

## NAI—No Adverse Impact Floodplain Management



### Background

Flood damage in the United States continues to escalate. From the early 1900s to the year 2007, flood damage increased six-fold, and now averages over \$6 billion annually, even when Hurricanes Katrina, Rita, and Wilma (2005) are not included. This has occurred despite the investment of billions of dollars in structural flood control and the application of many other structural and non-structural measures over these many decades. Even in the face of increasing flood losses, we continue to intensify development, and to do so in a manner in which flood-prone or marginally protected structures suddenly become susceptible to damage because the actions of others in and around the floodplain and watershed have worsened the flood hazard.

Current national standards for floodplain management allow development activity to divert flood waters onto other properties; to reduce the size of natural channel and overbank conveyance areas; to fill essential valley storage space; and to alter water velocities—all with little or no regard for how these changes affect other people and property in the floodplain or elsewhere in the watershed. The net result is that our own actions are intensifying the potential for flood damage. The current course is one that will result in continually rising costs over time, is not equitable to those whose property is affected, has been shown to be economically and environmentally unsustainable, and is a pattern of conduct generally not supported by the courts.

Over the past 50 years a system has developed through which local and individual accountability has been supplanted by federal programs for flood control, disaster assistance, and tax incentives that encourage and subsidize floodplain occupation and development. Although future funding for projects and programs of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, and other federal agencies will fluctuate, the general pattern of federal disaster response has become firmly entrenched and is not likely to change in the foreseeable future. At the same time, the minimum floodplain management standards of the National Flood Insurance Program have been accepted by many as the default standards for communities, even though they were designed for the purposes of an insurance program and not necessarily to control escalating flooding. In view of this nationwide system of federal programs, it is not surprising that many local governments assume that the minimum NFIP standards provide acceptable flood protection and also allow themselves to become financially disconnected from the consequences and impacts of their land use decisions. The result is that the burden of those impacts—increased flood damage and flood disasters—is transferred from those who make (and benefit from) the local decisions about land use to those who pay for the flood disaster—principally the federal taxpayers.

No Adverse Impact floodplain management offers local governments a way to prevent the worsening of flooding and other negative impacts on the community—right now. Although some state and local governments may have abandoned their responsibilities for protecting public health, safety, and welfare in the face of flood hazards, most simply have assumed that the federal programs represent an acceptable standard of care. They perhaps do not realize that these very approaches can induce additional flooding and damage within their communities. No Adverse Impact principles give communities a way to promote *responsible* floodplain development through community-based decision making. With the No Adverse Impact approach, communities will be able to put federal and state programs to better use—enhancing their local initiatives to their communities' advantage. No Adverse Impact floodplain management empowers the community (and its citizens) to build better-informed "wise development" stakeholders at the local level. It is a step towards individual accountability because it prevents increases in flood damage to other properties. No Adverse Impact floodplain management helps communities identify the potential impacts of development and implement action to mitigate them before the impacts occur.

## **No Adverse Impact Floodplain Management Defined**

“No Adverse Impact Floodplain Management” is a managing principle that is easy to communicate and, from legal and policy perspectives, tough to challenge. In essence, ***No Adverse Impact floodplain management takes place when the actions of one property owner are not allowed to adversely affect the rights of other property owners.*** *The adverse effects or impacts can be measured in terms of increased flood peaks, increased flood stages, higher flood velocities, increased erosion and sedimentation, or other impacts the community considers important.* The No Adverse impact philosophy can shape the default management criteria: a community develops and adopts a comprehensive plan to manage development that identifies acceptable levels of impact, specifies appropriate measures to mitigate those adverse impacts, and establishes a plan for implementation. No Adverse Impact criteria can be extended to entire watersheds as a means to promote the use of regional retention/detention or other stormwater techniques to mitigate damage from increased runoff from urban areas.

The No Adverse Impact approach will result in reduced flood damage. However, its true strength is seen when proposed development actions that would affect local flooding or the property rights of others are permitted only when they are in accord with a locally adopted plan that identifies the negative impacts the community wishes to avoid and/or mitigate. The plan could be specific to flood damage or be quite robust, encompassing related objectives such as water quality protection, groundwater recharge, or the management of stormwater, wetlands, and riparian zones. Because it is a local initiative, an NAI-based plan removes the mentality that floodplain management is something imposed by the federal government. Instead, it promotes local accountability for developing and implementing a comprehensive strategy and plan. With the flexibility to adopt comprehensive, locally tailored management plans (which would be recognized by FEMA and other federal programs as the acceptable management approach in that community) the community gains control of its land use decision-making process and is supported in adopting innovative approaches it considers appropriate for its situation.

No Adverse Impact management makes sense, and it is the right and legally appropriate thing to do. Too often our discussions on development approaches turn into arguments over the range of application and the effect these approaches may have on those who choose to encroach upon the floodplain. To reduce future costs and inequities, we must change this perspective. We must take a management stance that prevents any development activity from imposing additional flood impacts on other properties and also frees communities to manage flood hazards and development through comprehensive local plans, thus protecting the property rights of the entire community.

## **Conclusion**

This central message—that we are continuing to induce flood damage even while enforcing the minimum standards of the NFIP—has not been communicated effectively. The message has been lost in part because the floodplain management community has spent too much time debating individual issues instead of stepping back to evaluate the cumulative impact of all the management approaches being applied throughout the nation’s watersheds.

Current management systems to reduce flood losses are costly and often allow development that fails to evaluate or mitigate both current and future adverse impacts on other properties.

The No Adverse Impact approach will lead to reduced flood losses throughout the nation while promoting and rewarding strong water stewardship and mitigation at the local level.

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For more information, the ASFPM can be contacted at (608) 274-0123. Full copies of the ASFPM documents on flood policy, including many published articles on No Adverse Impact, *NAI and the Courts: Protecting the Property Rights of All*, the *NAI Toolkit*, the *Coastal NAI Handbook*, and other publications, can be downloaded free of charge at <http://www.floods.org>.