

**WESTERN GOVERNORS' ASSOCIATION*****An Action Plan for Reducing Flood Risk in the West***  
**December 1997**

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**INTRODUCTION**

In the past 18 months significant flooding has afflicted a majority of states in the West and northern plains. Floods in California, Colorado, North and South Dakota, Idaho, Montana, Nevada, Oregon, and Washington have caused a number of fatalities, destroyed businesses, homes and public facilities, and severely harmed farming and ranching operations. It is estimated that over \$5 billion in federal, state and local funds will be spent helping Western communities and agricultural interests recover from the 1996/1997 flood season.

As the number and cost of disasters continues to rise, improving the management of floodplain areas becomes even more critical. Over the last 30 years, average annual riverine flood damages have exceeded \$2 billion. During the decade ending in 1994, those costs escalated, averaging \$3 billion a year.

All too often, after flood waters have subsided, the emphasis has been placed on rebuilding structures and trying to restore flood victims' lives back to normal as quickly as possible. Unfortunately, in the rush, these flood victims have often rebuilt their structures to their previous "at risk" conditions. There is a growing societal impatience with continually "bailing out" those who choose to live at risk. Professionals at all levels of government are now seeking to integrate numerous programs to address our nation's flood problems and reduce future flood risks and costs.

Recent changes in federal policy are increasing the focus on non-structural alternatives, such as encouraging participation in the National Flood Insurance Program (NFIP). Flood insurance is now required for every federally secured mortgage for private and commercial property located in the 100-year floodplain. And flood insurance will only be made available if communities belong to the NFIP. Strict requirements for levee construction and maintenance are also mandated for private subdivisions that want to be eligible for federal reimbursement for flood losses. These changes are intended to reduce the growing costs of flood disasters to the federal government. Just as important, they can reduce costs to state and local governments. Between 1992 and 1996, emergency response and recovery costs for states increased 79 percent; and the trend will continue, unless state and local governments take cooperative, proactive steps to improve implementation and delivery of flood programs.

It is clear that the federal government's focus on disaster recovery has dramatically changed. In 1994 alone, state governors declared 467 disasters and spent more than \$1.6 billion on emergency management disaster related costs. Of the 467, only 27 were declared disasters by the President and, thus, eligible for federal aid. The federal government has taken steps to reduce eligibility for certain types of disaster recovery measures and programs involving federal cost sharing. At the same time, the federal government is working to reduce potential disaster damages through more proactive efforts to lower flood risk.

The federal government has accurately recognized that all disasters are local and hence, all disaster mitigation projects to resolve property losses should be "local" as well. Therefore, the federal government has developed, and will continue to develop, programs that support and encourage local jurisdictions to sponsor and complete mitigation projects. The governors share many of these concerns and are seeking to address flood issues to make communities safer, improve governance, and provide long-term economic and environmental benefits to Western communities.

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**A VISION FOR FUTURE FLOOD RISK REDUCTION**

Federal, state, and local governments have already dedicated significant resources to address flood risk

reduction. The June 1994 report completed after the 1993 Midwest flooding on the upper Mississippi River Basin, *Sharing the Challenge: Floodplain Management into the 21st Century*, outlines a comprehensive vision for reducing future flood risks and costs. The governors share a commitment to many of the goals in the report. In particular:

- \* Refrain from putting people and property at risk by avoiding development in floodplain areas when other alternatives are available, and allow development only when it can be appropriately protected.
- \* Reduce the vulnerability to existing urban areas, industry and agriculture, when such reduction is justified, economically sound and reasonable.
- \* Move those currently at risk from the floodplain, as appropriate.
- \* Strive to eliminate threats to life, property, and the environment, and to the mental health and well-being of floodplain occupants, subject to sound cost constraints and investment criteria.
- \* Ensure the viability of critical infrastructure and the regional economy.
- \* Treat the floodplain as part of a physical and biological system within the larger context of its watershed.
- \* Improve planning for and mitigation of disasters by implementing consistent, equitable, flexible, cost-shared and efficient floodplain management through the National Flood Insurance Program.
- \* Ensure collaboration and accountability among all levels of government and individuals in a bottom-up process of shared planning and decision-making.
- \* Reduce the cost of flood damages to the nation.
- \* Share the risk among all levels of government and among flood-affected individuals.

