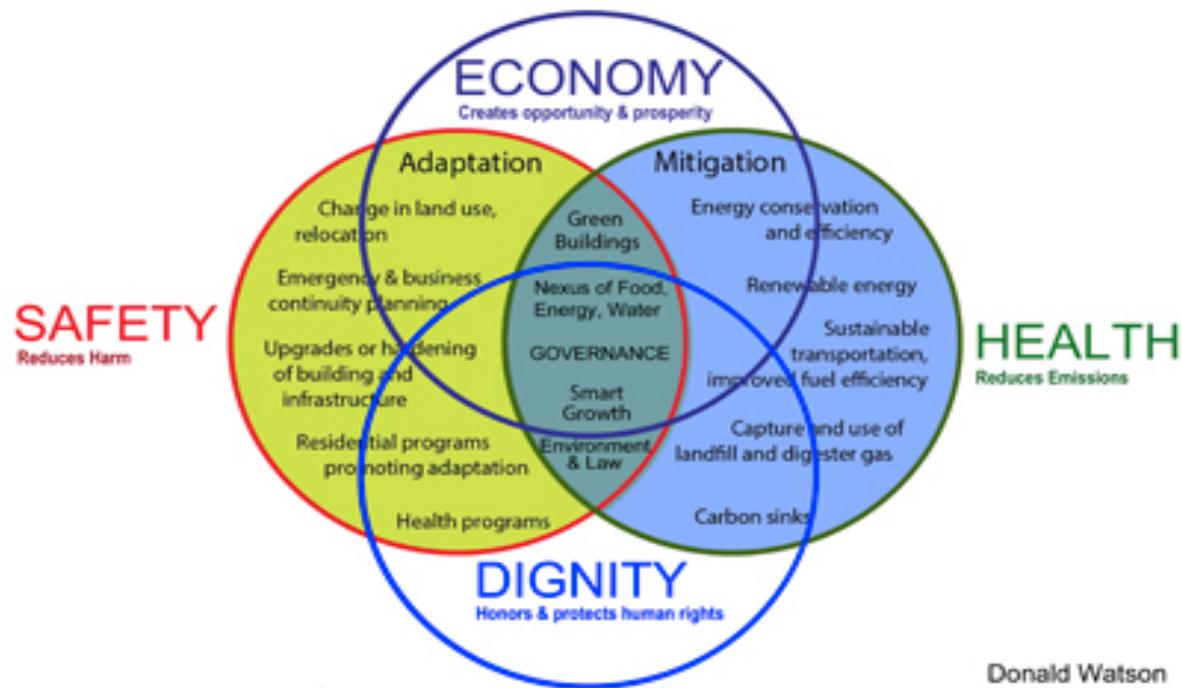
Resilience & Climate Adaptation are a huge concepts
They are also moving targets as the climate varies

Think of the arrows being shot at the target as development resources



**We at NHMA focus in on the Disaster Risk Reduction
Portion of Climate Adaptation and Resilience**

Finding the Bullseye

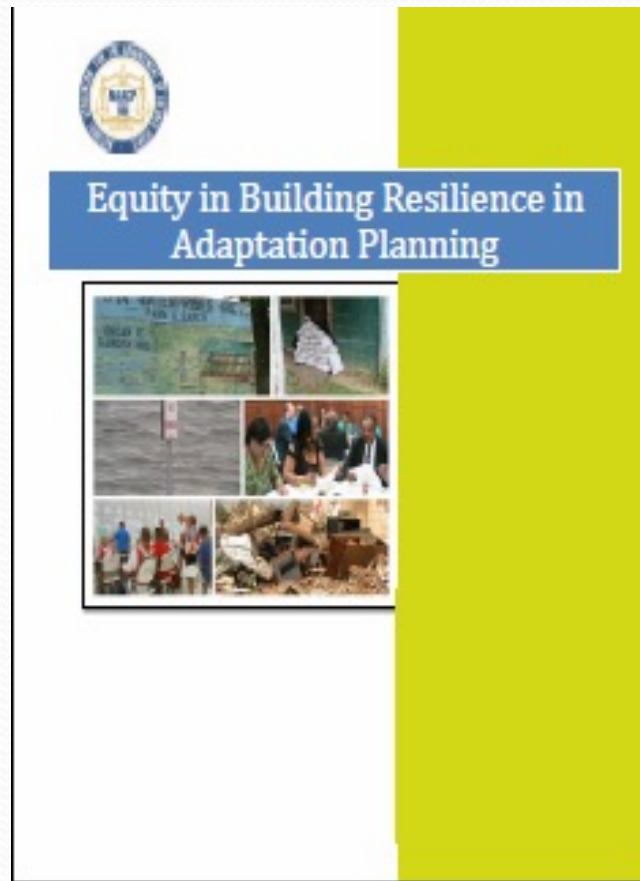
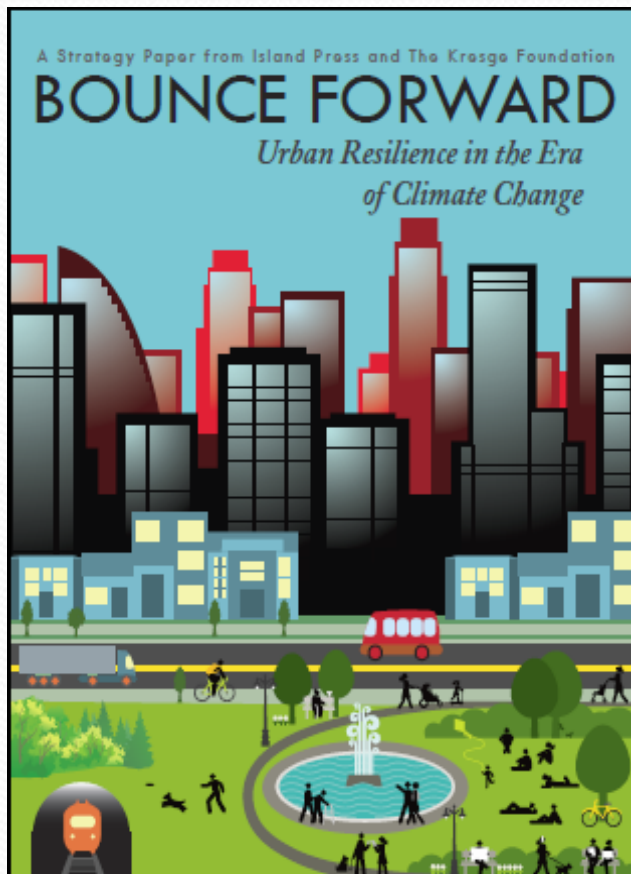


