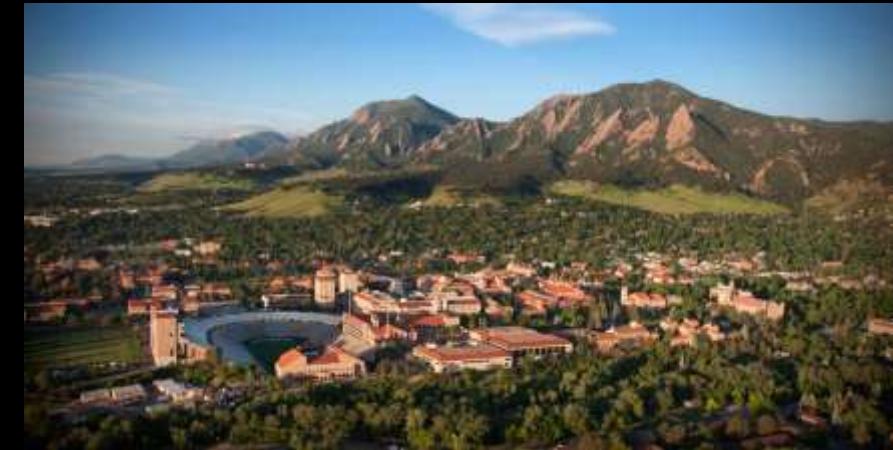


Reflections on 40 Years in the Hazards and Disasters Community



NHRAIC
40th Annual Workshop
Keynote Address
Tuesday--July 21, 2015
Claire B. Rubin

My Background



I have had a quite varied career path:

- Researcher
- Consultant
- Practitioner
- Educator
- Lot of part-time and consulting assignments

Attended 38 out of 40 Workshops!

My Funding Sources: Employment, Consulting, and Grants

Government

- Federal Disaster Assistance Administration
- U.S. Environmental Protection Agency
- Federal Emergency Management Agency
- FEMA Region IX
- Arlington County, VA

Non-Profit

- Academy of State/Local Government
- World Bank
- Natural Hazard Mitigation Association
- Oak Ridge National Lab (CARRI project)
- Public Entity Risk Institute
- Homeland Security Studies and Analysis Institute
- Natural Hazards Mitigation Association
- ICMA-Int'l City/County Management Assoc.

Academia

- American University
- Georgetown University
- George Washington University
- University of Maryland University College

For Profit

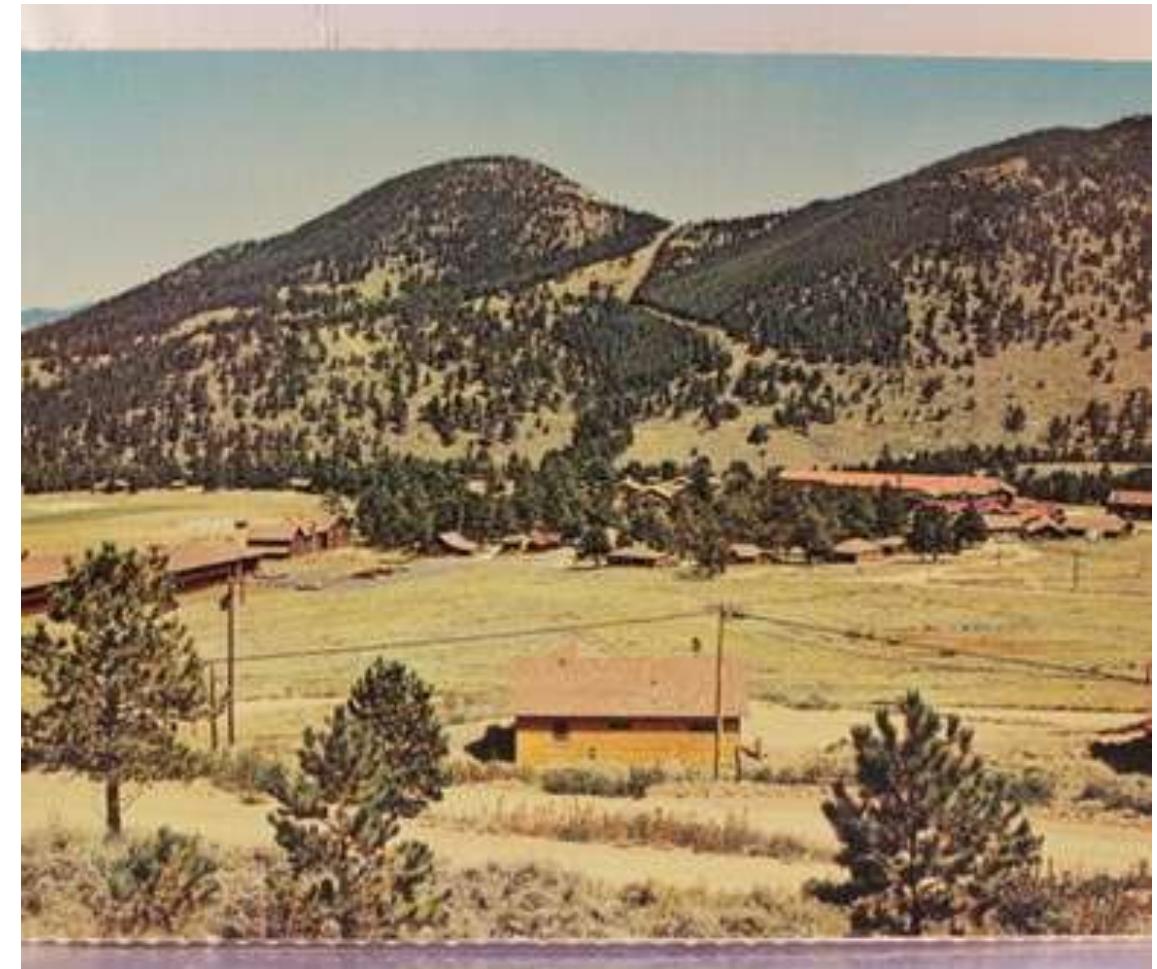
- Triway International Group
- Emergency Management Magazine
- Loch Haven Partners
- Ian McLean Consultancy, Rotorua, NZ
- Roy F. Weston
- ICF Consulting
- SRA International
- Marasco-Newton