In addition, several key premises must guide all levels of government and individuals in flood-risk reduction efforts in the future:

- \* Help those that help themselves.
- \* Communities and individuals that display responsible behavior should be encouraged and not placed at a financial disadvantage compared to those that exercise little or no responsibility.
- \* There is no simple or single answer (silver bullets), therefore, a matrix of solutions must be developed and implemented.
- \* Utilize incentives to implement high priority programs.
- \* Federal officials, governors and state, tribal and local officials must all be more outspoken and proactive in the implementation of this vision.

Western leaders must recognize the factors that compel local jurisdictions to redevelop areas that are prone to flooding. To break the cycle of repetitive loss, creative and innovative tools must be developed and communicated to responsible parties who can provide leadership to implement alternatives that enable sound floodplain management.

All levels of government should put forth a concerted effort and share the challenge to institutionalize the mechanisms and commitment necessary to face flood hazards intelligently. Only then can individuals recognize their role and assume personal responsibility for their assets and activities within the

floodplain. Reduced federal disaster-related spending along with heightened recognition of the value of natural floodplains is forcing decision-makers at all levels to consider the best mixture of well-tested, innovative approaches for managing floodplain areas in the future.

State and local governments are now facing the reality that the federal government is shifting away from its traditional strategy of using structural measures to reduce flood damages and is placing ever greater emphasis on non-structural measures. Aging levees, dams and other structures constructed decades ago, have created a false sense of security, which will only be compounded as the West continues to grow and the infrastructure continues to deteriorate. On the other hand, non-structural measures are designed to reduce the long-term susceptibility of individuals and property to flood damage while restoring or maintaining the natural functions and values of floodplains. The shift from structural to non structural solutions has been gradual, but is now accelerating because of escalating costs associated with disaster response and the pressure to reduce federal, state and local spending.

It is the responsibility of all levels of government, businesses and industry, as well as citizens -- particularly those located in a floodplains -- to reduce flood damages and the soaring flood-related disaster costs. We all have a stake in properly managed floodplains.

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## **IMPROVING FUTURE FLOODPLAIN MANAGEMENT**

### **Background**

Floodplain management experience indicates that the best damage-reduction plans are occurring in those states that have provided leadership strong enough to stay the course between high profile flood events. The WGA Floods Task Force concludes that pre-disaster flood planning and floodplain management are "essential" elements in reducing flood risk. Governors and all levels of government should place greater emphasis on these two policy areas. Detailed state and local planning will play an essential role in river-basin management in the future. Leadership must focus on a balance of structural and non structural floodplain management tools. With urbanization rapidly expanding in the West, decision makers must recognize that storm-water management planning is an integral component of an overall strategy to reduce flood losses.

Conditions for flooding in the West are much different than those in Eastern states. The mountainous regions provide the environment for flash flooding, high velocity flows, excessive erosion and torrent storm patterns. The gradual flood build-up of major rivers that devour small towns and remain high for weeks is a condition that exists primarily in the East. Alluvial fans, a common topographic feature in the West, will continue to present a tremendous challenge to local planners until an effective model for mapping alluvial fan flooding is developed and accepted by those in the engineering, urban planning and floodplain management professions. The great number of homes and businesses on alluvial fans pose high risk to Western communities, a risk that must be better understood and mitigation strategies developed.

Accurate maps are vital to the local floodplain administrator (FPA) to make sound management decisions. These maps are used by the FPA to determine if and how a structure can be built in a floodplain. In some Western states, the Flood Insurance Rate Maps were last updated in the late 70's and 80's. FEMA is currently working to improve and modernize the flood mapping process. Currently, all mapping is funded by NFIP policyholders which limits the available funds to address this critical issue. Current maps are needed to reflect new growth and changes in floodplains to correct inaccuracies in the original maps, and to show the annexation of new land that is not mapped.

### **Recommendations**

1. The Governors should facilitate the organization of public/private summits to identify areas at risk and ways to reduce it and to develop critical partnerships needed to successfully implement proactive flood mitigation plans.

