

# **Maryland Association of Floodplain and Stormwater Managers**

**Second Annual Meeting**  
***October 18 - 19, 2006***  
***Laurel, Maryland***

**Pam Pogue, Chair**  
**Association of State Floodplain Managers**  
**State Floodplain Program Manager**  
**Rhode Island Emergency Management Agency**



# Association of State Floodplain Managers

- **Organization of professionals involved in all aspects of floodplain management**
- **Executive Office**
  - 8 staff employees in Madison, Wisconsin
- **Policy is developed primarily from members**



# ASFPM Mission



Mitigate the losses, costs,  
and human suffering  
caused by flooding.

*and*



Protect the natural and  
beneficial functions of  
floodplains.

# ASFPM Structure

- **Executive Office**
- **Board of Directors**
- **Regional Directors**
- **Chapter Directors**
- **Policy Committees**
- **Chapters**
- **Certified Floodplain Managers (CFMs)**
- **Membership**
- **ASFPM Foundation**



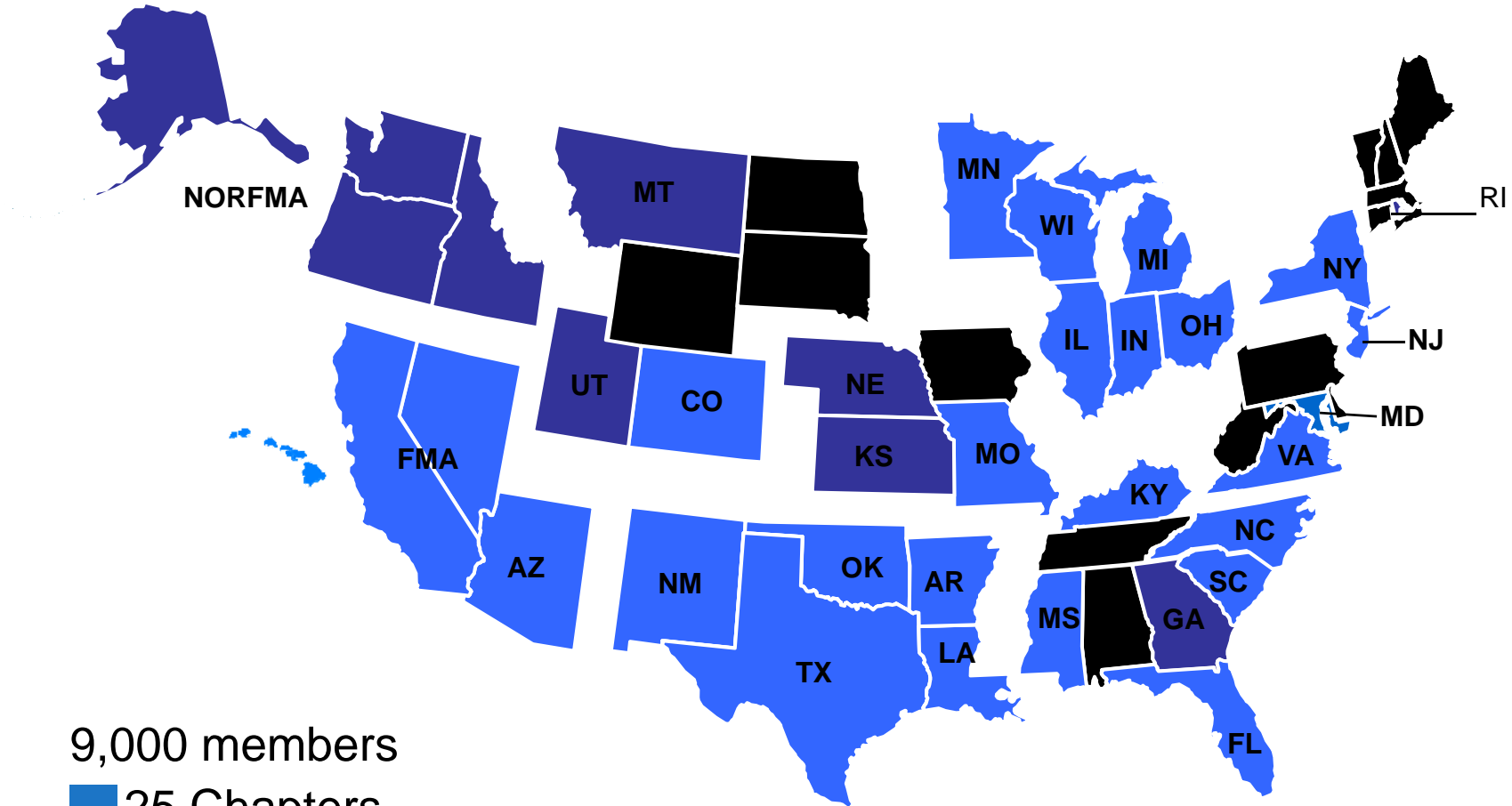
# ASFPM Policy Committees

- Arid Regions
- Coastal Issues
- Flood Insurance
- Flood Mitigation
- Mapping & Engineering Standards
- Floodplain Regulations
- No Adverse Impact
- Floodproofing/Retrofitting
- Multi-Objective Management
- Public Education
- Professional Development
- Stormwater Management
- Training