**It can be a juggling act
sometimes...**



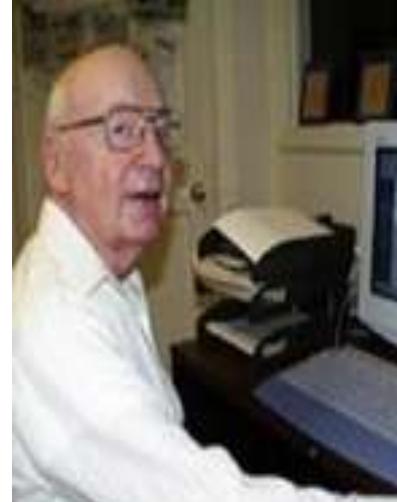
First Annual Workshop of the Natural Hazards Center: 1975

- Gilbert White, Center Director
- YMCA Camp, Estes Park , CO
- Attendees:
 - Roy Popkin
 - Ugo Morelli
 - About 70-80 others

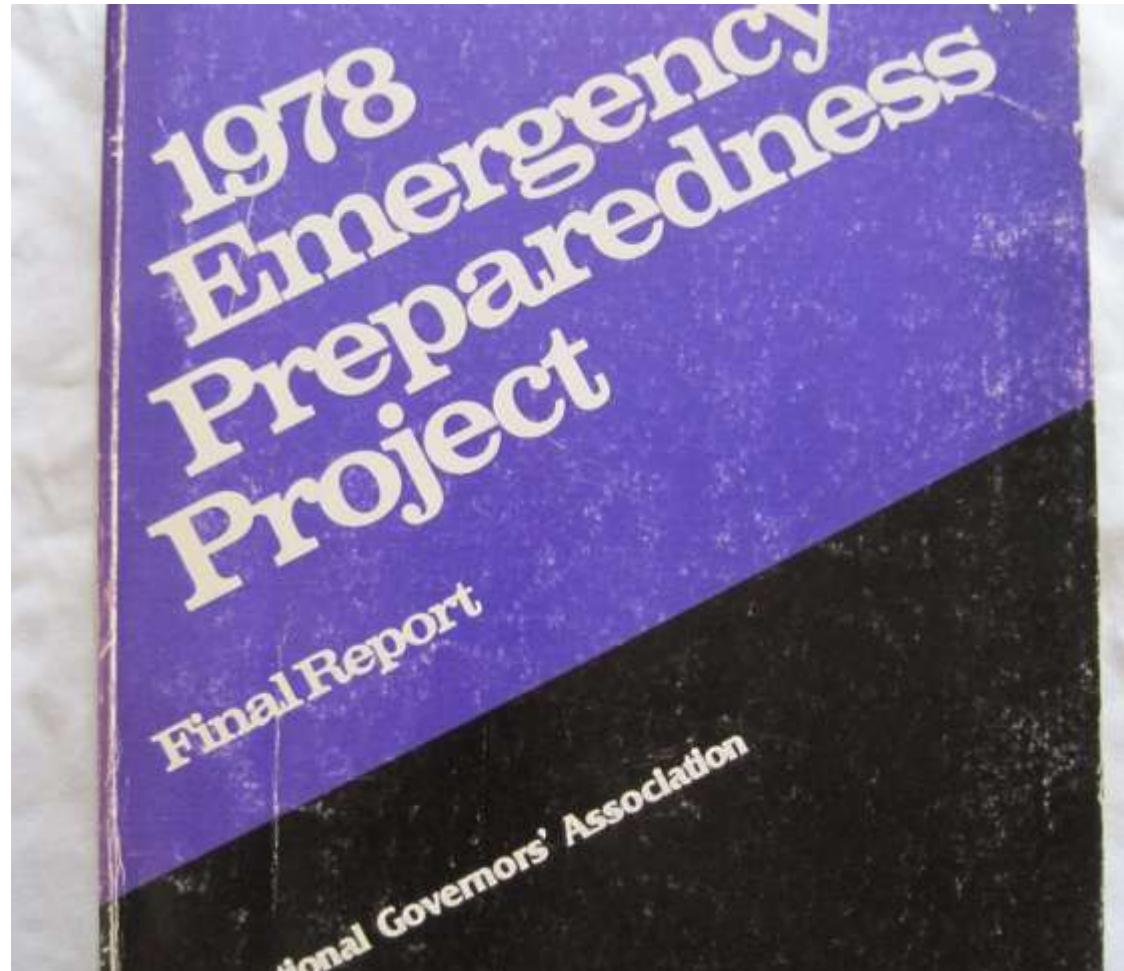


People and the Center

- The pantheon of capable, dedicated members of the hazards research and Emergency Management communities and the many people who provided inspiration and guidance to me through the years, starting with:



