

Integrating Hazard Mitigation into Local Planning

James C. Schwab, AICP
Manager, Hazards Planning Research Center
American Planning Association

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Background: U.S. Planning

- Land-use planning a function of state and local government, not federal
- 50 “state laboratories” mean 50 systems and statutory frameworks
- Federal role is limited to:
 - Planning land use on federal lands
 - Influencing state and local land use through policy initiatives on particular areas of federal concern

Background: U.S. Planning

- How federal influence works:
 - Establish minimum standards
 - Environmental
 - Hazards management, e.g., floodplains
 - Other
 - Unless law specifies pre-emption, states can exceed those standards in own policies
 - Delegation of enforcement authority to state agencies in compliance
 - Tying eligibility for federal money to achievement of performance standards

Emergence of Modern Environmentalism

- Parallel development in 1960s of modern environmental movement
 - Old focus: resource conservation
 - Added new focus: urban pollution
- Creation of U.S. EPA in 1970 and passage of NEPA, also in 1970
- Procession of federal laws follows:
 - Clean Air Act
 - Clean Water Act
 - RCRA, CERCLA, etc., dealing with hazardous waste and materials

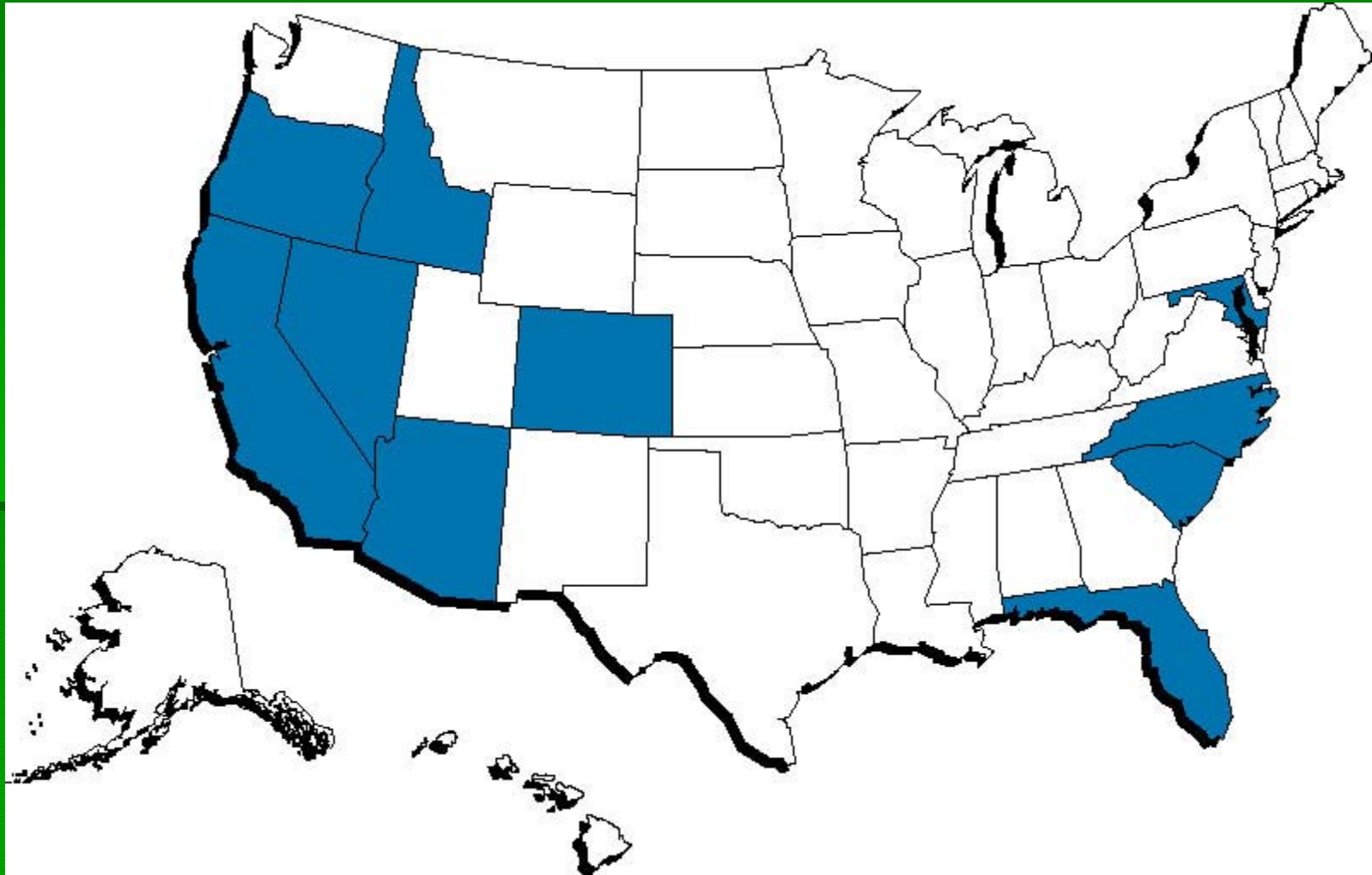
State Planning: Shift to Growth Management