# Association of State Floodplain Managers Chapters & Other State FPM Associations



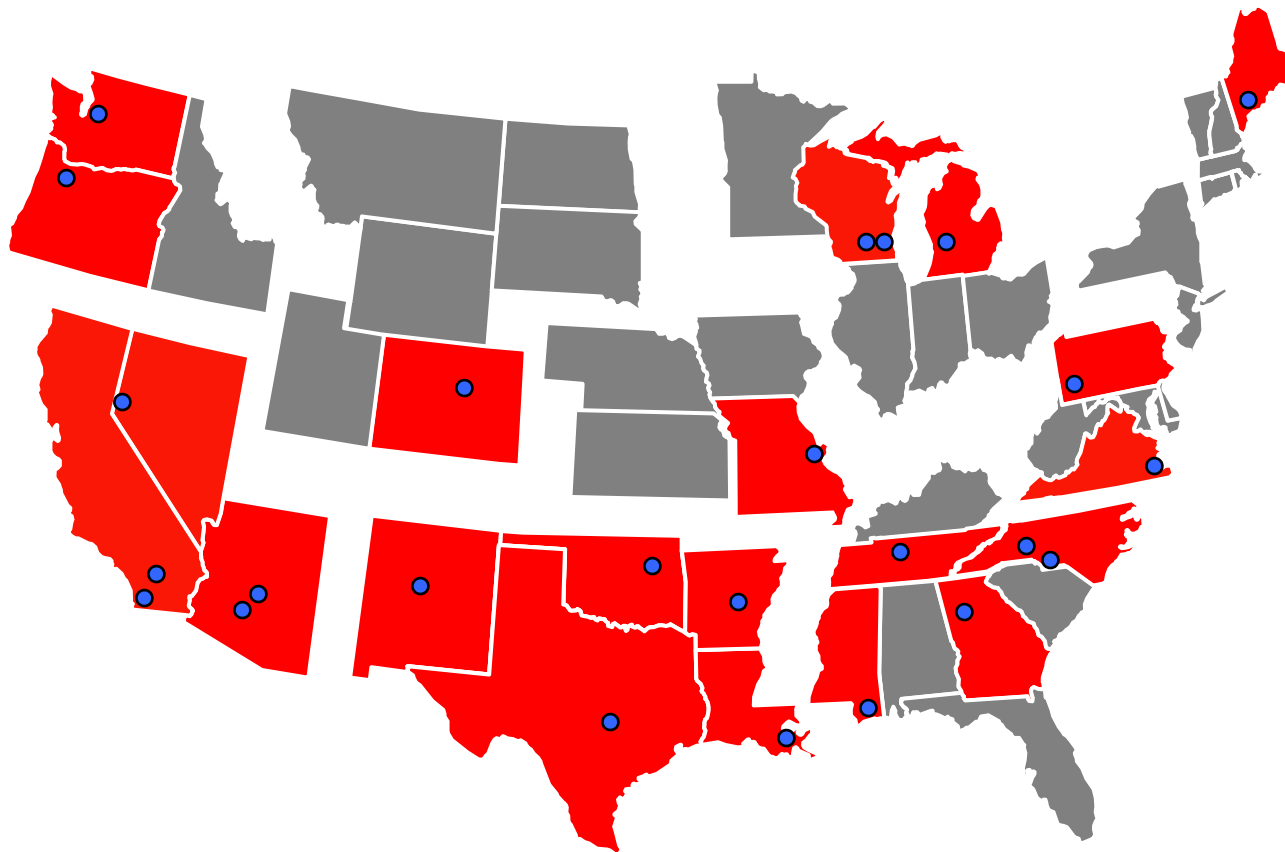
9,000 members

■ 25 Chapters

- Several State Associations & Pending Chapters



# Association of State Floodplain Managers National Conference Sites



2008	Reno, NV
2007	Norfolk, VA
2006	Albuquerque, NM
2005	Madison, WI
2004	Biloxi, MS
2003	St. Louis, MO
2002	Phoenix, AZ
2001	Charlotte, NC
2000	Austin, TX
1999	Portland, OR
1998	Milwaukee, WI
1997	Little Rock, AR
1996	San Diego, CA
1995	Portland, ME
1994	Tulsa, OK
1993	Atlanta, GA
1992	Grand Rapids, MI
1991	Denver, CO
1990	Asheville, NC
1989	Scottsdale, AZ
1988	Nashville, TN
1987	Seattle, WA
1986	Pittsburgh, PA
1985	New Orleans, LA
1984	Portland, ME
1983	Palm Springs, CA
1982	Madison, WI

# Who Represents Maryland?

- **ASFPM Region III Representative**  
**John Miller**  
Hillsborough County, Florida
- **ASFPM Chapter Director, District 3**