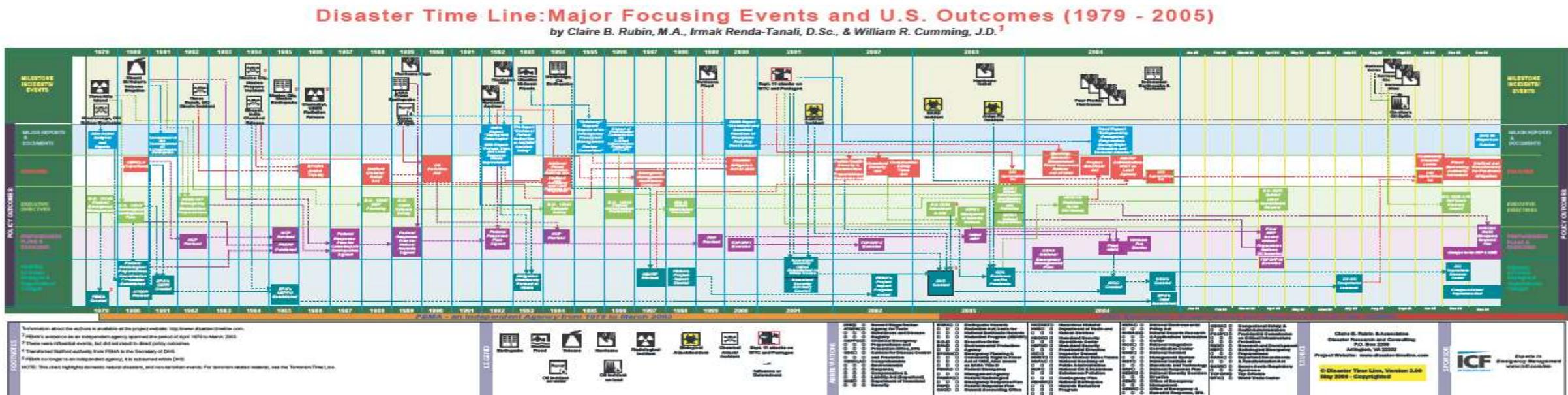
National Governor's Association (NGA) Report



- The NGA was engaged in some essential research and produced several ground-breaking, baseline documents on emergency management.
- Volume on Comprehensive Emergency Management (1978)
- Baseline for the newly-formed FEMA

Disaster Time Line

- In the late 1990s to early 2000s: affiliation with GWU led to my developing teaching products and educational materials.
- A key feature of the time line charts is how reactive our national system of emergency management is.



