

Rocky Mountain Land Use Institute

Western Places/Western Spaces: Building Fair & Resilient Communities

FOLLOW THE MONEY: LEVERAGING RESOURCES TO IMPROVE RESILIENCE

March 12-13, 2015

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President
Natural Hazard Mitigation Association (NHMA)

NHMA
Natural Hazard Mitigation Association

Good Day!

- I appear today representing:
The Natural Hazard Mitigation Association

This is not and cannot be legal advice

This is a statement of general principles of ethics, law
and policy

To Set the Stage For Our Discussion

- Lets discuss some basics of Law
- In the Law-especially criminal law- Attorneys often seek to identify someone else to take the blame
- For increased flood damages that “Someone Else” is often...

Mother Nature



- First of All, Does Mother Nature Cause Disasters?
- Dr. Gilbert White Stated What I Believe to be Correct:
“Floods are Acts of Nature; But Flood Losses Are Largely Acts of Man”
- I suggest that most losses from Foreseeable Natural Events are also really acts of man
- Many folks wish to solve the problem of disaster losses through a new concept: Resilience
- Other folks advocate “Climate Adaptation”

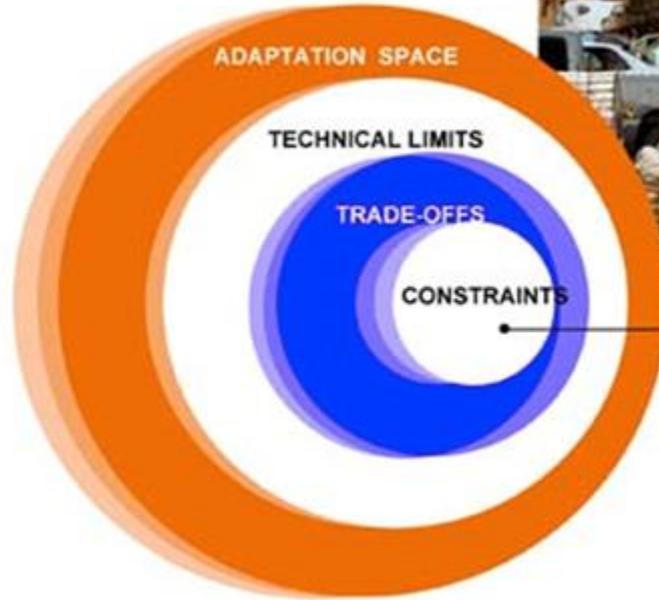
Resilience

- Many definitions of “Resilience”
- I like the UN Definition:
- “Resilience is the ability of a system, community or society exposed to hazards **to resist, absorb, accommodate to and recover from the effects of a hazard** in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.” (emphasis added)
- See, *UN System Task Team on the Post-2015 UN Development Agenda*, available at:
http://www.un.org/en/development/desa/policy/untaskteam_undf/thinkpieces/3_disaster_risk_resilience.pdf

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



What we must do



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

What is “Disaster Risk Reduction”?

- The UN has an excellent definition:
- “Disaster Risk Reduction is the **concept and practice** of reducing disaster risks through **systematic efforts** to **analyse** and **manage** the **causal factors of disasters**, including through reduced exposure to hazards, lessened vulnerability of people and property, **wise management of land and the environment**, and improved preparedness for adverse events.”(emphasis added)

I Hope All of You Will Agree

- **We need Disaster Risk Reduction!**
- Among the Most Clear Lessons of The Horrific Wildfires, Tornadoes, Hurricanes, Tsunamis & Floods of this Decade:
 - **There Is No Possibility of A Resilient Society Without Safe Locations for Business and Industry to Operate**
 - **We Need Safe Housing for Employees to Work at Businesses and Industry – to Have an Economy at All**

How Can We Accomplish Disaster Risk Reduction: A) Pre Disaster?