**So what are we doing?**





**MAP MOD SUPPORT**

# MAP MOD support

**CTP Incentives for States**

**MAPMOD technical support**

**Analysis of approximate zone  
mapping techniques**



# TECHNICAL SUPPORT DISASTER RECOVERY IN THE GULF STATES

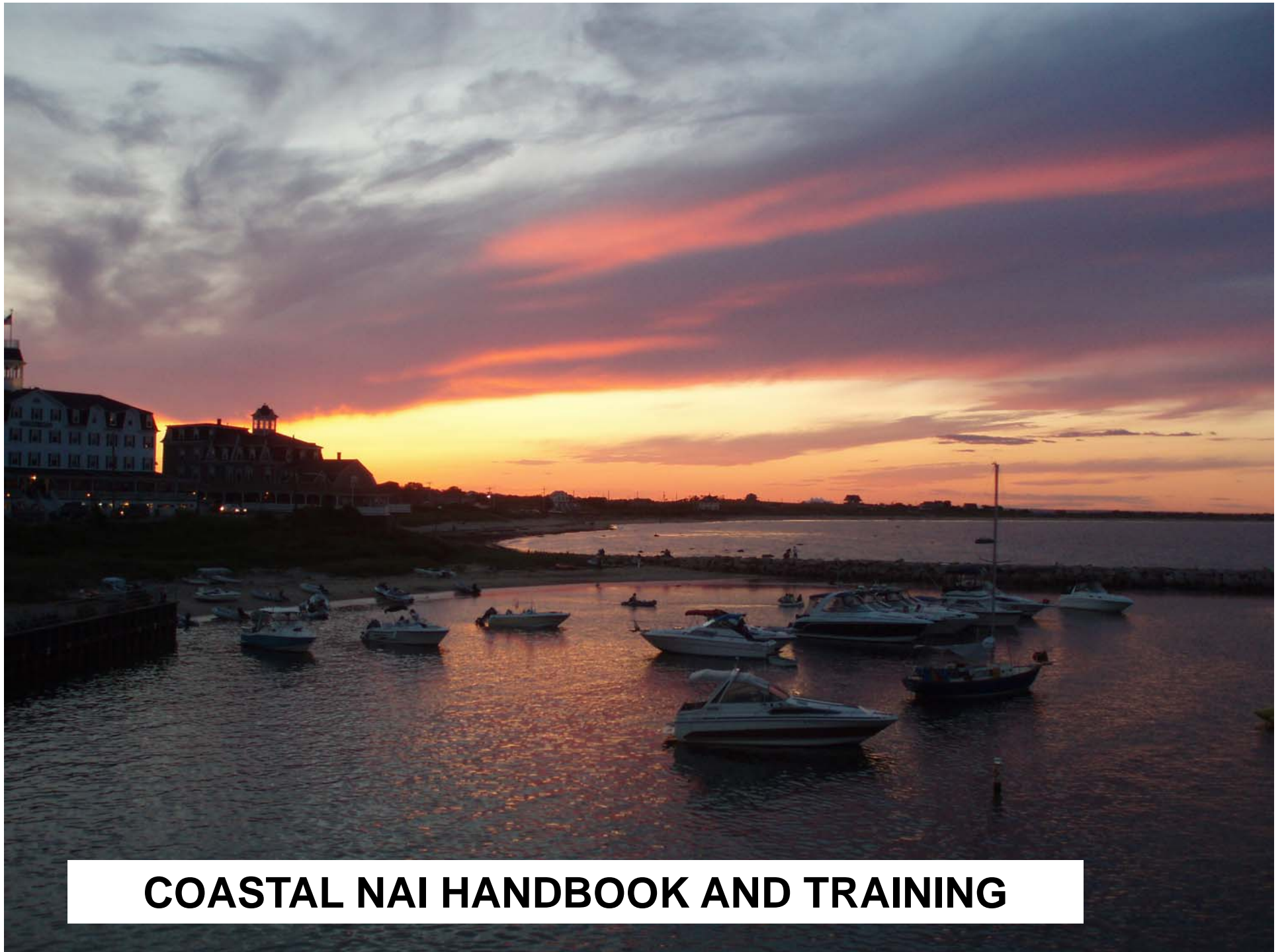


# ASFPM Current Katrina Projects

- **Technical Support – Disaster Recovery → Volunteer Coordination**

- ASFPM Web page
- EMAC link to State Coordinators
- EMAC directory of state contacts
- Assisted LA with EMAC requests
- Put 16 volunteers in Mississippi
- Training materials added to volunteer page