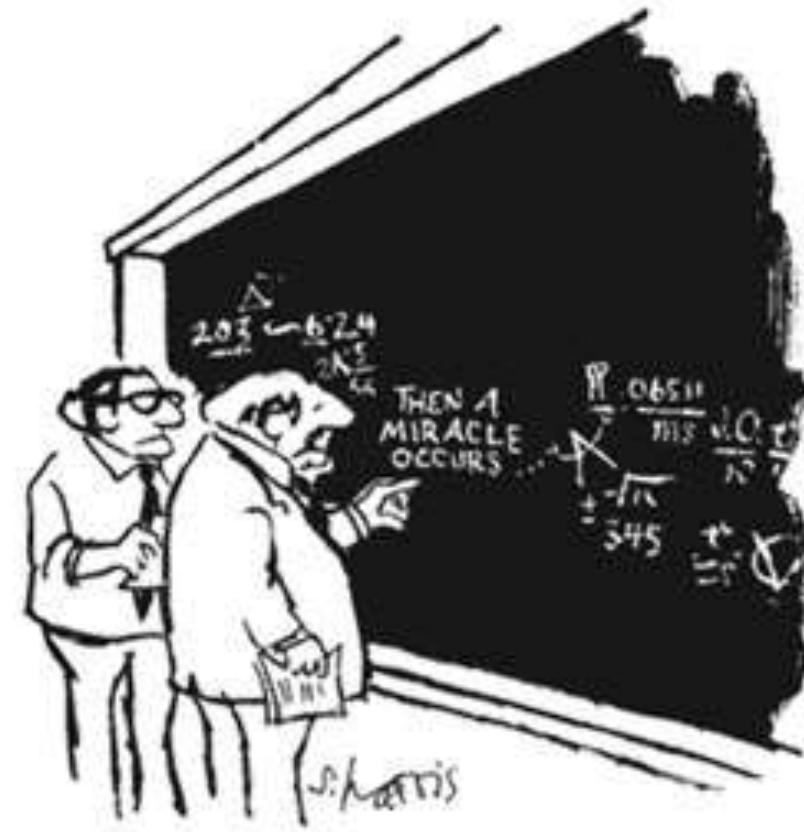
Research and Education Centers

- Natural Hazard Research and Applications Information Center (CO)
- FEMA's Emergency Management Institute (MD)
- Disaster Research Center (DE)



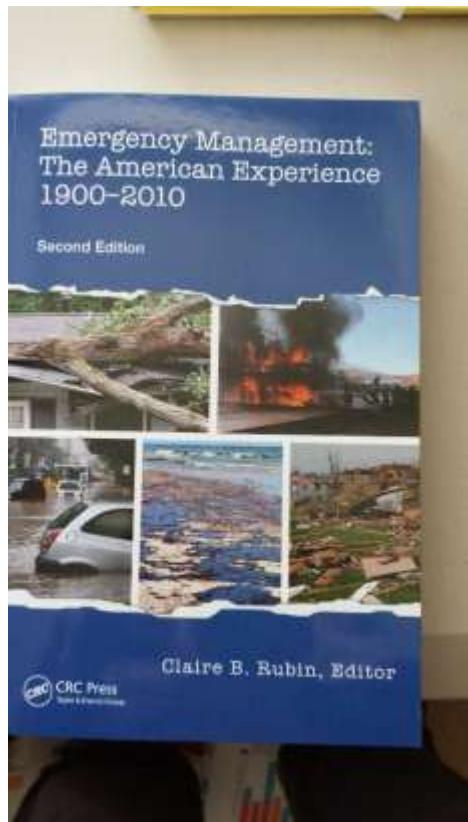
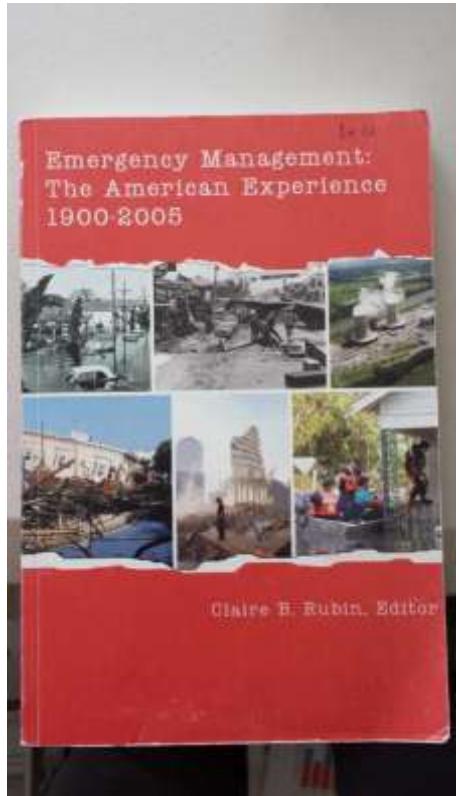
Different Emergency Management Groups