2. Each Governor should assign to a cabinet-level official responsibility for the development and implementation of state plans and policies to reduce future flood risk. The cabinet official would be charged with developing and implementing policies that would improve the coordination of floodplainmanagement activities both within their states and, when necessary, with adjacent states and Mexico and Canada when dealing with shared water-basin issues. High priority must be given to all actions that will reduce flood losses by giving a lead state agency specific responsibility for monitoring and implementing flood-loss strategies and for reporting back annually on progress toward that goal. The lead state agency should:

- Initiate and support additional professional training opportunities for state and local floodplainplain administrators, geological survey organizations, drainage engineers, dam safety professionals, land management agencies, emergency managers and all stakeholders relative to flood mitigation.
- Enhance recruiting and training programs and develop shared goals for local floodplainadministrators and emergency managers. These programs must include provisions to update and enhance skills on a regular basis.
- Provide financial incentives for those communities that are implementing a flood-loss reduction program.
- Conduct careful analysis/evaluation of existing state flood programs to determine whether they have had a net economic impact on the value of floodplainplain areas, and whether they affect the way watersheds perform their natural functions.

3. Each Governor, through executive order or other appropriate means, emphasize his or her support of the National Flood Insurance Program (NFIP) and flood mitigation in general. Communities should be encouraged to participate in the NFIP and individual citizens to purchase flood insurance.

4. Each state should develop flood-loss reduction strategies consistent with floodplainplain, water management, natural resource and economic goals. Active state involvement is essential and can be achieved by organizing a state task force along water basin boundaries to coordinate all water management and environmental issues.

5. States should develop, implement and monitor plans which assure full coordination in repair activities, buyouts, hazard mitigation, permitting and maintenance of levees and other structures that will have an impact beyond the local area.

6. States should develop a priority list of where floodplainplain delineation studies (including high groundwater and debris flow areas) are most needed. Cost-share funds will be essential and should be made available both at the state and federal level to assist communities with developing and implementing the strategies and measures. Other suggestions include:

- Allow local communities to develop and utilize cost effective technologies to update their own maps using FEMA approved engineering practices.
- Enhance state/local capabilities with new mapping technology and additional review personnel to expedite the restudy process.
- Jointly develop an improved predictive model for alluvial fan flooding (including debris flow impact, force research and structural engineering studies) and obtain its acceptance among federal and state agencies concerned with floodplainmanagement.

7. Government and private sector leaders should place a greater emphasis on encouraging communities to join the National Flood Insurance Program. Improved marketing strategies and timely distribution of flood maps will be required to encourage greater citizen participation in the purchase of flood insurance policies.

8. Congress should provide new authority to 1) reduce the amount of post-disaster support to individuals who did not buy flood insurance to the level needed to provide for immediate health, safety and welfare; and 2)

limit public assistance grants to communities that elect not to participate in the National Flood Insurance Program.

9. Federal and state priorities should encourage relocation of flood-prone development and restoration of the natural beneficial functions of floodplain areas.

10. The federal government should continue to partner with state and local community-led efforts to develop comprehensive flood risk reduction plans using basin-wide approaches. These plans should include documentation of measures that can be taken by communities in advance of an imminent flood. States that take a lead in preparing such plans should receive priority for additional assistance.

11. Each state should establish a task force, led by a cabinet-level official, to explore and implement methods for reducing dependence on traditional federal sources of disaster recovery funding. The task force should also develop alternatives for reducing the state share of disaster costs through overall flood-loss reduction, enhanced building code development and enforcement, or state regulatory changes.

- The task force should work with federal and state agencies to make available reliable sources of funds to pursue a comprehensive flood risk reduction program.

- Each state should consider the implementation of a "state trust fund" to provide cost sharing for a flood risk reduction and mitigation program. The trust funds could be used in the numerous instances when federal disaster assistance is unavailable. Consideration should be given to establishing a mechanism to buy out properties using this fund at the time of disasters to bridge the difference between flood insurance and fair market value to significantly expedite the mitigation process.

12. The National Conference of State Legislatures, Council of State Governments, federal agencies, and the governors should continue to provide information to state legislatures to advise them of the changing trends in federal disaster assistance policies and their affects on state budgets.

