

IMPROVING PUBLIC SAFETY – FROM FEDERAL PROTECTION TO SHARED RISK REDUCTION

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Responsibility for flood risk management in the United States is a shared responsibility between multiple Federal, State, and local government agencies with a complex set of programs and authorities. Nationally, both the US Army Corps of Engineers (USACE) and the Federal Emergency Management Agency (FEMA) have programs to assist states and communities in reducing flood damages and promoting sound flood risk management. The authority to determine how land is used in floodplains and to enforce flood-wise requirements is entirely the responsibility of state and local government. Floodplain management choices made by state and local officials, in turn, impact the effectiveness of federal programs to mitigate flood risk and the performance of federal flood damage reduction infrastructure. One key challenge is to ensure that as the public and government leaders make flood risk management decisions, they integrate environmental, social, and economic factors and consider all available tools to improve public safety. Importantly, we must ensure the public is educated both as to the risks they face and actions they can take to reduce their risks. Because of this complex arrangement of responsibilities, only a life-cycle, comprehensive and collaborative systems approach will enable communities to sustain an effective reduction of risks from flooding.

Where we are now – “The government will protect us”

Individual agency processes and procedures typically have provided the venue for planning and implementation of flood damage reduction measures. The present process to engage the Corps of Engineers is on a project by project basis, even though the Corps has made advances in incorporating collaborative approaches and assessing alternatives in a watershed context. Traditionally, the Corps focuses on reducing flood damages by managing floods that cause damage largely by decreasing the probability of flooding. The Corps develops alternatives based on reducing known potential flood damages, with minimal consideration of future land use or other social effects. Additionally, the Corps infrequently assesses options to reduce consequences should a failure occur. Whether communities strive for 1% level of protection or greater, the present process drives decisions based on reducing the potential for failure or *reducing flood damages* and does not incorporate an assessment of localized risks and consequences. Figure 1 is an example of the present paradigm – a system based on an appropriate “level of protection”, which provides credence to the notion that “the government is responsible” and “therefore, we are protected.” Complicating the matter, many prudent cost share sponsors seek to limit their costs; which drives some to seek to achieve only a level of protection whereby community members will not be required to purchase flood insurance.

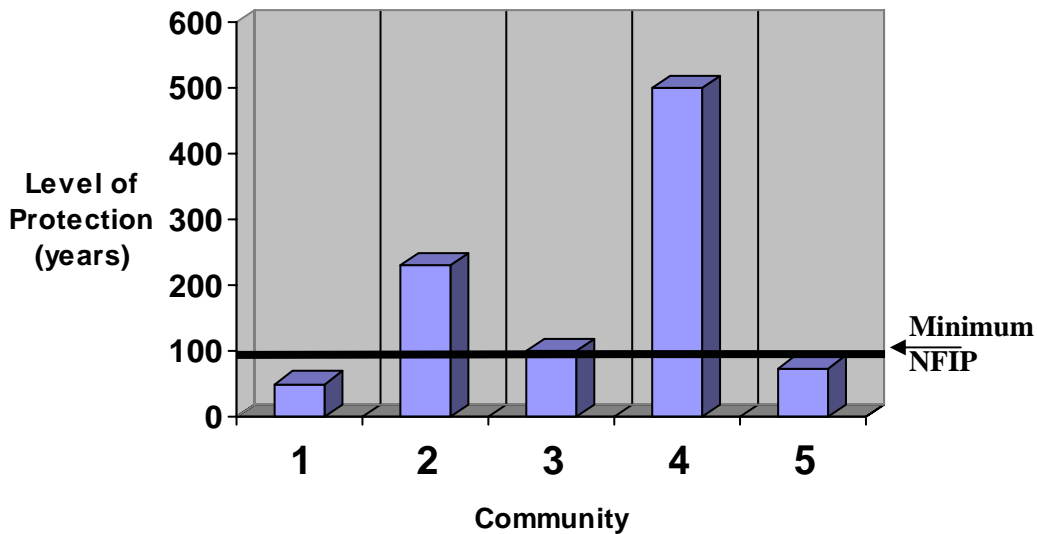
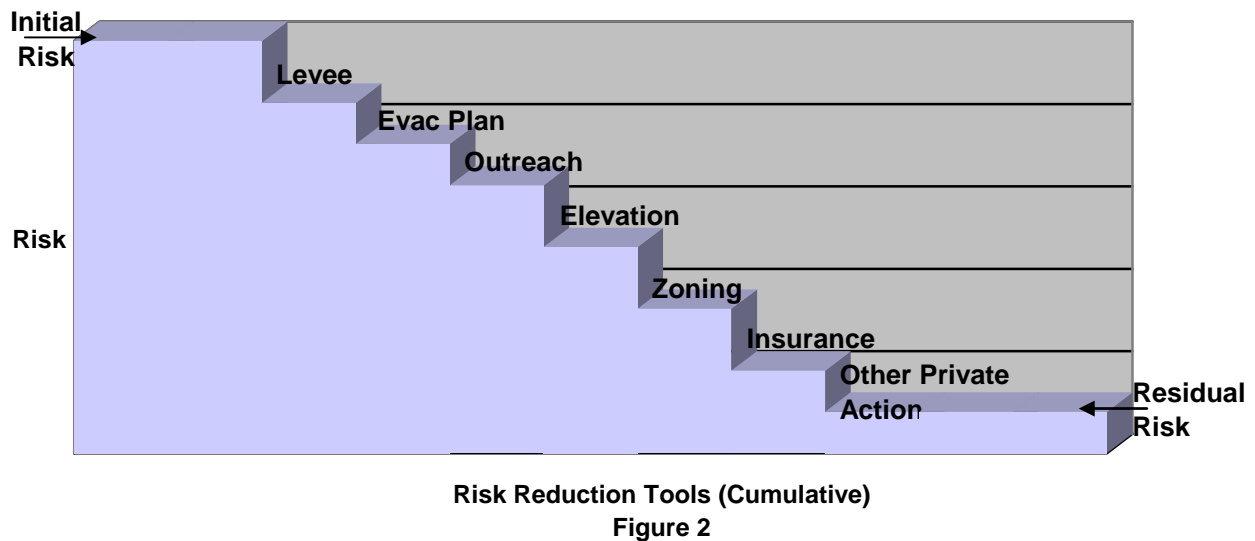