- Hazards Center: many of the major researchers who create the intellectual content
- FEMA/EMI: Primarily deliverers of education and training (based in Washington DC)
- The Natural Hazards Center has filled the role of a professional association: – it offers an annual workshop, has a newsletter or two, and supports a community of people with common interests.



"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

Emergency Management: The American Experience



- Plans for the history book began in 2004.
- To document the history of emergency management in the U.S.
- We had documented the outline of recent decades of history in the disaster time line charts.
- The book is now in its second edition

The Washington DC Experience

- Being based in Washington, DC was essential to my career in that I got in on some foundational projects, which were essential to capturing history, since so much of the Emergency Management history was never formally written down.
- **FEMA; NSF; EPA; DHS**



Late 20th Century: EM as a new Frontier: 1975 - 2000



- During this time period we saw the build-up of the Emergency Management field:
 - in terms of personnel numbers
 - development of plans, policies, and tools
 - higher education programs
 - increasing professionalization (excluding this cartoon)

Major Disaster Events: 1975-2000



Hurricane Hugo (1989)



Loma Prieta Earthquake (1989)



Exxon Valdez (1989)



Hurricane Andrew (1992)



Great Midwest Floods (1993)



Northridge Earthquake (1994)

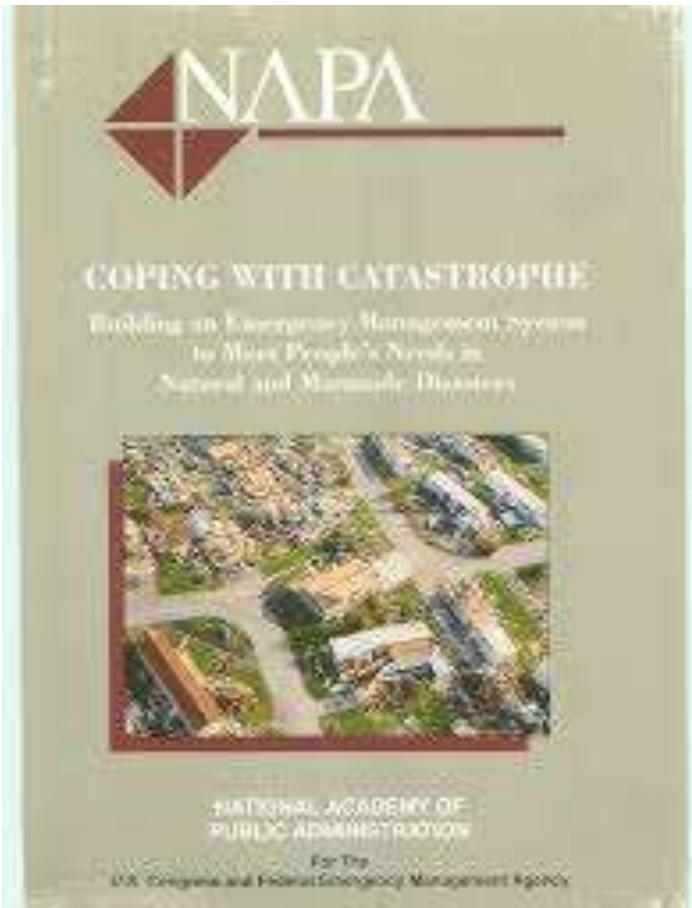
Major Organizational/Professional Activities or Actions: 1975-2000

- Work of the NGA and creation of Comprehensive EM (1978)
- FEMA formed by Executive Order, 6/19/1978
- Development of the draft Federal Response to a Catastrophic EQ Plan (the precursor to what is now the National Response Framework (late 80s))
- The first ICMA green book on EM (1991) – start of the higher education emphasis (1998)
- Public Entity Risk Institute created (1997) with private endowment. They were risk takers, funded small projects, exerted their independence in support of worthwhile projects.