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Prosperous and just economy

Brilliant Publications

Designed to Promote True Resilience Including Disaster Risk Reduction for ALL



See, <http://nhma.info/resources/recommended-reading/>

How Much Has the Federal Government Spent on Disasters Since 1983

- Any thoughts?
- See, Focusing on Disaster Costs Before Rather Than After They Happen, Insurance Journal, August 6, 2014

<http://www.insurancejournal.com/news/national/2014/08/06/336796.htm>

- Billion-Dollar Weather and Climate Disasters: Overview, NOAA, available at: <https://www.ncdc.noaa.gov/billions/>

Safe Development Is Affordable

- The **American Institutes for Research** has conducted a detailed study on the cost of floodproofing and elevation
- That study supports the idea that elevation and floodproofing **costs add very small sums** and have a significant societal payback
- The **Multihazard Mitigation Council**, a group which includes private industry representatives, reports that hazard mitigation has a **proven 4-1 payback when retrofitting** past mistakes
- Other Organizations calculate that safe design or redesign following a disaster has a payback of 10-1 or greater

The Constitution in Exile

- **Richard Epstein, a Professor of Law at the University of Chicago is the Intellectual Force Behind a Movement that Feels that Many US Supreme Court Cases in the Twentieth Century were Wrongfully Decided**
- **Examples of Federal Laws Which they Feel are Unconstitutional: Social Security; Minimum Wage Laws; EPA; OSHA**

- The Supreme Court agrees with safe development based planning. Justice Alito wrote in the majority opinion:
- "Insisting that landowners internalize the negative externalities of their conduct is a hallmark of responsible land-use policy, and we have long sustained such regulations against constitutional attack."

