

Preparing for Coastal Storms and Hazards: No Adverse Impact and Mitigation Opportunities

NOAA Coastal Services Center
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Meeting*
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Mark Matulik, Co-Chair
Flood Mitigation Committee
Association of State Floodplain Managers

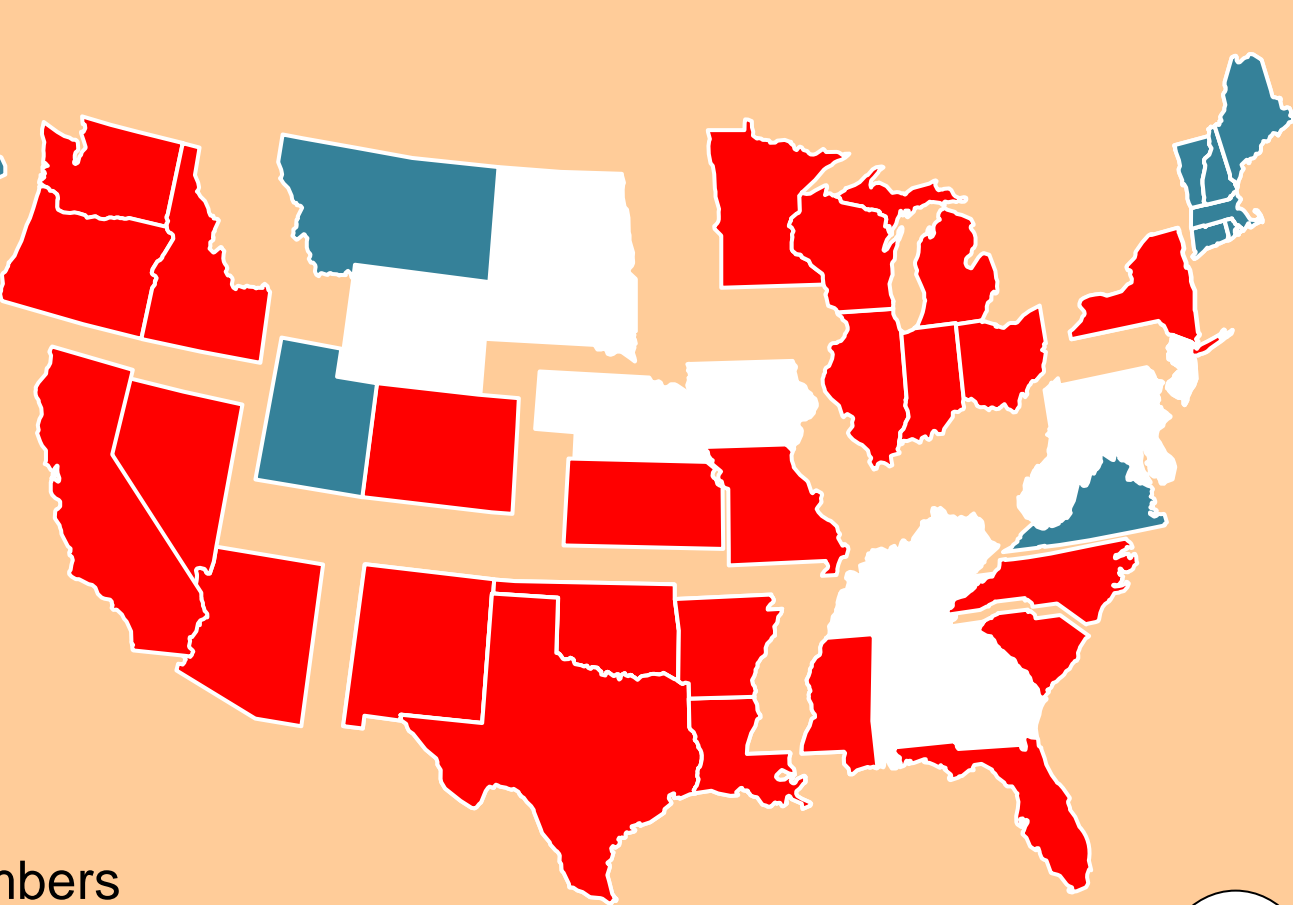


Two Areas for Discussion

- **The Concept of No Adverse Impact (NAI) and Developing a Coastal Version of the NAI Toolkit**
- **Coastal Hazards Mitigation Opportunities**



Association of State Floodplain Managers, an Association of Professionals



9,000 members

21 Chapters

• Several pending chapters / state associations



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**



Policy Committees

- Coastal
- Flood Insurance
- Floodproofing
- Regulations
- Mapping Standards
- No Adverse Impact
- Arid Regions
- Flood Mitigation
- Multi-Objective Mgt
- Public Education
- Training
- International



ASFPM National Initiatives

- **Coastal Issues**
- **No Adverse Impact**
- **Mapping Standards**
- **Certified Floodplain Managers Program**
- **Legislative Priorities**
- **1% Standard**