Community Recovery After a Major Disaster (1985), published by NHRAIC

Coping with Catastrophe (1993)



- It was the first in-depth evaluation of FEMA, done 12 years into its operation and about half way through its roughly 25 years as an independent agency.
- It was influential, especially to J.L. Witt, who assumed his position as FEMA Director just as the report was being finished.
- It remained relevant for many years and was frequently cited.

First 15 years of 21st Century: 2000-2015



9/11 (2001)



Hurricanes Katrina, Rita and Wilma (2005)



BP Oil Spill (2010)



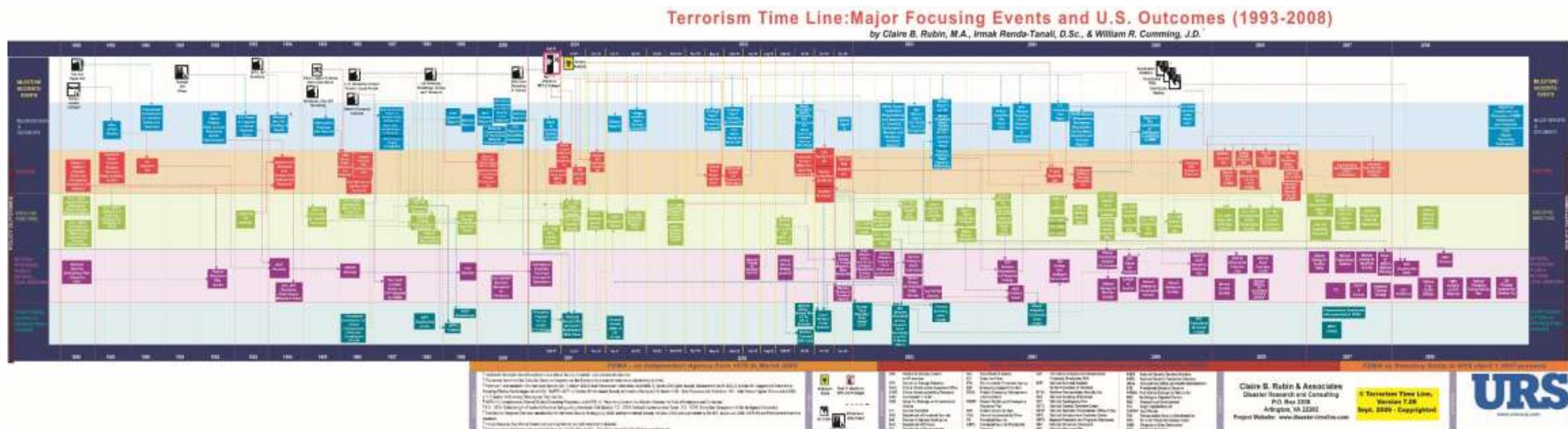
Mega Storm Sandy (2012)



International Earthquakes (Haiti, Japan, Nepal)