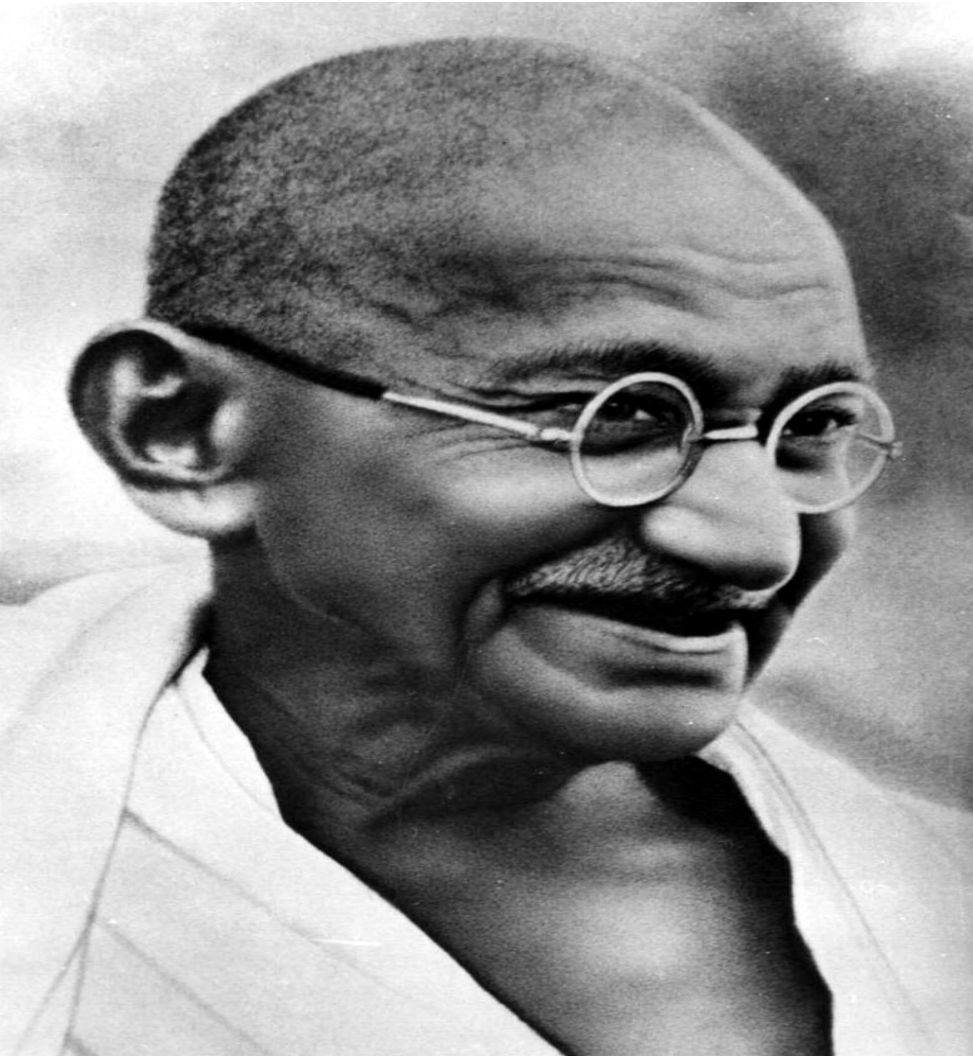
Conservatives Agree

- The Cato Institute Indicates that **Compensation is Not Due When:**

“... regulation prohibits wrongful uses, no compensation is required.”

“When the government acts to Secure Rights-when it stops someone from polluting his neighbor ... it is acting under its police power ... because the use prohibited ... was wrong to begin with.”

Equity and Morality Support Safe Development



According To Gandhi's Writings

“Sic Utere Tuo Ut Alienum Non Laedas” That Is, In English: Use Your Property So You Do Not Harm Others Is:

- ***“A Grand Doctrine Of Life And The Basis Of (Loving Relationships) Between Neighbors”***

Gandhi is also quoted as saying:

- ***“We should act as ‘trustees’ and use natural resources wisely as is our moral responsibility to ensure to future generations a healthy planet.” [See, Narendra Modi in the *Financial Times* of 11/30/15]***

Overcoming Impediments: Paths Forward

- **Understanding how much morality, the law and equity support safe development**
- **Understanding the need for current, actionable, understandable information on risk**
- **Educating on true risk**
- **Influencing transformative behavior change through higher standards of care; litigation; inspiration**

Opportunities to Overcome Impediments! Higher Standards for Future Development



- Dr. Arthur “Chris” Nelson, FAICP at the Rocky Mountain Land Use Institute March 13, 2015
 - “More than half of the built environment of the United States we will see in 2050 does not exist today.”
 - *Update on information contained in: Journal of the American Planning Association, Vol. 72, No. 4, Autumn 2006.*

Just Released

Hide from the Wind

Tornado Safe Rooms in Central Oklahoma



Prepared by
The Natural Hazard Mitigation Association
for the Federal Emergency Management Agency

Needed: A Common Message of Disaster Risk Reduction-Delivered By Multiple Folks

- We need to deliver knowledgeable messages of enormous business opportunity in resilience [c.f J. Moules in *Financial Times*, 11/3015,
- To some folks we need to appeal based on disaster vulnerability reduction, safety, and security, with regional and locally based mitigation suggestions.
- Great article on this topic in *New York Times* of 11/15/15: “The Key to Political Persuasion”, by Robb Willer and Matthew Feinberg
- Also in an Article in the journal *Personality and Social Psychology Bulletin* by same authors
- “...frame your position in terms of the moral values of the person you are trying to convince”
- “It’s a simple strategy, It’s just not easy to implement”

Some Suggested Messages

- **Resilience presents an enormous business opportunity**
- Increase mass transit, design to reduce Greenhouse Gas Emissions;
- build **safe rooms**, and have higher **wind load building standards** in areas subject to high probability of high winds/tornadoes;
- carry out community and individual **wildfire protection** in appropriate areas;
- design and retrofit to reduce **earthquake** damage;
- build with higher **freeboard** (generally 4 feet or more) in areas subject to floods, understand the limitations of flood frequency projections based on the past, which include many unrealistic assumptions;
- recognize the need to protect **water quality**, ecosystem services and threatened and endangered species
- Avoid litigation caused by improper design

NHMA IS Developing a CROSS-CUTTING Disaster Risk Reduction Ambassador Curriculum

Multihazard

Multidisciplinary

**Part of the larger national and international efforts to
support “Whole Community” Resilience.**

Summary

Fundamentally our society must choose either:

Better standards to protect resources and people

or

Standards which inevitably will result in destruction **and**
litigation

**We Need To Make Allies and Friends
To Get Our Message Across**

FIND THE COMMON VALUES AND START THERE

**All of us can and should play a key role in planning a safe
and sustainable future**

A Thought Courtesy of Ben Franklin: All of US Who Care About a Safer, Better Future Need To Work Together