- Growth management becomes focus from 1970s forward in several states:
 - Florida, California, Oregon, Washington, Maryland, a few others
 - Planning becomes mandatory, not optional
- Hazards added as a required focus
 - Twelve states now require a hazards element in local comprehensive plans

Focus on Hazards

- Safety element developed in California
 - Adapted later in Nevada and Arizona
 - Began with seismic safety focus
 - California has virtually gone all-hazards
- Florida, Carolinas with coastal focus
- Gradual shift to all-hazards focus
 - Oregon incorporates multiple hazards

Natural Hazards Element



Require



Don't Require



Where to Learn More

- Go to <http://www.disastersafety.org>
- For background on growth management and “smart growth,” go to:
<http://www.planning.org/growingsmart>

Shift in Federal Focus

- National Flood Insurance Program created by Congress in 1968
- FEMA created in 1979 by President Carter
- Stafford Act (1988) establishes framework for federal disaster declarations and assistance
- Flood Insurance Reform Act (1995) reacts to recommended changes after 1993 Midwest Floods
- Disaster Mitigation Act (2000) requires preparation of local hazard mitigation plans to qualify for federal hazard mitigation grants

Hazard Mitigation

- Definition in U.S. Context:
 - "Sustained action taken to reduce or eliminate the long-term risk to human life or property from natural hazards and their effects. Note that this emphasis on long-term risk distinguishes mitigation from actions geared primarily to emergency preparedness and short-term recovery."

DMA: What's so Radical?

- First federal effort to *make* states and local governments plan for mitigation *before* disasters
- Ties eligibility for federal grants to adoption of a FEMA-approved plan
- Sets the stage for gradually ratcheting up level of quality expected in future plan updates

DMA: What's the Problem?

- Most plans are prepared by emergency managers with little planning input
- However, implementation generally implicates role for land-use planning
- Multijurisdictional (regional) plans often don't connect well with local plans or land-use regulations
- States control land-use planning, not federal government—introduces hazards planning to areas with minimal previous experience

Integrating Hazard Mitigation into Local Planning

- FEMA underwriting APA research project into best practices in integration
- Need to generate cooperation and discussion between planners and emergency managers
- Need to improve understanding of how communities can integrate hazards into local planning process—and why they should

Integrating Hazard Mitigation into Local Planning



A Project of the APA Hazards Planning Research Center with support from FEMA

Why this project; why now?

- Better linkage of planners, emergency managers, and other professionals to improve plan quality
- Help communities move beyond basic DMA requirements toward broader planning goals
- Mainstream hazard mitigation planning in order to improve implementation of hazard mitigation objectives
- Reduce losses of life and property by learning to think ahead about probable consequences of natural disasters



Scene from Hurricane Opal, Florida, 1995

Where Should Integration Occur?