Major Organizational/Professional Activities or Actions: 2000-2015

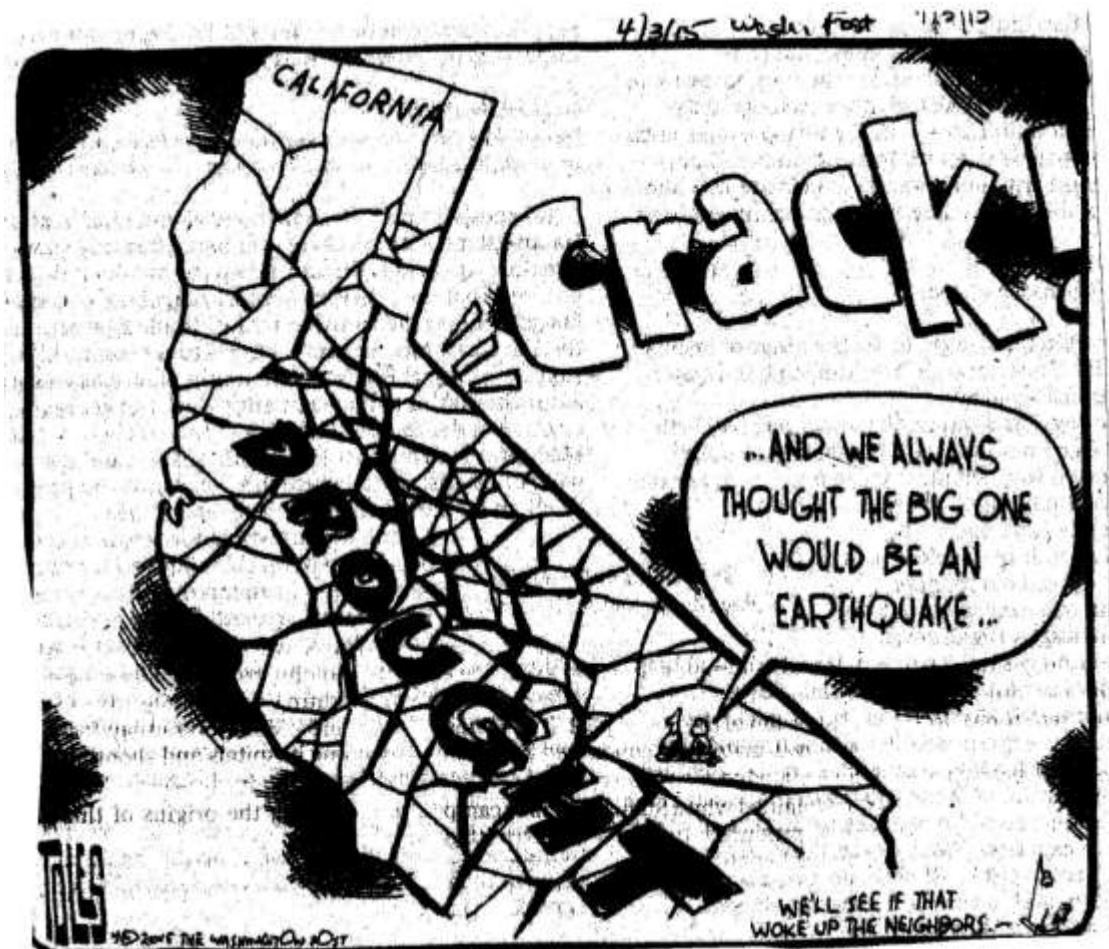
- **Events of 9/11:** 2003 formation of DHS (office of HS came first) and the Terrorism Time Line Chart (www.disaster-timeline.com) outlines the major legislation and public policy outcomes from 2001-2008.
- **Hurricane Sandy:** first use of the National Disaster Recovery Framework (issued in 2011) for a major disaster event