- Many folks tell me that there are insufficient funds for Hazard Mitigation/Climate Adaptation/Disaster Risk Reduction
- Do you at least sort of agree with the old saying that **“Well Begun is Half Done?”**
- If so, is “Half-Done” very, very “Well Begun”?

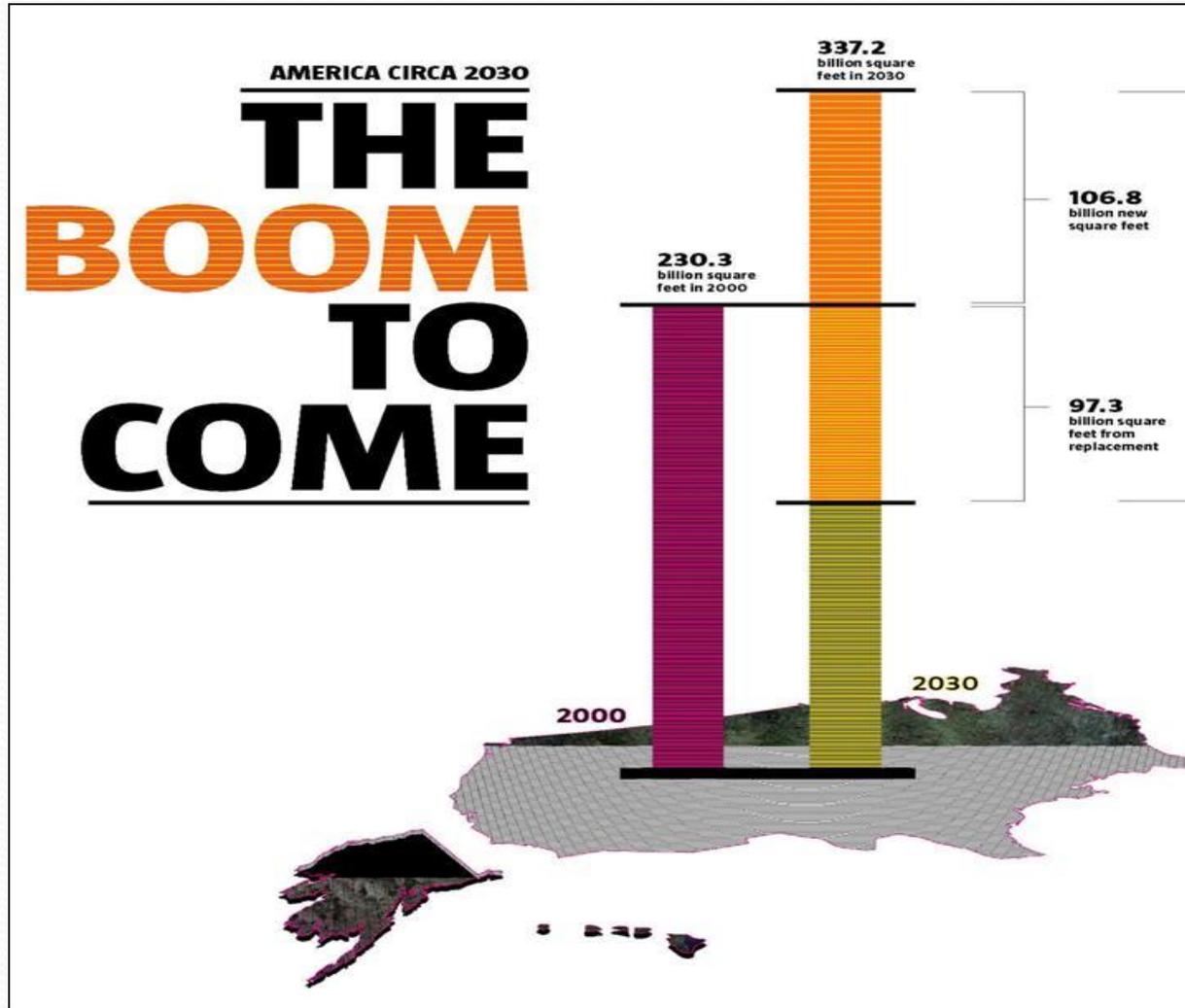
Demographic Trends: The Future



- Dr. Arthur “Chris” Nelson, FAICP
 - “More than half of the built environment of the United States we will see in 2025 did not exist in 2000.”