**COASTAL NAI HANDBOOK AND TRAINING**

# NAI Coastal Handbook

**Focuses exclusively on coastal regulations and development**

**Partnering with NOAA Coastal Services Center to deliver Spanish version**

**Training provided to State chapters/associations**





**ASFPM CFM  
PROGRAM**



# Certified Floodplain Management Program (CFM)

**Online training opportunities to be posted**

**CBOR activities (test updates, state certifications, etc)**

**Enhance CEC online directory**

***Funding provided by NOAA, FEMA, USACE***



**NATIONAL  
POLICY  
DISCUSSION  
WITH US  
CONGRESSIONAL  
STAFFS**



**ASFPM/NAFSMA/FEMA/CORPS  
LEVEE POLICY SYMPOSIUM**



# **Partner with agencies to effectively implement natural hazard reduction programs**

- National Levee Symposium**
- Gulf Workshop**
- Insurance Industry Meetings**



**MEETINGS WITH  
NATIONAL  
REPRESENTATIVES  
FROM THE  
INSURANCE  
INDUSTRY**

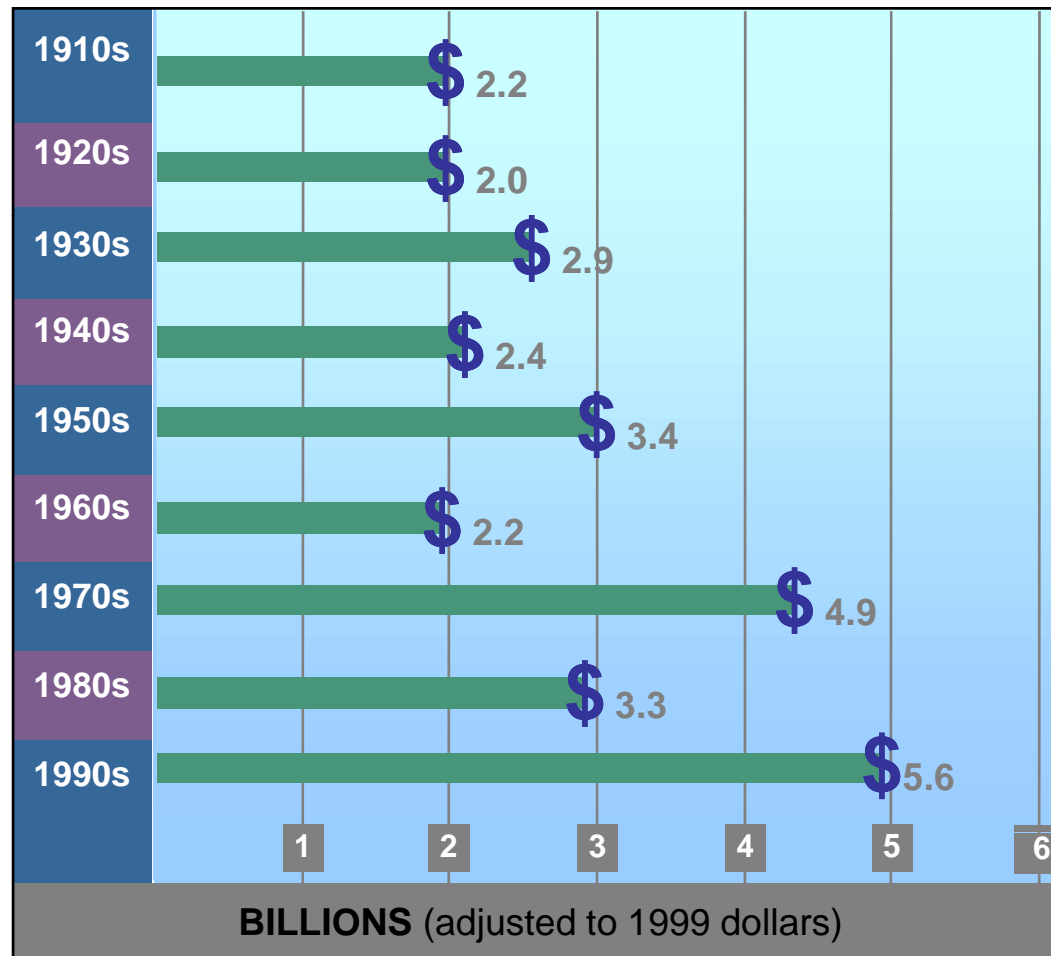


# Trends in Flood Damages

❖ \$6 billion annually

❖ Four-fold increase from early 1900s

❖ Per Capita damages increased by more than a factor of 2.5 in the previous century in real dollar terms



# What is Influencing the Trend? Increased Property at Risk

## Current policy:

- ❖ Promotes intensification in risk areas
- ❖ Ignores changing conditions
- ❖ Ignores adverse impacts to existing properties
- ❖ Undervalues natural floodplain functions