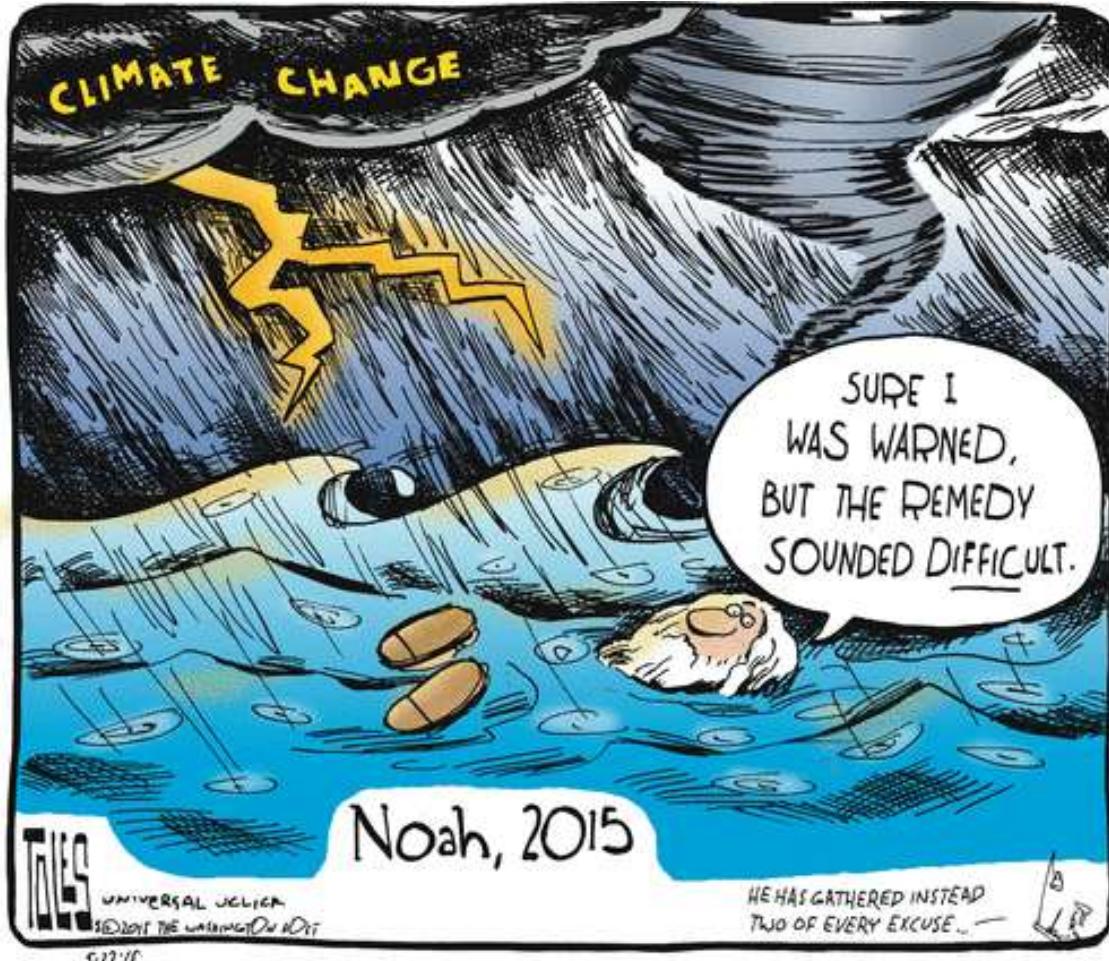
What Worked and What Didn't Work over last 40 years

■ Some Observations:

- Research Community
- Federal Agency and Congressional Actions
- Emergency Management Training and Education
- Hazards/Disaster Science and Public Policy



Into the 21st Century...



- Emergency Management has become an ever changing field with new threats and hazards, and more complex meanwhile the population is growing and moving to the most vulnerable geographic areas.
- Events are covering ever wider areas and needing billions of dollars for recovery. Hence, there is an even greater need for frequent updates in enabling legislation, guidance, programs, and education and training.

Increase in Knowledge?

- Growth in knowledge does not necessarily result in growth in competence and effectiveness.
- Recovery as example of limited progress: There has been relatively little progress on long-term recovery—the longest and most expensive phase of EM.

Resolving the Hazards Loss Paradox

Policy Makers and Practitioners:

- Fundamental cultural shift in emergency management (from reactive to proactive)
- Evidence-based public policy (not expedient politics)
- Think long-term for community betterment (not just election cycle)
- Engage hazards scientists (they are your friends)

Hazard Researchers:

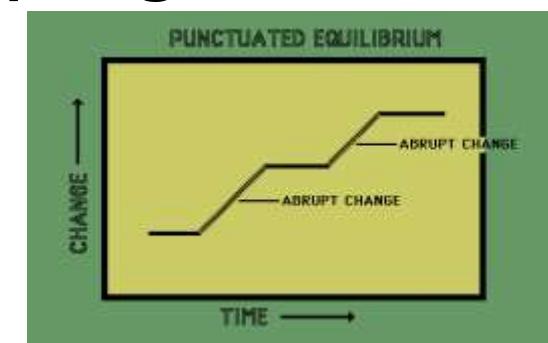
- Make research results more useful (not refereed journal articles, but policy briefs, etc.)
- Help solve their problem (engage with practice and co-produce knowledge)
- Get over finding perfect solution with clearly defined certainty bands (think what is good enough)

Keep in mind larger goals of equity, fairness, and a more resilient future for the next generation



Closing Thoughts

- Like all endeavors, progress in our field has not been a straight line. There are many lurches forward and backward. “Punctuated equilibrium” is the term public administration researchers have used.
- In the coming years, we face new threats/hazards, along with advances in technology and science. We will have a vastly wider range of choices and tools, but also a comparably large number of risks and responsibilities.
- Are we up to the challenge?



Questions?

- Claire B. Rubin
- www.clairerubin.com
- www.disaster-timeline.com
- http://recoverydiva.com
- www.disastersandfaith.com
- cbrubin@gmail.com