*Journal of the American Planning Association,
Vol. 72, No. 4, Autumn 2006.*

© American Planning Association, Chicago, IL.



www.architectmagazine.com

We Will Have Development

- Demographic Pressures Will Drive Development
- Often in Areas Where there Are Considerable Natural Hazards:
 - Tornadoes
 - Floods
 - Tsunamis
 - Earthquakes
- **We Need To Develop Safely and Affordably**
- **We Can Do It!**

Must an Event be a “Disaster”?

- Preparation
 - Individual
 - Insurance
 - Disaster Kit/Plan
- One’s Community
 - **Disaster Risk Reduction building codes/zoning**
 - **Pre-Disaster Mitigation**
 - **Post Disaster Mitigation**
 - Mutual Assistance Compacts
 - Disaster Contingency Planning
 - Volunteers – the Citizens Corps

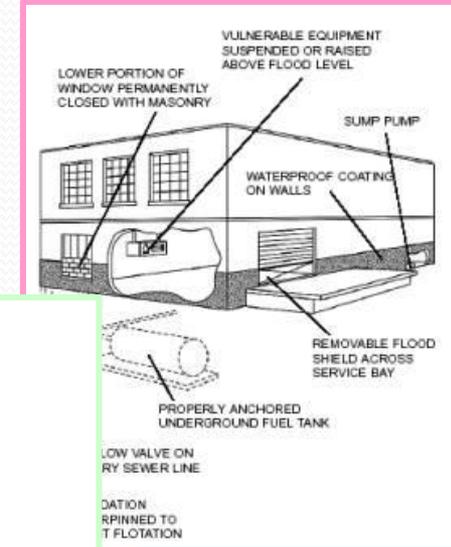
How Can We Accomplish Disaster Risk Reduction: A) Post- Disaster?

- Once-Upon-A-Time There Was a Magic Chant to Get Post-Disaster Assistance
- **“Return to Pre Disaster Conditions”**
- Today, Hazard Mitigation is Widely Accepted as a Foundation of Resilient and Livable Communities
- But How to Do it?

The NHMA Approach to Disaster Risk Reduction

Planning and Building Livable, Safe & Sustainable Communities

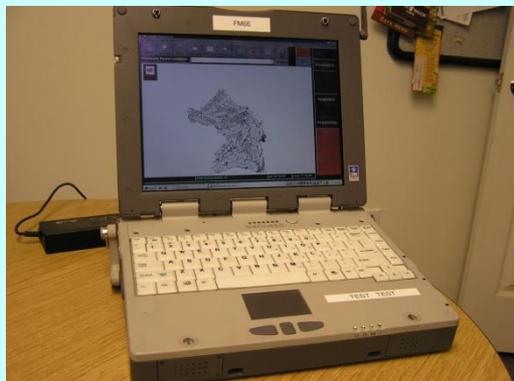
The Patchwork Quilt Approach



PARTNERSHIP



PROTECTION



Creating the Quilt-Leadership

- First We Need A Quilter – A Community Leader With Vision For Change
- A specific pattern, or plan must be formulated to guide recovery
- Piecing together implementation will require significant technical support
- How do you engage technical support?
- Where are resources found to bind it all together for long-term strength and endurance?

