

National Hazard Readiness

Lecture Objectives:

- compare 1975 and 2000 states of hazard readiness**
- awareness of future directions**
- understand concept of sustainability**

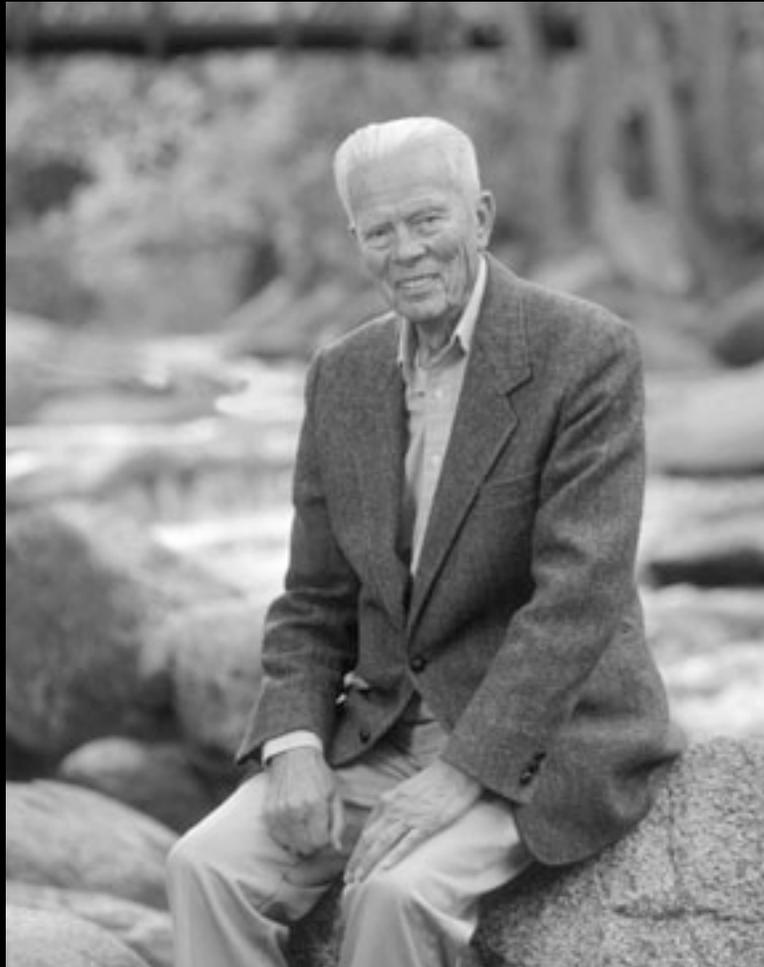
First U.S. Hazard Assessment

*National report by Gilbert White (geographer)
and Eugene Haas (sociologist)*

White, G. and E. Haas (1975) *Assessment of
Research in Natural Hazards*. Cambridge, MA, MIT
press.

Main Findings - 1975

- dominated by technical/science fields
- efforts are sporadic (event-based)
- unorganized, lacking funding programs
- lacking baseline information*



***Gilbert F. White
1911 -***

We must learn something that no nation or group of nations yet has mastered: the art of helping others to improve their lot even as differences between them grow. In a world increasingly organized on principles of individual and national equality, this will be a staggering test of sensitive understanding, cooperation, and communication. - Gilbert F. White

1975 Assessment Accomplishments (direct and indirect)

- created a single hazard agency (FEMA) by Pres. Carter**
- provided awareness of hazards and needs, prevention and mitigation**
- began process of communication across disciplines, social and scientific**
- developed a clearinghouse of disaster information
NHRAIC (<http://www.colorado.edu/hazards/>)**
- many of the hundreds of recommendations (152 in research alone) now standard**

1975 Assessment Failures

- no creation of specific post-disaster audits**
- no comprehensive longitudinal studies**
- state-level disaster agencies - not funded, not involved**
- no congressional committee overseeing hazards**
- political action tends to focus on short-sighted, provincial agendas**
- reliance on technology to remain safe, recover**

What's Missing from Assessments?

- Litigation, liability issues
- Resource allocation: how much is a human life worth?
- Is true "multidisciplinary" research possible?
- Do academic, government systems help or hinder crossover work?
- Weakest link? Communication - always.