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## **IMPROVING THE COORDINATION AND COMMUNICATION OF FLOOD ISSUES**

### **Background**

Differences in local and regional conditions and the evolution of floodplain management nationwide demonstrate the necessity of approaching the issue from various perspectives simultaneously. However, the complexity of the nation's flood problems coupled with the diffusion of responsibility between levels of government and among agencies has resulted in uncoordinated, fragmented and inconsistent approaches. Responsibility for floodplain management has been hampered by uncoordinated and conflicting federal, state and local programs. This has resulted in confusion among local governments and the public, duplication of efforts, gaps in program delivery, and missed opportunities all of which are magnified in the aftermath of a flood disaster.

Because citizens are becoming more knowledgeable about and respectful of the natural processes associated with floodplain areas and are subsequently less willing to subsidize the costs of unwise occupancy of them, it is imperative that future floodplain activities be coordinated to maximize the benefits of floodplains and waters and to minimize the loss of life and damage from flooding.

Western states and the federal government are committed to reducing flood damages and costs in the future. These shared goals provide an excellent opportunity to enter into collaborative relationships to accomplish the task. New and creative ideas need to be tested that will give states greater flexibility and authority to make decisions and mitigate costs following disasters. In addition, FEMA is beginning to fund pre-disaster mitigation projects. The design of these new projects should minimize state cost-sharing and include state benefits in the analysis. This would provide the needed incentive to reduce disaster costs for state- and local-designated disasters. States must be able to leverage new opportunities with existing programs in innovative

ways to create powerful mitigation tools that can be evoked at the state and local level.

### **Recommendations:**

13. By Executive Order, the President of the United States should establish a focal point for all federal agencies that are responsible for coordinating and implementing damage-reduction strategies. The focal point would be responsible for ensuring consistency among federal programs and agencies involved in flood response and recovery programs.

14. Each state should maintain a permanent interagency hazard-mitigation team that meets regularly to address natural hazards in general. It would report to the governor concerning the necessary planning, mitigation and coordination of hazards management activities, including those related to floodplain areas.

15. The president, Congress and the governors should provide the necessary policy or statutory encouragement for the formation of new partnerships between federal, state, tribal and local governments and private entities to maintain and develop flood warning systems.

\* A higher priority should be placed on additional funding and cooperative efforts among agencies to maintain and operate more efficiently the nation's water forecasting programs and stream gauge network, which are used to assess flood risk and to warn communities of imminent flood risks. States could play an increased role by assisting with identifying priorities, cost sharing where appropriate and participating in improving the overall coordination of the system.

\* State and federal agencies should establish resource-sharing agreements to cooperatively develop and maintain comprehensive floodplain management databases to support flood response efforts and flood-loss reduction planning.

16. States should combine resources for disaster response by joining existing Emergency Compacts or by forming new ones. Many states have already joined the Emergency Management Assistance Compact (EMAC) first proposed by the Southern Governors' Association and endorsed by WGA (WGA Policy Resolution 96-010, June 24, 1996). Other options are to join one of the Regional Compacts such as the Southwest Caucus or to form new compacts.

17. Federal and state agencies should place increased emphasis on education and technical support for flood-loss reduction strategies and floodplain management. Better information (i.e. floodplain delineation studies) is needed for the education strategy to be credible.

18. The Federal Emergency Management Agency should review and, where appropriate, revise all FEMA disaster recovery rules, regulations and operating procedures so that issues of funding, cost sharing, priorities, and other issues are handled consistently.

19. The president and governors should direct federal and state agencies, respectively, that fund community-based planning activities to integrate comprehensive flood-loss reduction planning into their programs.

20. The Army Corps of Engineers, U.S. Fish and Wildlife Service and appropriate state agencies should cooperate in a review of Corp standards for levee maintenance and repair to address and/or eliminate conflicting requirements for aquatic species.

21. The president should form a task force comprised of all federal agencies having disaster relief programs including the Federal Emergency Management Agency, U.S. Army Corps of Engineers, Natural Resource Conservation Service, Farm Service Agency, U.S. Forest Service, Bureau of Reclamation, Economic Development Administration, Bureau of Land Management, Federal Highway Administration and U.S. Fish & Wildlife Service. The task force would review and revise disaster recovery programs, policies, rules and regulations to eliminate duplication of coverage and gaps in program delivery. This would insure consistency in program funding, purpose, cost-sharing rates and priority setting. In addition, the Office of Management

and Budget and the Council on Environmental Quality should be participants in the task force. The president should provide for state representation on this task force through the WGA.