

**No Adverse Impact**  
**A Common Sense Strategy**  
**for Floodplain Management**

Association of State Floodplain Managers

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**ASFPM Mission**



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

*and*



Protect the natural and beneficial functions of floodplains.

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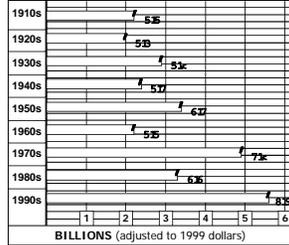
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## Trends in Flood Damages

- \$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




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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

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## Central Message

Even if we perfectly implement current standards, **damages will increase.**

Remember, we have done a number of positive things, both non-structural and structural, but... We'll discuss why that is...

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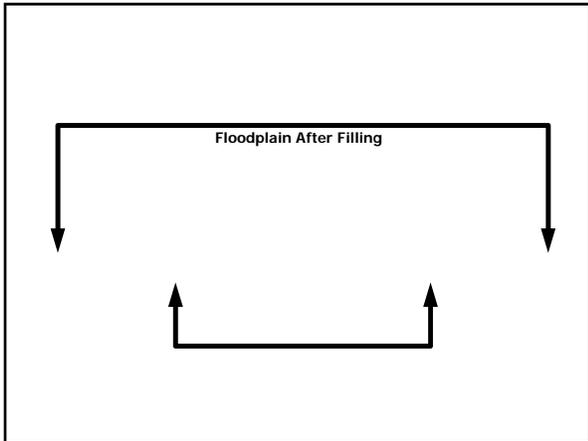
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**Why No Adverse Impact?**

Flood damages are rapidly increasing *unnecessarily!*

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

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**No Adverse Impact Explained**

NAI is a concept/policy/strategy that broadens one's focus from the built environment to include how changes to the built environment potentially impact other 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 Defined

Activities that could adversely impact flood damage to another property or community will be allowed only to the extent that the impacts are mitigated or have been accounted for within an adopted community-based plan.

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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"



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## 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

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**ASFPM Support:**

- Identify NAI Project Examples-Case studies
- Provide Toolkit on NAI to locals
- Document the Benefits of Mapping Future Conditions
- Support Local NAI Principles
- Community liability and “takings”
  - ◆ Legal workshops with Chapters/States
  - ◆ Legal Q&A brochures

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**Community Activities that can Incorporate NAI:**

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

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### **Hazard Identification**

- Use a comprehensive approach
- Reflect future conditions
- Identify hazards not mapped by FEMA

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### **Education and Outreach**

- Target specific audiences
- Modify existing outreach efforts
- Your message should be:
  - know your hazards
  - understand how your actions could adversely impact others
  - identify how community members can protect themselves and others

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### **Planning**

- Use a comprehensive watershed approach
- Incorporate NAI in all planning activities
- Consider individual and cumulative impacts of current and future development
  - Hazus is one tool for that
  - Assume the development--then calculate new flood levels
- Incentives needed (PDM, Corps. EPA) to get local and state support

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## Regulations and Standards

- Current standards don't consider all impacts
  - Current and future impacts
  - Cumulative impacts
- Policies and regulations must go beyond NFIP
  - Zero rise floodways--do not put one more foot of water on others
  - Additional freeboard to account for mother nature
- Consequences of ignoring impacts are drastic
  - Damages increase beyond \$6 billion per year
  - Downstream and upstream damage--and loss of life

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## Mitigation Actions

- Mitigate while not transferring the problem elsewhere
- Non-structural mitigation on individual structures:
  - elevation
  - acquisition
  - Flood proofing
- Structural--often cause adverse impacts to others
  - levees, dams, channels

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## Infrastructure

- Consider impacts of maintenance, repair and new construction
- Consider individual and cumulative impacts
- Mitigate infrastructure while not transferring the problem elsewhere

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**Emergency Services**

- Disaster response should consider cumulative impacts
  - Sand bags--levees, etc.
- Pre-plan flood fighting to avoid adverse impacts
- Emergency actions should not increase flooding on others

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**Legal Research**

- ASFPM currently updating floodplain development case law
  - ◆ Specifically looking into community liability, standard of care, takings and NAI
- ASFPM has contracted with Jon Kusler, Esq. to research case law, identify trends and provide a report on this legal research
  - ◆ These slides based on Kusler research

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**Legal Research: Trends in Case Law**

- Courts have modified common law doctrines to require an increased standard of care over time (e.g., common enemy to reasonable use doctrine for surface water)
- Hydraulic, hydrologic, and geologic models facilitate proof of causation
- Act of God defense has been greatly reduced due to ability to predict hazard events

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### **Legal Research: Trends in Case Law**

- Defense of sovereign immunity has been greatly reduced
- Communities most apt to have to pay:
  - ◆ not when they deny permit, but
  - ◆ **when development they permit causes damage to others,**
    - damage is easily predictable (which is easier to do with better computer models and technology)

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### **Legal Research Products**

- Spring 2003, ASFPM produced 4 page brochure "Community Liability and Property Rights"
  - ◆ download at [www.floods.org](http://www.floods.org)
- Spring 2004, ASFPM will release Kusler's full legal report for legal profession and others
- Winter 2004--Common Legal Questions on:
  - ◆ Floodplain management and the courts
  - ◆ Community liability and NAI
- 2004--Legal workshops for local and state attorneys on these key issues--Contact ASFPM

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### **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

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## CONCLUSION

### Current Approaches Create Future Disasters

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?*

[www.floods.org](http://www.floods.org)

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