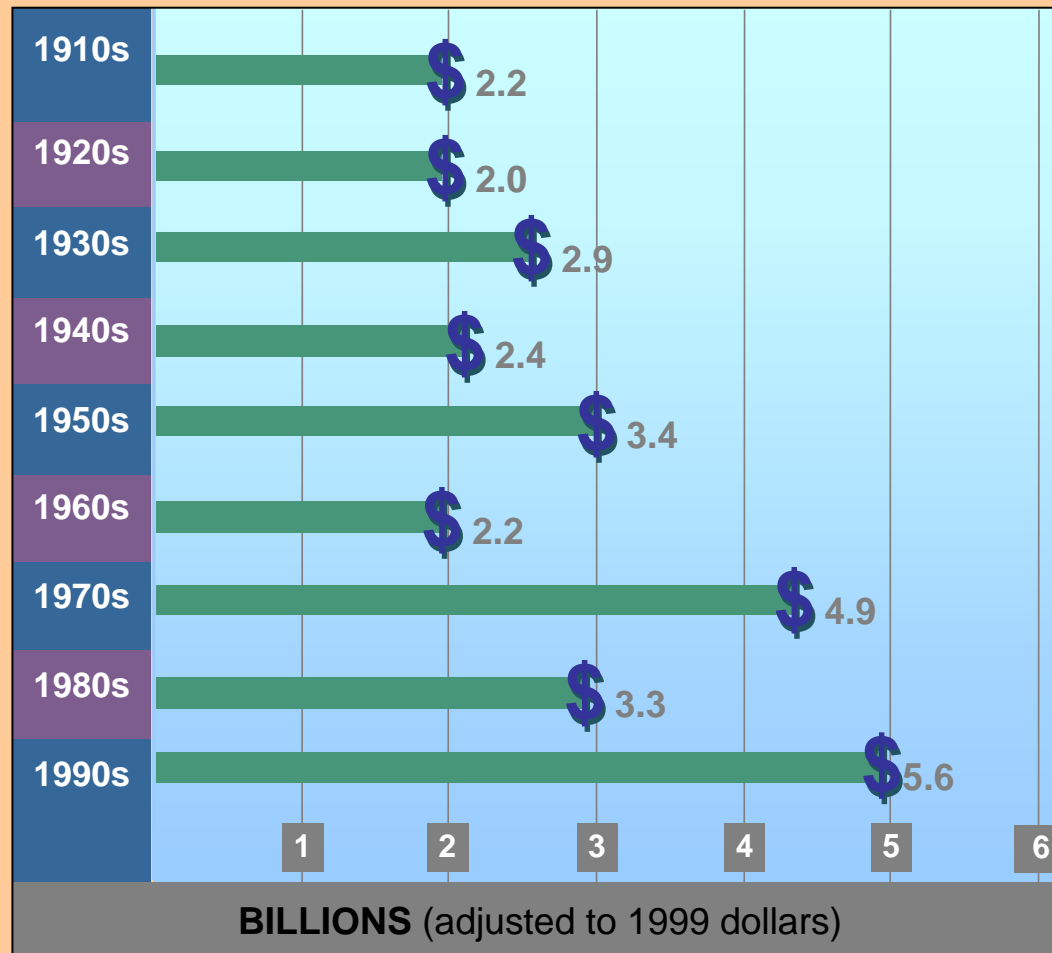


Trends in Flood Damages

❖ \$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





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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





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





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*





SCHOOL

POLICE

EMERGENCY 911

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**





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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



Community Activities that Can Incorporate NAI:

