

## **Section One Floodplain Management Forum Issue Paper**

The Floodplain Management Forum Issue Paper was written by FEMA and distributed to the participants prior to the Forum. This issue paper articulates the goals and objectives of the Forum and was designed to capture some of the floodplain management issues and guide discussion at the Forum.

### **Background**

Floodplain management in the United States has undergone a significant change during the 20th century. For more than the first half of the century, the Federal Government attempted to control floods through structural methods. This strategy proved unsuccessful as the cost of flood damage increased and the ecological integrity of the Nation's watercourses were negatively impacted. Therefore, in 1968 the U.S. Congress created the National Flood Insurance Program (NFIP) to reduce the escalating costs of flood disasters that are borne by taxpayers. The NFIP marked a significant shift from traditional structural methods of flood control toward floodplain management and shared responsibility. Through the NFIP, all units of government, the private sector, and individual citizens share the responsibility for managing the Nation's floodplains.

In the past decade, considerable progress has been made in taking a more holistic approach to floodplain management. The concept of sustainability brings a relatively new approach to environmental, economic, and social thought. Sustainability is development that maintains or enhances economic opportunity and community well-being while respecting, protecting, and restoring the natural environment on which people and economies depend.

Federal, State, and local units of government are now beginning to incorporate sustainability into floodplain management. It is widely understood that we cannot view floodplain management in a vacuum. To fully protect the natural integrity of floodplains and protect people and property from floods, we must integrate floodplain management into land use planning, economic development, habitat protection, flood insurance, cultural preservation, and many other locally driven activities.

The NFIP currently provides significant protection against flood losses. The NFIP has saved an estimated \$1 billion per year in flood damage, and has reduced flood damages to individual buildings by approximately 77 percent. Although the NFIP has reduced flood damage, the number and severity of catastrophic flood events and the costs of disasters continue to rise at an alarming rate. Riverine flood damage now exceeds \$5 billion annually.

Hurricane Floyd is the most notable recent example. The flooding caused by Hurricane Floyd approached or exceeded the 500-year flood in some areas, devastating properties and lives and disrupting many communities along the east coast of the United States. The damages from Hurricane Floyd are estimated to exceed \$700 million. Moreover, a majority of the residents living inside and outside the special flood hazard area did not have flood insurance.

Despite the successes of the NFIP, many people continue to ignore flood risk and choose to build in the floodplain, perpetuating the continuous cycle of build-flood-rebuild. To break this disastrous cycle, Director Witt has worked tirelessly the past several years through the *Project Impact* initiative to encourage communities to identify hazards and take proactive steps to build sustainable and livable communities. Through *Project Impact*, community leaders from the public, private, and nonprofit sectors have coordinated their efforts to plan and implement activities designed to protect their communities against future disasters. *Project Impact* has taught us that through collaborative partnerships and planning, we can create disaster-resistant communities while protecting and enhancing environmental resources.

Recent flood events such as Hurricane Floyd, increased urbanization of watersheds, coastal erosion, and climatic changes have brought to the forefront our Nation's vulnerability to floods and the issues regarding the adequacy of NFIP requirements. Although the NFIP has made significant strides over the past 30 years, more must be done to reduce the threat that floods pose to the Nation's economy and the safety of its citizens. We must evaluate the past successes and failures of the NFIP and, more importantly, develop new strategies to better identify the flood hazard risk, provide a higher level of protection against flood risks, cultivate a greater sense of responsibility and accountability, and encourage States and communities to foster sustainable development.

### **Floodplain Management Forum**

The purpose of the Floodplain Management Forum is to bring together a select group of individuals with expertise and experience in floodplain management. The Forum will focus on the large issues facing the NFIP and floodplain management and began to explore methods to increase the level of protection against flood risks. This Forum will help the Federal Emergency Management Agency (FEMA) evaluate the NFIP to improve programs and policies and develop a future strategy for the NFIP. Certainly FEMA alone cannot foster sustainable development and sound floodplain management throughout the United States. It will take collaborative partnerships among all levels of government, the private sector, nonprofit organizations, and individual citizens.

The Forum is designed to be a highly interactive discussion focusing on the future of the NFIP and floodplain management. It is important that the Forum identify aspects of the NFIP that are ripe for change, and issues that will require a more extensive national dialog to raise public awareness and support such changes. A concerted effort has been made to invite people who represent the diverse stakeholders of the NFIP, including representatives of academia, environmental groups, government agencies, the insurance industry, the building industry, lending institutions, local floodplain administrations, and elected officials so that a variety of viewpoints regarding the NFIP and floodplain management could be heard.

Each participant is requested to provide a copy of his or her prepared statement prior to the Forum. A report will be developed and distributed to all the participants following the Forum. The report will capture the discussion generated at the Forum, the statements submitted by each participant, and the participant's recommendations for implementing change. The report will be used by FEMA to consider changes or new initiatives regarding FEMA's responsibilities in

administering the NFIP and other FEMA programs affecting the management of the Nation's floodplains.

The complex issues surrounding the NFIP equally involve the three intricately connected components of the program: flood hazard identification, floodplain management, and insurance. To develop a future strategy for the NFIP, we must examine these three components as a whole. To capture some of the issues and guide discussion at the Forum, we have developed a brief description of the three components of the NFIP followed by a list of policy questions. These policy questions are intended to highlight some of the issues; however, please do not limit yourself to these policy issues alone.