One Example of Leadership

The **Silver Jackets** Program, in support of
Flood Risk Management at the state level

Began in Colorado in October 2013

Obtaining Technical Assistance

Planning for Recovery

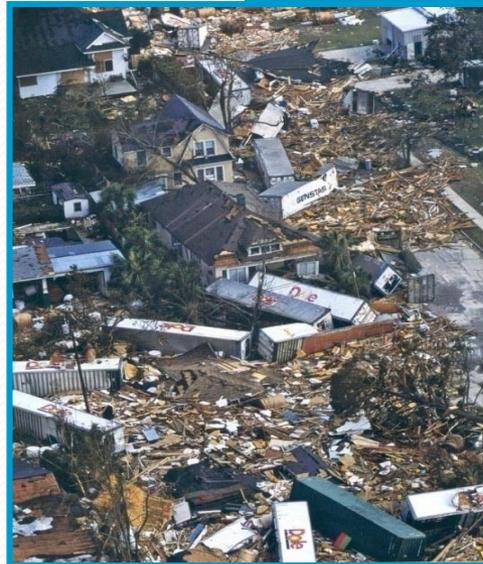
- Hazard Mitigation Plans – Native American tribes, state, local, regional and university
- FEMA-State Disaster Mitigation Strategies
- Long-Term Community Recovery Plans – ESF 14
- Statewide initiatives such as Road Back Home or Mississippi Recovery & Renewal

Participants & Resources

- Federal, Native American Tribes, state and local governments
- Regional authorities, community groups & other local agencies
- Consultants
- Businesses
- Universities
- National Non-governmental Organizations

Some Available Mitigation Programs

There are a huge number of federal, state, charitable, voluntary agency and foundations anxious to help, especially post-disaster.



Voluntary Agencies Active in Disaster (VOAD)

The Link to the excellent and informative National Voluntary Organizations Active in Disaster Long-Term Recovery Manual is:

www.nvoad.org/articles/LTRManualFinalApr232004a.pdf



National Voluntary Organizations Active in Disaster

*Promoting Cooperation, Communication, Coordination and Collaboration
in Disaster Response*

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FEMA Human Services

- Individuals And Households Program
- Temporary Housing
- Repair
- Replacement (Rare)
- Other Needs Assistance (ONA)
- Excellent additional Information

www.fema.gov/pdf/rebuild/recover/dec_proc.pdf

www.fema.gov/pdf/assistance/process/help_after_disaster_english.pdf

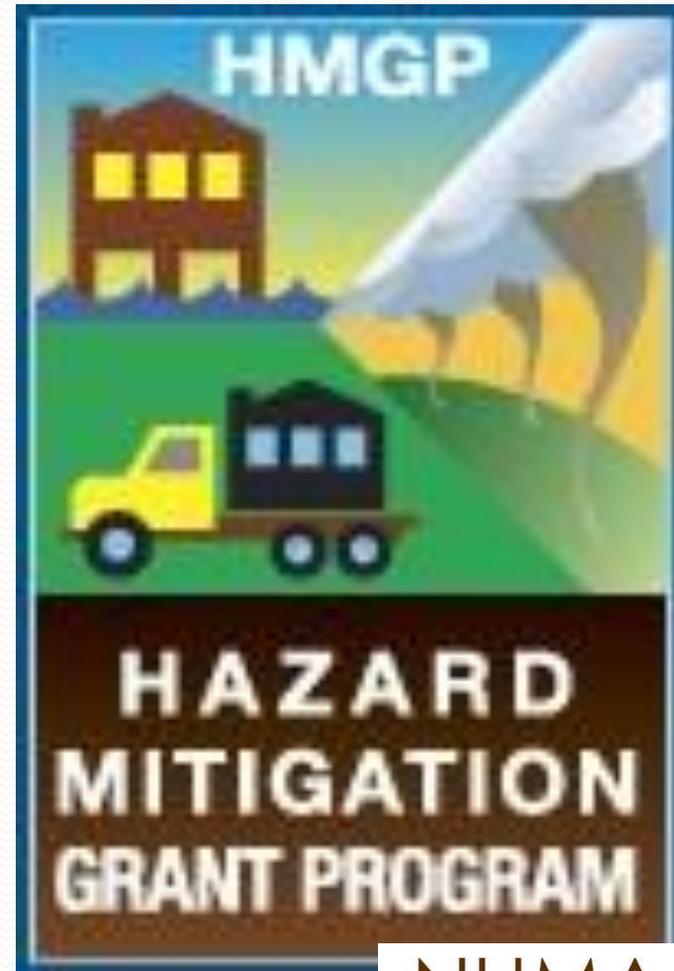
Grants can Support Disaster Recovery and Plan Implementation