# Hurricanes Katrina-Rita and Wilma Created New Critical Issues on:

**National Flood Insurance Program Solvency**

**National Levee Policy**

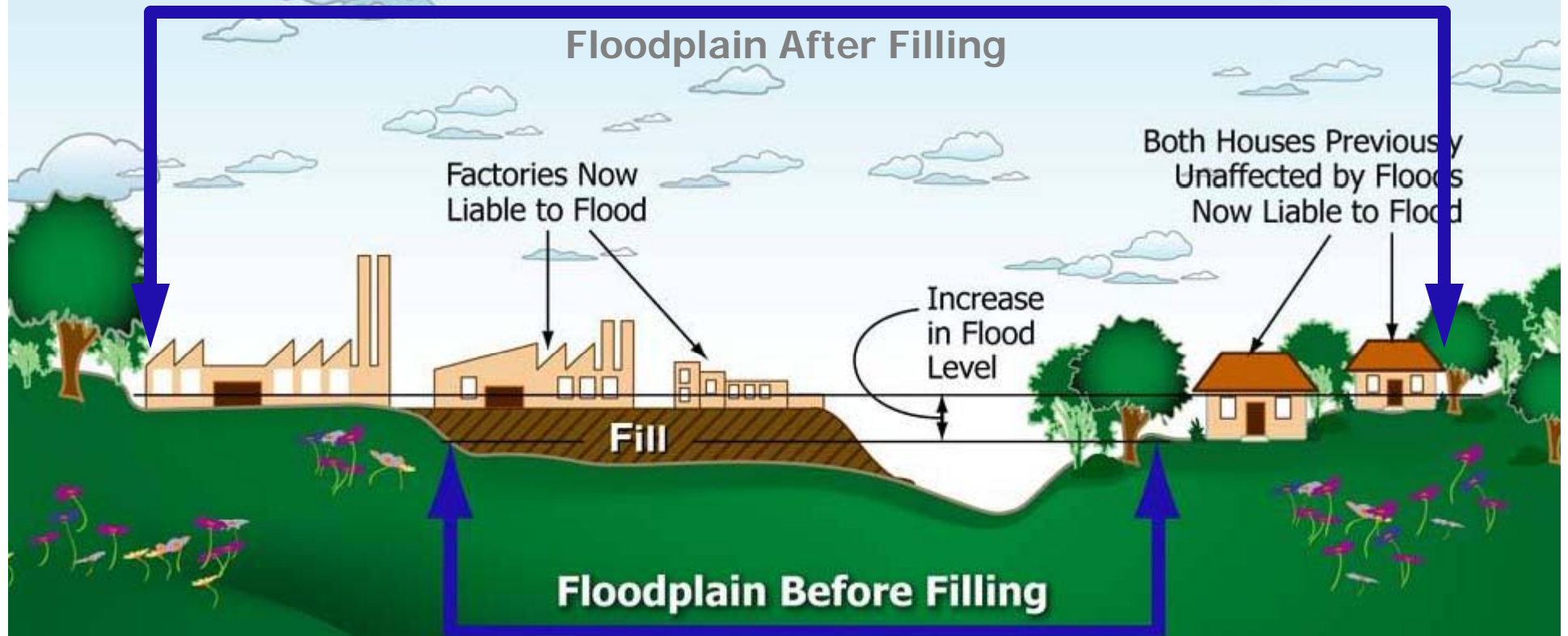
**Flood Recovery Advisory Maps**

**Mitigation funding for recovery**

**No Adverse Impact Floodplain Management**



# Today's Floodplain Is Not Necessarily Tomorrow's Floodplain



**If large areas of the floodplain are filled, then there will be an increase in the land area needed to store flood waters.  
This means your home or business may be impacted.**

**Even if NFIP minimum  
criteria standards were  
implemented in a  
consistent and perfect  
manner throughout the  
country, flood damages  
would continue to  
increase...**





**NAI**  
**No Adverse Impact**



# Why No Adverse Impact?

- Flood damages are rapidly increasing
- Existing approaches only address

*how to build in a floodplain*

*rather than*

*how to minimize future damages  
in a floodplain*



# What Is No Adverse Impact?

- ❖ **NAI is a strategy that addresses the impacts of the built environment on adjacent properties**
- ❖ **NAI broadens property rights by protecting the property rights of those that would be adversely impacted by the actions of others**



# No Adverse Impact Floodplain Management

- Current approaches deal primarily with *how to build in a floodplain vs. how to minimize future damages*

- Insurance driven approach – *Regulations address the structure being built/insured not on effects to adjacent properties*

- Floodplain filling continues despite decades of evidence that it leads to increasing flood heights

- Flood Insurance Program essentially rates structures once – when they are built – then grandfathered. Subsequent flood increases not factored – no means to re-rate.

# No Adverse Impact Roles

## Local government is the key

- ❖ Develop and adopt NAI community-based plans
