



# MITIGATION

FACT SHEET: HOW-TO-GUIDE FOR NO ADVERSE IMPACT

## Practical Applications of NAI into Hazard Mitigation



### The Concept

Hazard Mitigation is an excellent concept and practice on its own; however, without applying the principals of No-Adverse-Impact (NAI), floodplain management can be insufficient to truly protect a community. NAI can be put into practice in many forms. Here are few examples of how a community can take hazard mitigation to the next level:

- *Flood Acquisition and Relocation Mitigation Projects*
- *Waterway Restoration through Dam Removal*
- *Non-Structural Erosion Control and Shorelines Stabilization*
- *Sustainable Stormwater Management*
- *Mitigating Critical Facilities*

### Flood Acquisition and Relocation Mitigation Projects

Acquiring repetitive loss, or potential for repetitive loss, properties and turning them into green space can not only save the community money in the long run, but it can also reduce the over-all flood elevation throughout the community. In addition, besides simply loss reduction, the community will experience social, economic, and environmental benefits.

### Waterway Restoration through Dam Removal

Natural stream restoration and river bank reclamation techniques comprise a large group of methodologies widely defined as measures to bring waterways to their natural state. These measures can be divided into four groups: stream restoration and natural channel design; modifying, removing or setting back levees; removal of dams; and restoring riparian wetlands

### Non-Structural Erosion Control and Shoreline Stabilization

Unlike hard coastal engineering structures, non-structural shoreline stabilization projects dissipate wave energy rather than reflecting waves onto beaches or neighboring properties. Non-structural alternatives will enhance the beneficial functions of the landforms to provide greater storm damage protection and flood control. Additionally, because of their more natural appearance, non-structural measures are typically easier to permit and more aesthetically pleasing.

*"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?"*

*-Larry Larson, ASFPM*

*"No adverse impact (NAI) is an approach that ensures the action of any community or property owner, public or private, does not adversely impact the property and rights of others."*

*NAI Toolkit, 2003*

For case studies and specific examples of NAI success, visit [http://www.floods.org/PDF/NAI\\_Case\\_Studies.pdf](http://www.floods.org/PDF/NAI_Case_Studies.pdf)

## Sustainable Stormwater Management

Preserving the floodplain's natural ability to carry and store floodwater is a central step in ensuring that development will not have an adverse impact on others. Using setbacks, buffer zones, and floodway protection regulations can help protect those capabilities. A properly enforced floodplain management program will also go a long way in reducing.

## Mitigating Critical Facilities

Major investments in a community's critical facilities, such as a new fire station, police station or emergency center, should not be located in a high risk flood zone where equipment and personnel can become trapped during flooding or lose their operational capabilities during a flood event. Current roads, bridges or culverts which obstruct flood flows and are scheduled to be replaced, should incorporate flood-damage reduction as part of the project. Resilient infrastructure is key to both a community's survivability and its recoverability from flood events.

## In Summary

NAI has many benefits. By developing activities that really address local situations and that do not harm others, your community can:

- Prevent flooding from increasing or damaging others.
- See a reduction in flood losses over time,
- Avoid challenges and lawsuits over causing or aggravating a flood problem, and
- Receive recognition for your efforts through the Community Rating System.

NAI can be put into practice in many forms. Using acquisition/demolition & acquisition/relocation, enhanced watershed protection, and mitigating critical facilities are just a few examples of how this can be done. There are many resources and tools to help a community put NAI into practice, and the sites listed below are a good place to start.

## Resources

For more information refer to:

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

NAI Toolkit: [www.floods.org/NoAdverseImpact/NAI Toolkit 2003.pdf](http://www.floods.org/NoAdverseImpact/NAI_Toolkit_2003.pdf)

NAI How-to-Guides: [www.floods.org/NoAdverseImpact/How to Guides](http://www.floods.org/NoAdverseImpact/How_to_Guides)

*"Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs."*  
-United Nations World Commission on Environment & Development

To speak to an expert in No Adverse Impact, contact ASFPM via:

E-mail: [ASFPM@Floods.org](mailto:ASFPM@Floods.org)

Phone: 608-828-3000