Figure 1 – Selecting Level of Protection

Where we need to be – “We are all responsible for our safety”

To significantly improve public safety, we are pursuing a level of public education at which our fellow citizens are so well informed they are able to assume responsibility for decisions they make about where and how they want to live and work. We then can engage in a comprehensive and multi-government and private citizen collaborative process to *managing flood risk* to achieve levels of tolerable risk. The Corps is expanding our traditional approach to focus on the most effective combination of tools available citizens may use to lower or “buy down” their flood risk (as illustrated in Figure 2). We will consider not only reducing the probability of flooding, but also reducing the consequences should a flood occur. A multitude of options and tools becomes more evident through the process of assessing the consequences of a flood. Furthermore, the decision on which tools to implement involves all stakeholders. For example, the Corps can help reduce risk by levee construction. Whereas in a coordinated but independent action, local government can further reduce flood risk by implementing flood plain management actions such as evacuation plans, zoning ordinances, and public outreach.

This cannot be achieved without a new paradigm of joint partnerships in a comprehensive approach of public education and flood risk management. For instance, the insurance industry has a similar goal of assessing hazards and therefore, there exists an opportunity for the federal government and insurance industry to leverage efforts, possibly in the areas of research and development, implementation of assessment tools, and increase of public and policy-makers awareness.



What we are doing now

In May 2006, USACE established the National Flood Risk Management Program (NFRMP) to take the first step of bringing together other federal agencies, state and local governments and agencies, and the private sector to develop and implement a unified national flood risk management strategy that eliminates conflicts between different flood risk management programs and takes advantage of all opportunities for collaboration. Additionally, we are seeking partnerships with those that best understand risk such banking and insurance industries to share data and risk model development. We also wish to collaborate more closely with business councils and developers so they understand local flood risks, and can assist us in public education campaigns.

An integral part of the NFRMP is the Interagency Flood Risk Management Committee (IFRMC), with core leadership from USACE, FEMA, Association of State Flood Plain Managers (ASFPM), and the National Association of Flood and Stormwater Management Agencies (NAFSMA). This committee will be expanded to include other stakeholder groups, such as, the resource agencies. Through this committee, organizational leadership should use or change, when possible, existing policies and programs to transition into a comprehensive and shared process of lowering or “buying down” flood risks. As the transition occurs, the IFRMC should identify and recommend necessary administrative, policy, and legislative changes for complete implementation of the collaborative risk-informed decision process for managing flood risks.