- Post-disaster Stafford Act Grant Programs
 - Hazard Mitigation Grant Program (HMGP)
 - Public Assistance (PA)
- Unified Hazard Mitigation Assistance Programs
 - Pre-Disaster Mitigation Program (PDM)
 - Flood Mitigation Assistance (FMA)
 - Repetitive Flood Claims (RFC)
 - Severe Repetitive Loss (SRL)



There Are Many Grant Programs

- FEMA
- HUD
- USDA
- EDA
- More



Public Assistance (PA)

- Grant program for debris management and emergency protective measures for presidential emergency and disaster declarations;
- Supports repair and replacement assistance for public infrastructure recovery **after a presidential disaster declaration.**
- FEMA funds not less than 75%; no more than 25% non-federal match is required



Facilities can be mitigated through Section 406 of the Stafford Act!!

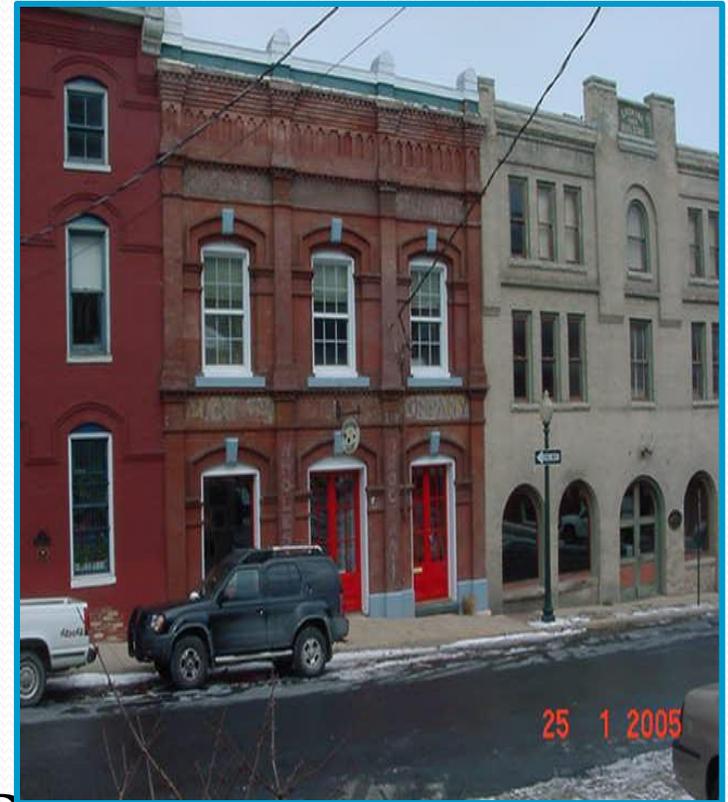
Public Assistance 406 Mitigation

- The mitigation work must be cost effective and performed as part of the work which will reduce the potential for damage to a facility from a disaster event;
- Is applied on the parts of the facility that were actually damaged by the disaster;
- Can be combined with HMGP to protect an entire facility if portions were undamaged
- **ASK FOR IT!!!**