2000 National Assessment: Mileti, D. (1999) Disasters By Design. Joseph Henry Press, Washington, DC

-why are disaster losses increasing?

-what is sustainable mitigation?

-strategies for improved mitigation?

Some changes have impacted hazards study independent of any recommendations:

-computers

-Internet

-environmental, physical, chemical models

Mileti (1999) - what is sustainable mitigation?

- maintain and enhance environmental quality (ecosystem)**
- maintain and enhance quality of life (social needs)**
- foster local resiliency and responsibility (protection)**
- foster vibrant local economies (mitigation does not hinder livelihoods)**
- ensure social equity (both across current divisions, and future generations)**
- adopt local consensus building (full participation)**

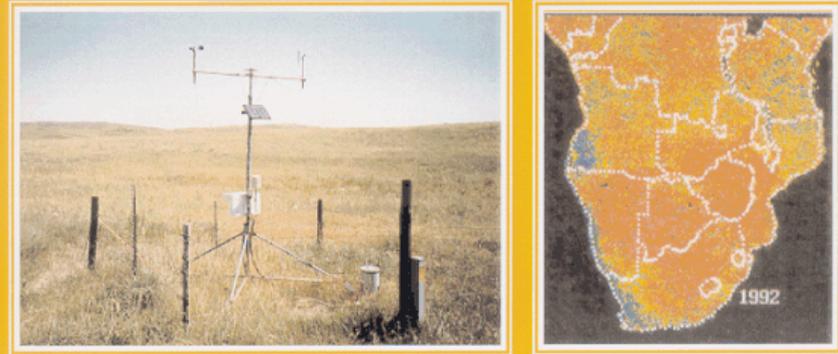


Mileti (1999) - Proposed tools for improvements

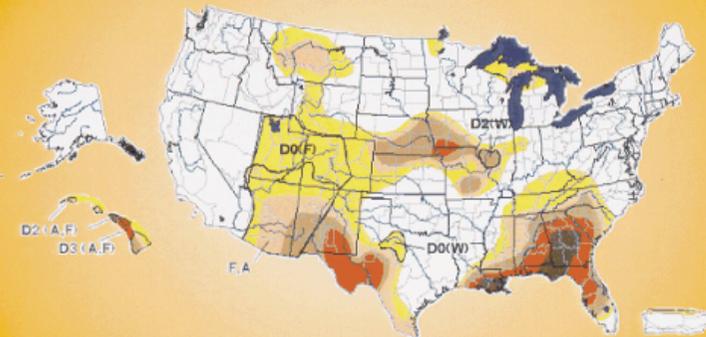
-Warning Systems: technology increased detection, but not dissemination; more baseline data, more technology, integrate with specific needs (warning times, levels of danger)

-Insurance: take a more active role (incentives); data on cost-effectiveness (mitigation vs insurance repair), scenario modeling, measures of insurance capacity to respond

-Technology: computers, GIS, satellites



Early Warning Systems for Drought Preparedness and Drought Management



Mileti (1999) - proposed tools

-Engineering

-Codes: adapted with experience, but need assessment, social impacts, monitoring

-Research: more technology wanted

-Hazard-specific: more technology, dissemination, integration with specific needs

-Preparation/Recovery: territorial issues, training, understanding of social response to hazards, long-term action

-Economics: assessments of cost vs benefits for people, structures, resources



Economics and Science Building, National University, San Salvador, following 1986 earthquake.

What's missing from evaluations?

-Litigation, liability issues

-Resource allocation: how much is a human life worth?

-Is true "multidisciplinary" research possible?

-Do academic, government systems help or hinder crossover work (timeframe resolution of studies)?



Report: Majority Of Americans Unprepared For Apocalypse

the ONION, September 13, 2006 | Issue 42-37



Millions remain vulnerable to the all-devouring terror of Jesus' wrath (file photo).

WASHINGTON, DC—Over 87 percent of Americans are unprepared to protect themselves from even the most basic world-ending scenarios, according to a study released Monday by the nonpartisan doomsday think-tank The Malthusian Institute.

Despite "more than ample warning" for the most likely means of worldwide destruction, less than one million American households have taken even the simplest precautions against nuclear shockwaves, asteroid impact, or a host of angels bearing swords of fire, the study concluded.

"All in all, America gets an 'F' for end-of-the-world preparedness."

U.S. Apocalyptic Vulnerabilities