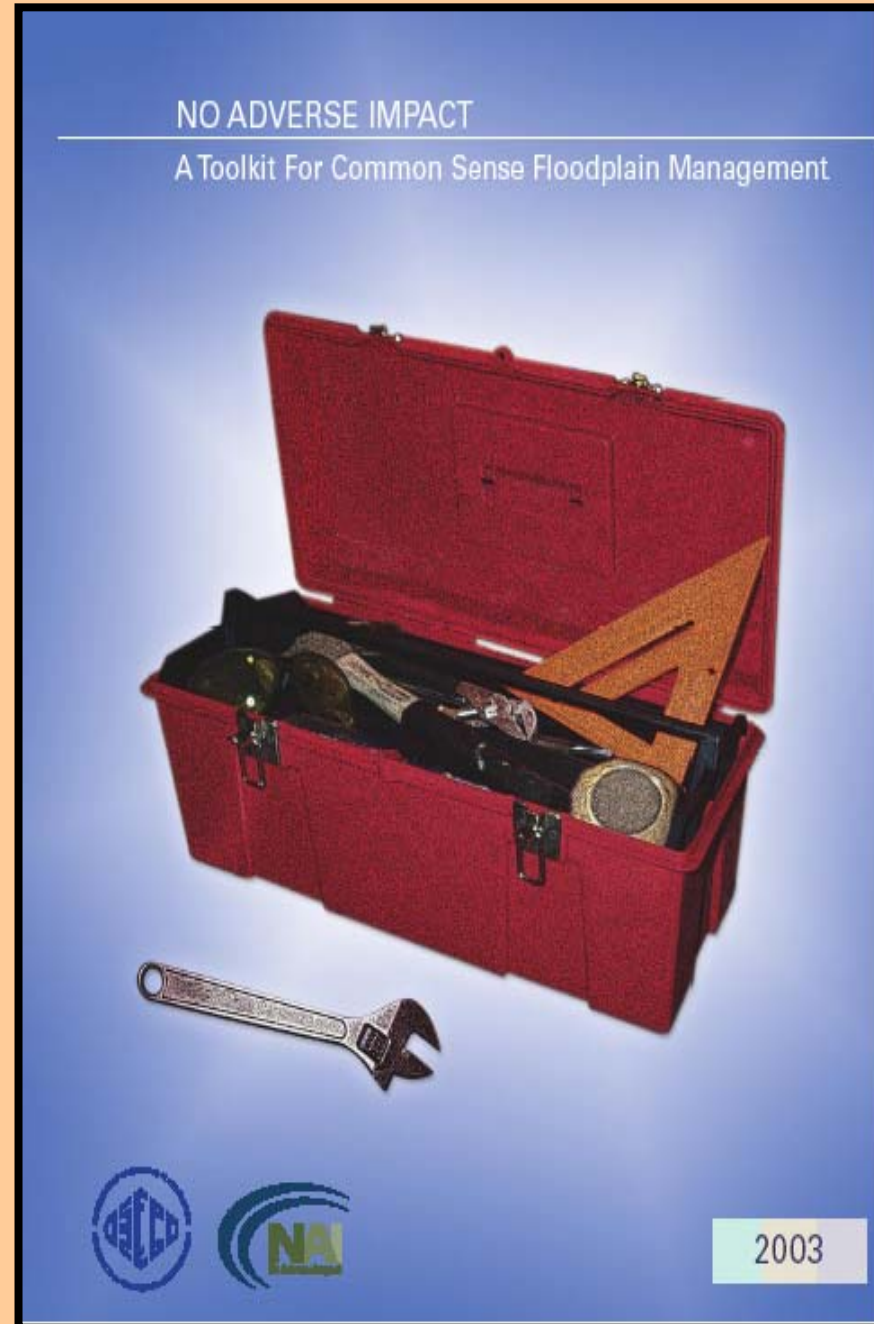
- ❖ Hazard Identification
- ❖ Education and Outreach
- ❖ Planning
- ❖ Regulations and Standards
- ❖ Mitigation Actions
- ❖ Infrastructure
- ❖ Emergency Services



THE NAI TOOLKIT

Implement NAI Concepts through 7 Building Blocks

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



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



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**
- **As well as, provide input to ASFPM on Draft No. 2 of the NAI Coastal Handbook**



NAI Coastal Handbook

- Funding provided by NOAA's Coastal Services Center
- Draft No. 1 review comments due by January 25, 2006
- It expands on the concept of No Adverse Impact and applies the principles in the context of the coastal landscape

NAI Coastal Handbook

- Describes the coastal hazards confronting coastal zone and floodplain managers.
- Offers a practical application of NAI concepts to specific coastal hazards.
- Discusses how NAI fits within and in conjunction with the existing management programs that apply to coastal zones.
- Summarizes the NAI approach in a coastal setting.

NAI Coastal Handbook

- In the NAI approach, the documented history of adverse impacts on others from non-engineered, shore protection projects, and from inadequate knowledge of local coastal habitat, processes and hazards, is sufficient reason to require a higher standard of care in planning and designing coastal development.



NAI Coastal Handbook

- A higher standard for coastal protection and coastal development is particularly important in this present time as a changing climate challenges engineers' best professional judgment about how best to protect coastal resources (built and natural) from the resulting changes in coastal hazards.



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?



Coastal Mitigation Opportunities

- FEMA's Public Assistance (PA) Program provides assistance for hazard mitigation measures during the recovery process. Specifically, the program provides assistance for:
 - debris removal,
 - implementation of emergency measures,
 - and permanent restoration of infrastructure.



Coastal Mitigation Opportunities

1. Developed, adopted and implemented a disaster-specific “Mitigation Strategy” in the Public Assistance Program,
2. Overcame the “get it done as fast as possible” approach to recovery, and in turn, generating thoughtful consideration of how mitigation can be incorporated into repair and restoration efforts,
3. Institutionalized the Technical Specialist’s role in assuring that mitigation is incorporated into Project Worksheets (PWs),
4. Secured buy-in for mitigation from Public Assistance Coordinators (PACs) and Project Officers (POs), and
5. Utilized the tools provided by FEMA Policy 9526.1 and the *“Hurricane Mitigation Handbook for Public Facilities”* to implement mitigation measures seamlessly into the PA Program.

QUESTIONS & COMMENTS

for more information on
No Adverse Impact contact:

**The Association of State Floodplain
Managers**

608-274-0123

Email: asfpm@floods.org

Web Site: www.floods.org