- Long-range community visioning and goals and objectives activities;
- Plan making of all types:
 - Comprehensive, master, or general plans
 - Sub-area plans
 - Functional plans
- Land-use management tools
- Review and approval of development projects
- Capital improvements programming

Challenges to Better Integration

- Mitigation has tended to be event-oriented—first the disaster, then the money to mitigate
- Lack of planning expertise in hazard mitigation
- Need for longer-term perspective on risk reduction
- Mitigation as low priority among planning goals and objectives (including willingness to procrastinate)
- Perception that someone else will pay (federal aid, insurance)
- Property rights versus public safety

Problematic Results?

- Unnecessary levels of loss
- Slow economic recovery
- Lack of community resilience



Examples of Plan Element Linkages

Transportation:

Mitigating hazards that could cripple vital routes through the community

Highway landslide



Examples of Plan Element Linkages



Historic preservation:
Shoring up vulnerable historic properties to preserve community heritage

Fats Domino residence,
New Orleans

Examples of Plan Element Linkages

Economic development:

Preventing catastrophic loss of business activity from disaster

Small business in Chelsea, Iowa, 1993 Midwest floods



Examples of Plan Element Linkages

Park in Tulsa floodplain

Land use:

Preventing inappropriate or unsafe uses of land through regulations, easements, and acquisitions



Examples of Plan Element Linkages

Colorado mountain stream

Environment:

Coupling mitigation goals like floodplain management with goals for open space, recreation, and clean air and water



Examples of Plan Element Linkages

Housing:

What do we build, how safely, and where do we choose to build it?

What's in your subdivision code?

What's in your building code?

Iowa City homeowner,
1993 Midwest floods



Plan Element Linkages

A Starting Point:

Linking goals and objectives in a hazards element or hazard mitigation plan with related issues in other plan elements

How might this work?

Principles for Integrating Hazard Mitigation into Local Planning

- Act before a disaster strikes
- Mitigation requires patience, monitoring, and reevaluation
- Be strategic and opportunistic
- Evaluate opportunities for density reallocation
- Emulate green building trend through existing or new programs
- Communicate risks for hazards in local areas
- Local implementation depends on political will
- Account for stakeholder values in light of hazard mitigation

Best Practices Inventory

- Online questionnaire to guide participants
- Follow-up appeal to participants for specifics
- Broad-ranging appeal for plans, documents, and ordinances from communities with best practices
- Outreach to SHMOs and FEMA regions for recommendations on forward-looking communities
- Direct outreach to planners in recommended communities
- Analysis of materials collected and creation of best practices database for use in developing PAS Report

Potential Best Practices (From APA Symposium, Nov. 2007)

- Make hazard mitigation and comprehensive plan complementary
- Routinely implement participatory planning
- Incorporate hazards into visioning
- Use the best tools to integrate hazard mitigation into planning
- Use tools and resources to advance integration into new arenas of planning

For Further Information

Visit project web pages at:

www.planning.org/hazardmitigation

E-mail: hazardsplanning@planning.org

Further Considerations: Relocation

- Evolving context in U.S. since late 1970s move of Soldiers Grove, Wisconsin
- All moves have been voluntary efforts to conserve entire communities
- Assistance packages have often been complex and somewhat ad hoc
- Related movement toward sustainable post-disaster redevelopment