- ❖ Adopt NAI strategies
- ❖ Educate citizens on the “Good Neighbor Policy”



# No Adverse Impact Roles

## State government

- Update State Executive Orders
- Provide locals technical & planning assistance
- Adopt policies with incentives to encourage NAI

## Federal government

- Update Federal Executive Orders
- Provide technical assistance
- Adopt policies with incentives to encourage NAI
- Evaluate how we measure success





# Incorporate NAI into Nation's Overall Flood Policy

- Continued development of NAI materials for use at the community level
  - NAI case studies
  - Coastal NAI publications
  - Spanish version of NAI Toolkit
- Introducing NAI concept to other Federal agencies, OMB, congressional staff
- NAI focus at conferences and other venues
- Legal research on NAI Takings, community liability with legal workshops for attorneys



# THE NAI TOOLKIT

## Implement NAI Concepts through 7 Building Blocks

- Hazard Identification
- Planning
- Regulations & Standards
- Mitigation Actions
- Infrastructure
- Emergency Services
- Education & Outreach



# Community Activities that Can Incorporate NAI:

- ❖ Hazard Identification
- ❖ Education and Outreach
- ❖ Planning
- ❖ Regulations and Standards
- ❖ Mitigation Actions
- ❖ Infrastructure
- ❖ Emergency Services



# Three Block Levels

- **BASIC:** typifies what is done to meet National Flood Insurance Program minimum criteria
- **BETTER:** prevents or minimizes adverse impacts on other properties
- **NAI:** identifies the most effective ways under each building block to protect everyone's property *and* prevent increased flood problems



# Planning

- **Activities that communities pursue to direct future development and publicly funded projects.**
- **If done right, planning can prevent future flooding problems and meet the goals of many.**