Historic Preservation Initiative

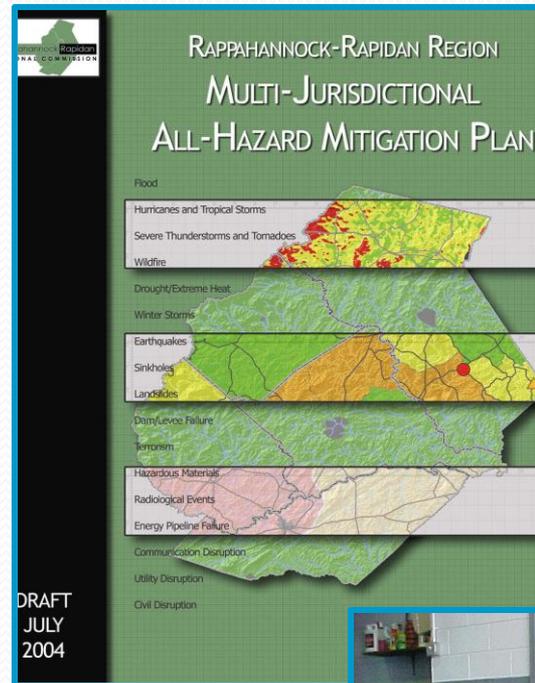
FEMA's Historic Preservation and Cultural Resources Program integrates historic preservation considerations into FEMA's mission of preparedness, response, recovery, and mitigation.



www.heritagepreservation.org/PDFS/Disaster.pdf
www.fema.gov/plan/ehp/index.shtm

Pre-Disaster Mitigation Program (PDM)

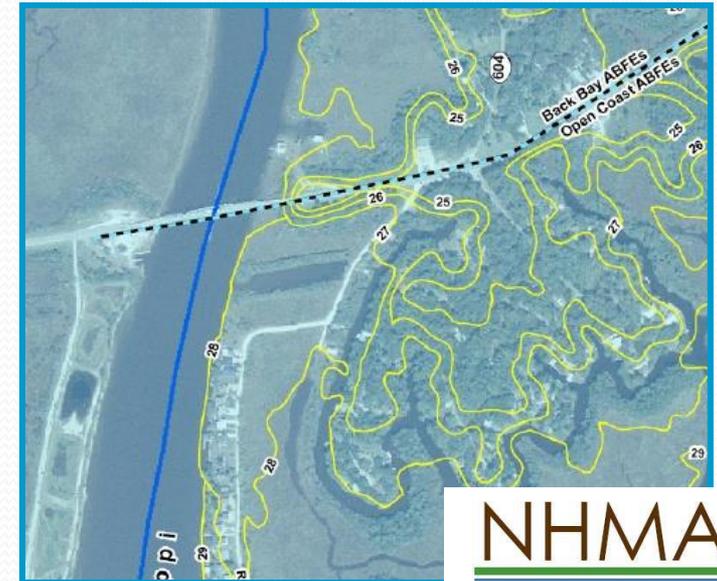
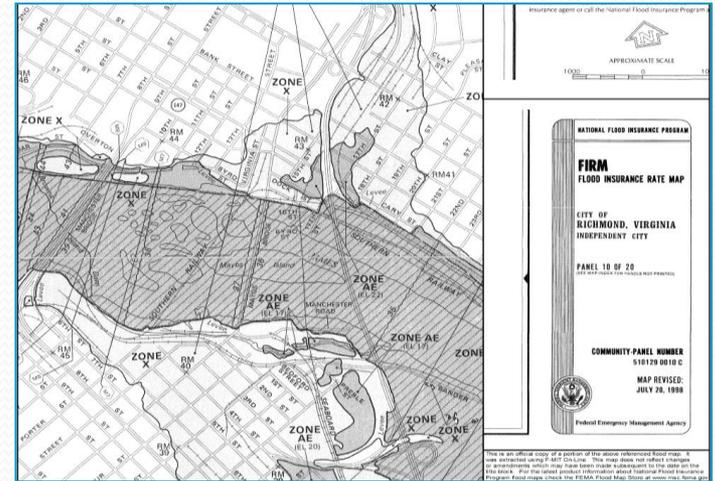
- Nationally competitive source for planning and structural mitigation projects.
- FEMA funds up to 75% of the project cost, can shift to 90% for small impoverished communities.
- Projects must be consistent with local mitigation plan and cost-effective.