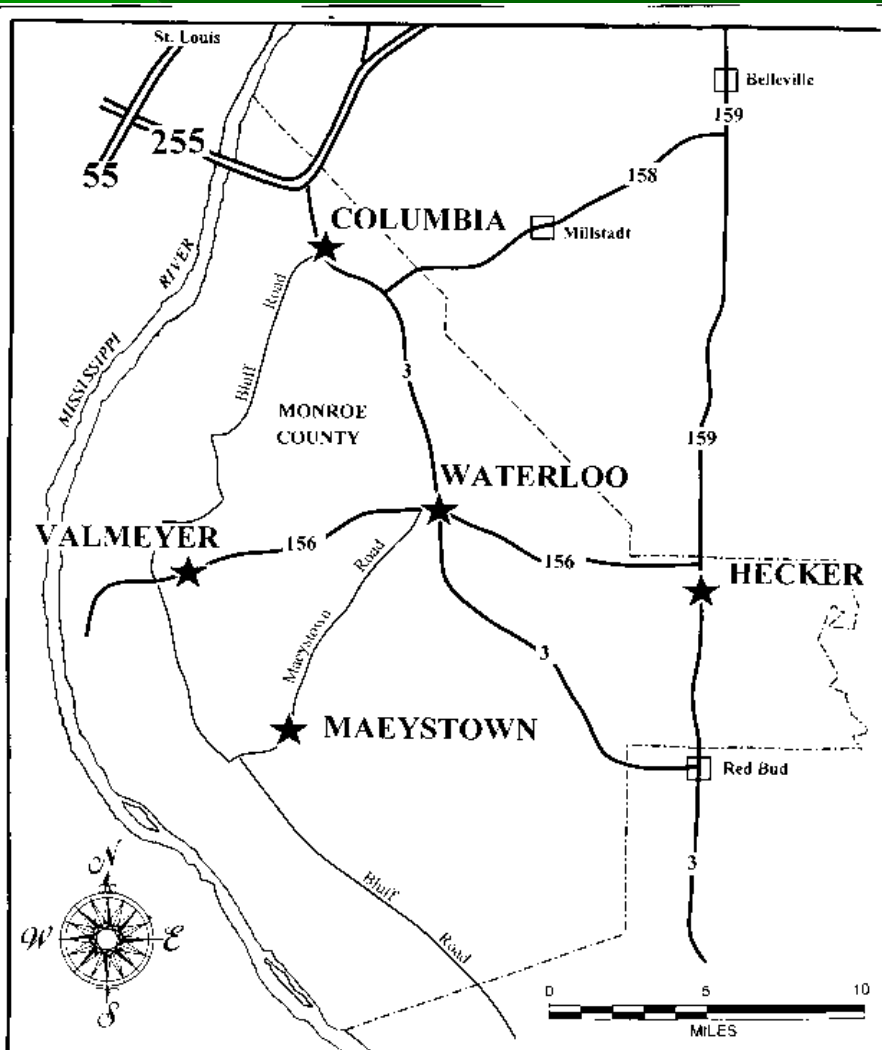
Soldiers Grove Relocation Funding: State/Local Sources

- Regional Planning Commission (\$4,000)
- State Planning Office (\$2,700)
- Dept. Local Affairs & Dev. (\$13,200)
- Local businesses (\$3,300)
- General obligation borrowing (\$90,000)
- Dept. Natural Resources (\$42,000)
- Governor's discretionary (\$167,684)
- Village borrowing—TIF startup (\$235,000)
- Farmers Home Admin. (\$1,663,000)
 - Total: \$2,220,884

Soldiers Grove Relocation Funding: Federal Sources

- Housing & Urban Development-CDBG (\$3,261,900)
- Community Services Admin. (\$40,000)
- Economic Development Admin. (\$500,000)
- Dept. of Interior-LAWCON [parks acquisition] (\$646,147)
 - Total: \$4,455,247

Valmeyer, Illinois Relocation Project



Main Points

- Disasters create opportunities as well as loss and destruction
- Few better opportunities exist to rethink a community's pattern of development
- Recovery from one disaster is preparation for the next disaster
- Goal: Create a new community that is safer and stronger than the old

Final Comment on Design

- Two hotels in coastal Sri Lanka
 - One survived the tsunami
 - One did not
 - Why the difference?



Questions

- How does this model of hazards management relate to New Zealand?
- Does it provide potential material for New Zealand guidelines?
- What do you think is missing from the U.S. approach?
- What can we learn from you?