### **Flood Hazard Identification**

Flood hazard identification is the backbone of the NFIP and is critical to managing development of the floodplain. FEMA produces Flood Insurance Rate Maps (FIRMs) that delineate the floodplain and regulatory floodway boundaries, base flood elevations, and insurance risk zones. FIRMs are an essential tool by which States and communities evaluate their flood risks to manage development in the floodplain, insurance agents properly rate flood insurance policies, and lending institutions and Federal agencies determine flood insurance requirements. For a community to make wise land use decisions, flood risk must be accurately identified. However, flood maps in many communities are inaccurate and outdated; some communities have never been mapped.

In 1997 FEMA developed a Map Modernization Plan to provide communities with more accurate and extensive flood hazard maps. This aggressive 7-year plan is designed to update and digitize the 100,000-panel flood map inventory. Unfortunately, lack of funding has hindered the implementation of the Map Modernization Plan.

Accurate flood hazard identification is essential for sound floodplain management and prudent flood insurance decisions. It is important that we better assess the flood hazard risk and provide communities with the most accurate and usable data. The following questions are intended to capture some of the policy issues surrounding flood hazard identification:

- Should the mapping of floodplains be based on a higher standard, such as the 500-year standard?
- How can the uncertainty in hydrology be addressed in the flood maps?
- Should mapping be based on future conditions, accounting for urbanization and coastal erosion?
- Does the current policy that recognizes levees or removes properties from the floodplain adequately reflect the flood risk?
- Are hazards such as coastal erosion, alluvial fans, coastal flooding, high-velocity flooding, and similar hazards adequately addressed in the hazard identification and mapping?

- Are current standards for designating floodways appropriate, particularly the allowance of a 1-foot increase in flood stage?
- Are there methods of identifying flood hazards other than the traditional mapping approach?

### **Floodplain Management**

All units of government, the private sector, and individual citizens share the responsibility for floodplain management. Federal and State Governments must develop policies, programs, and incentives that increase the capability of and encourage individuals and communities to foster sound floodplain management and sustainable development. Communities and individuals must accept more responsibility and accountability for land use decisions that put people and property at risk for flooding.

We must take a holistic approach in managing our floodplains, begin to integrate floodplain management in land use planning and decisions, and move toward building disaster-resistant, sustainable communities. To achieve this goal, we must evaluate current NFIP regulations to determine whether they provide an adequate level of protection against flood risks. We also must develop innovative and creative methods to increase the capability of State and community floodplain management programs. The following questions are intended to capture some of policy issues surrounding floodplain management:

- Should a higher standard, such as the elevation to the 500-year floodplain, be implemented?
- Should freeboard be required above the base flood elevation (BFE)?
- Are hazards such as coastal erosion, alluvial fans, coastal flooding, high-velocity flooding, and similar hazards adequately addressed in the regulatory requirements?
- What strategies can be developed to encourage communities to adopt hazard mitigation plans or comprehensive plans and policies that steer development out of floodplains?
- Are there other things the Program can do to increase levels of protection for flood-prone properties?
- What strategies and incentives can encourage States and communities to foster sustainable development and discourage inappropriate floodplain development?
- What can be done to instill a greater sense of responsibility in States, communities, and citizens for inappropriate floodplain development that puts people and property at risk?
- What strategies can be developed to address the flood risk to structures constructed prior to the NFIP?

## **Insurance**

Flood insurance is an essential mechanism for transferring the costs of flood losses from taxpayers to property owners through flood insurance premiums. Flood insurance also encourages mitigation by providing rating and premium incentives and helps cultivate individual responsibility and accountability for floodplain land use decisions. More than 4 million flood insurance policies are in force, although they may cover fewer than one-third of those who need coverage, both inside and outside of high-risk areas. Since the passage of the National Flood Insurance Reform Act (NFIRA) of 1994, lender compliance with the mandatory purchase requirement has improved considerably; however, many mortgaged properties still do not have flood insurance.

Through the Cover America I and II campaigns, the Federal Insurance Administration (FIA) is effectively marketing flood insurance and building a recognizable “Be Flood Alert” logo for the NFIP. Some flood insurance sales can be attributed directly to advertising, with the biggest impact in low- to medium-risk areas. Despite FIA’s efforts and successes, the market penetration of flood insurance has not reached desired levels. If the NFIP is to fully achieve its objectives, strategies must be developed that will increase the number of property owners who have flood insurance, both inside and outside of the special flood hazard area, and ensure that flood insurance policies do not lapse. The following questions are intended to capture some of the issues surrounding flood insurance:

- Should the flood insurance Mandatory Purchase Requirement be extended to apply outside of the 100-year floodplain? Are there other ways to increase coverage in these areas?
- Are there methods to improve implementation of the Mandatory Purchase Requirement by Federal agencies and lenders?
- Are there ways to ensure that, once purchased, flood insurance policies remain in place?
- Are there ways to increase insurance coverage to buildings not subject to the Mandatory Purchase Requirement?
- Should flood insurance be required behind levees?
- Is the current flood insurance rating model sufficient, or are there other methods to rate the flood risk?