Flood Map Improvement

FEMA is engaging in a multi-year effort to update and transform flood maps into more reliable, easy-to-use, and readily available digital products. This effort is now called **RISK MAP**. This effort will enable communities and citizens across the country to more efficiently obtain flood hazard data, learn their flood risk, and make informed decisions about development, floodplain management, and mitigation projects that limit damages in future flooding events.

<http://www.fema.gov/plan/ffmm.shtm>



Post- Disaster Improved Analysis of Risk

- FEMA Can Sometimes Approve the Use of Federal Disaster Technical Assistance (Stafford Act) Funds to Assist States and Communities Better Understand the Nature of a Flood or Other Hazard When There is Outdated Information on the Nature of the Risk
- Consider Requesting Such Support

Tornado Safety

Hide from the Wind

Tornado Safe Rooms
in Central Oklahoma



- Safe rooms are “hardened” interior places like bathrooms or closets that can provide shelter from severe winds and windborne debris. A community shelter, usually built in public buildings such as schools or hospitals, can protect a large number of people.
- Federal funds are available for the construction of safe rooms and community shelters. Sources include FEMA’s HMGP and PDM programs, U.S. Department of Housing and Urban Development /Community Development Block Grants (local governments), and U.S. Small Business Administration post-disaster loans (homeowners).

www.fema.gov/hazard/tornado/index.shtm

National Flood Insurance Program

- Enables homeowners, business-owners, renters, and governments to purchase flood insurance to protect buildings and contents from floods, mudslides or flood-related erosion. The NFIP reduces federal disaster expenses and requires wise floodplain management practices.
- NFIP Policies include Increased Cost of Compliance (ICC) coverage that provides up to \$30,000 to elevate, demolish, or relocate substantially damaged homes.

www.fema.gov/pdf/nfip/summary_cov.pdf



IRS Casualty Loss- Special Disaster Provisions

“Taxpayers who have sustained a casualty loss from a declared disaster may deduct that loss on the federal income tax return for the year when the casualty actually occurred, or elect to deduct the loss on the tax return for the preceding tax year.”



Agricultural Assistance

- USDA Farm Services Agency and other support agencies provide assistance to farmers with crop, livestock and facility losses.
- SBA also supports agribusiness losses.



Economic Revitalization and Community Assistance

- Economic Development Administration
- HUD
- Housing Assistance
FEMA-SBA-HUD
- Infrastructure Assistance
FEMA-DOT-USDA



Firewise® Communities

The national Firewise® Communities program is an interagency program designed to encourage local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters, and others to protect people and property from wildfire.



NOAA StormReady® Program

- StormReady was designed to help communities better prepare for and mitigate effects of extreme weather-related events.
- StormReady also helps establish a commitment to creating an infrastructure and systems that will save lives and protect property.
- StormReady recognition does ensure being storm proof, but StormReady

www.stormready.noaa.gov/

Other Resources

- Funding recovery can include issuing tax-exempt bonds, holding community fund raisers, soliciting contributions of money and goods from local state and regional businesses and industry.
- Get creative! Hustle!
- There is NO SHAME in asking for help, NO SHAME in begging and pleading for help to make the lives of disaster victims, and future generations better and safer!



How Much Time Do YOU Have Before The Next Disaster?

- This Summer: Wildfire & Flood Following Season?
- WHO in the community needs to be involved in doing the best we can NOW, before something awful happens so that foreseeable, preventable misery is averted or lessened?
- WHAT PRE-DISASTER funding sources exist now?
- WHEN Do We Start? NOW!
- WHERE? Your Town! Your Region!
- Your State! Your District!
- WHY?