# BASIC: Land Use Planning and Zoning

- **Balance of public and private interests**
- **Comprehensive land use plans**
  - Transportation plans
  - Economic development plans
  - Housing plans
  - Habitat protection; watershed management; coastal zone plans; beach management
- **Zoning ordinances**



# **BETTER: Plans that Address Flooding Issues and Problems**

- **Restrict damage-prone development**
- **Low density zoning**
- **Vulnerability/Risk analysis**
- **Geographic Information System Mapping**
- **Special Area Management Plans**
- **Stormwater Management Plans**
- **Hazard Mitigation Plans**



# NAI: Multi-Objective Management

- All planning that involves flooding should identify all of the impacts of the hazard and all of the alternative measures that address the impacts
- “M-O-M”/SAMP approach – gain a larger constituency to support the plans with longer term goals
- Sustainability – meeting the needs of the present, without compromising the ability of future generations to meet their own needs





# COASTAL NAI PLANNING TOOLS

- Coastal vegetative buffers
- Wetland mitigation banking
- Local land use plans
- Watershed Management Plans
- Land acquisition
- Habitat & coastal feature restoration and enhancement
- Special Area Management Plan activity can include
  - » regulatory
  - » non-regulatory
  - » planning
  - » acquisition and designation
  - » wetlands and dune restoration
  - » research and assessment
  - » outreach and education

# COASTAL NAI MITIGATION TOOLS

- Elevate buildings above flood level
- Keep floodwater below high damage-prone part of the building
- The Dune Protection Ordinance for Southern Shores, NC, protects dunes from encroachment by development and crossing by pedestrians at other than approved crossing points



# BASIC: NFIP Regulations

- **Development on the floodplain must be permitted by the community**
- **Development in floodway not prohibited; should not be an increase in flood levels**
- **Flood fringe development allowed: residential– lowest member at or above BFE; nonresidential – elevated and/or flood-proofed**
- **Substantial improvements – no clause for cumulative improvements**



# **BETTER: Higher Regulatory Standards**

- **Building Standards**
  - Freeboard; foundation protection; limit enclosures; non-supporting breakaway walls;
  - count SDs cumulatively & lower threshold;
  - BCEGs;
  - Subdivision standards;
  - Stormwater regulations;
  - Health & safety standards



# COASTAL REGULATION TOOLS

- **coastal barrier development prohibited**
- **implement dune and beach protection regulations**
  - stairs and boardwalks over dunes required
  - removal of vegetation prohibited
  - altering sand dune fences prohibited
  - coastal set-back regulations required
  - vegetative buffer required
- **coastal storm hazard mitigation measures**
  - preservation/conservation zones
  - waterfront setbacks
  - vegetative coastal buffers
  - impervious cover limits
  - stream corridor buffers
  - wetland buffer areas
  - transfer of development rights
  - **Coastal Barriers Resources Act protects undeveloped coastal barriers**

# COASTAL NAI HAZARD ID & MAPPING TOOLS

- Coastal Zone Management Program establishes setbacks, dune protection standards
- Coastal A zone identified and regulated



*Planning for Pelican Watch, Southern Shores, NC, utilizes lot lines superimposed on aerial photographs*

# COASTAL NAI EDUCATION AND OUTREACH TOOLS

- Coastal Construction Manual training
- **NAI and legal training workshops**

*Neighborhood Meeting in Southern Shores, NC.*



# Actions Your Community Can Take

- Define “adverse impact”, based on your community’s unique condition
- Evaluate your hazards and programs
- Identify existing adverse impacts in the floodplain and throughout the watershed
- Require adverse impacts to be mitigated when development occurs





# What Can You Do?

- **Define “adverse impact”, based on your community’s unique condition**
- **Evaluate your hazards and programs**
- **Identify existing adverse impacts in the floodplain and throughout the watershed**
- **Require adverse impacts to be mitigated when development occurs**



# CONCLUSION

**If we continue to encourage at-risk development and ignore the impact to others, can we accept the consequences...**

***... and, are you willing to pay for it?***



# QUESTIONS & COMMENTS

for more information on  
No Adverse Impact contact:

**The Association of State Floodplain  
Managers**

608-274-0123

Email: [asfpm@floods.org](mailto:asfpm@floods.org)  
Web Site: [www.floods.org](http://www.floods.org)