An Exercise to Illustrate the Patchwork Process

- Anywhere, Rivertown, U.S.A. Rivertown is an agricultural community of 4,000 people located along the majestic banks of the Great Fast River. The town has only a few full-time employees or officials. Some officials wear many public hats and run their own businesses, too.
- Rivertown Floods Every Year – not a big deal in the past
- Also has suffered a tornado and a Wildfire
- **This year's event: A Big Deal!**

An Exercise to Illustrate the Patchwork Process

- Twenty-Five Homes received major damage or were destroyed; a bridge and significant historic structure were also impacted.
- Rivertown recently received new flood insurance rate maps. Unfortunately few folks have flood insurance.
- Governor Requests and President Declares A Major Disaster Under The Stafford Act (P.L. 93-288 as amended)
- Congress Appropriates Special Disaster CDBG Funds

The Town Officials Decide

- Town officials originally planned to spend special HUD funds to acquire one home and help elevate another. The original thought by the community was to demolish the entire impacted neighborhood to force residents to relocate to safer, higher ground.
- The residents did not agree, and shared that thought with the local officials clearly, forthrightly, and loudly.

The Community's Solution When We Work Together

1. First The Process
2. Then The Programs Available
3. Then Your Solutions
4. No One Answer For All Communities
5. No One Right Answer, So Long As We Re-Build Safely

How the Process Works

- Funds To Individuals
 - Everyone receives the same assistance from the same program, right?
 - Same needs?
 - Same damage?
 - Same resources from insurance
- Funds To Communities
 - DO all communities have the same:
 - Needs?
 - Vision For The Future?
 - Resources?
 - Leadership?

Patchwork Quilt Synergy

- Solves the problems of all 25 homes
- Safer, livable, sustainable area with greater tax revenue
- 20 different programs and funding sources brought to the solution
- See Patchwork Quilt White Paper for more details

Patchwork Quilt: Summary Time, Patience and Synergy Can Create A Whole Greater than the Sum of its Parts

Time and patience are required in putting together the "Patchwork Quilt." The devastation may have taken many forms, and the recovery may take months or even years. By working together, balancing each individual's needs with the community's long-term objectives, *Nania*, another term for synergism, can take place.



Next Steps?

One Model: Reduction in Urban Fires

FEMA Publication

America at Risk

America Burning Recommissioned

FA-223/June 2002

FEMA Report in 2002

Fire Loss in Urban United States

“One hundred years ago, American cities faced a devastating challenge from the threat of urban fires. Whole cities had become the victims of these events. Entire neighborhoods lived with the very real threat that an ignited fire would take everything, including their lives.”

From: *America at Risk*

America Burning Recommissioned

FA-223/June 2002

Fire Loss in Urban United States

“Today, the threat of fires is still with us. But we have done a lot to address the risk, minimize the incidence and severity of losses, and prevent fires from spreading. Our states and localities have an improving system of codes and standards; most of us are aware of the risks; We have accomplished a lot, but we have much more to do.”

From: *America at Risk*

America Burning Recommissioned

FA-223/June 2002

Fire Loss Reduction Shows Us A Way Forward

- “...the success of America’s fire services over the past 100 years is instructive for the strength and sustainability of America’s communities for the next 100 years as well.”

From: *America at Risk*

America Burning Recommissioned

FA-223/June 2002

Build On Our Success

“Today, we must not only continue and reinvigorate our successes, but also expand them to include the natural and man-made threats that each of our counties, cities, towns and villages face every day – floods, earthquakes, hurricanes, hazardous material spills, highway accidents, acts of terrorism, and so much more.”

From: *America at Risk*

America Burning Recommissioned

FA-223/June 2002

Closing Remarks

- Climate Adaptation & Hazard Mitigation as the foundation of Resilience, that is the development of decent, safe, sanitary, affordable and sustainable communities
- Working together instead of in parallel or recreating the wheel
- Safe Building principles applied to Hazard Mitigation in general
- Patchwork Quilt approach

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