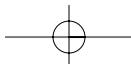
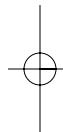
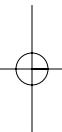
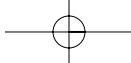


Floodplain Management in New Mexico A Call for Action

September 2003



September 2003
Presented by the
New Mexico Floodplain Managers Association



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More information about the NMFMA and floodplain management in New Mexico is available on the NMFMA Website (<http://www.nmfma.org>)



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Front & back cover - Photo Credits: Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA)
Background - Calabacillas Arroyo sediment fan in the Rio Grande, August 1988
Upper left - House within floodplain of La Cueva Arroyo in Northeast Albuquerque, July 1992
Upper right - Embudo Arroyo at Juan Tabo and Indian School in Northeast Albuquerque, after storm July 1988

Summary

Floodplain management in New Mexico has made significant advances since the formation of the New Mexico Floodplain Managers Association (NMFMA). However, there is still much to be done to reduce the potential for flood damage throughout the State. In April 2002, NMFMA published *A Call for Action*, identifying short-term priorities to improve floodplain management in the state. Since that time there have been accomplishments and changes implemented by the State Legislature and NMFMA. (See Appendix A.)

In this document, the September 2003 edition of *A Call for Action*, revised short-term priorities are defined by the membership of the NMFMA. These priorities identify both the tasks and the entities that need to work on each task. The tasks are summarized on these first three pages and are discussed in more detail starting on page 9. This edition of *A Call for Action* includes information on the NMFMA; the statutes that require floodplain management in New Mexico; and other background information intended to help readers understand the issues and the problems faced by our floodplain managers.

Floodplain Mapping Issues (For more detail, see discussion on page 9.)

Priority M-1: The State of New Mexico should support improved floodplain mapping for its communities.

State Legislature Action: The Legislature should provide funds to improve New Mexico's priority for Federal Emergency Management Agency (FEMA) floodplain mapping funds. This will increase the amount of mapping money apportioned to New Mexico by FEMA. (*Funding: \$500,000 for each year FY04, FY05 and FY06*)

State Legislature Action: The Legislature should direct the Department of Public Safety (DPS) to work with the Office of the State Engineer to determine the need for additional river gauges to improve flood hydrology throughout the State. (*Funding: current staff and budget to determine need; \$200,000 per year to install needed gauges starting in FY05*)

State and Federal Agencies Action: The Interagency Council on Floodplain Management (see Priority R-2 below) should develop specifications for state-wide topographic mapping or digital-terrain modeling to serve the needs of all agencies. The Council should then seek funding for such mapping or digital-terrain modeling. (*Funding: no immediate funding required*)

FEMA Action: FEMA should examine all New Mexico communities with no identified flood hazard areas and determine if flood hazards should be identified. (*Funding: current staff and budget*)

NMFMA Action: Participate in the Interagency Council on Floodplain Management (see Priority R-2 below) to develop specifications for state-wide topographic mapping or digital-terrain modeling to serve the needs of all agencies. The Council should then seek funding for such mapping or digital-terrain modeling. (*Funding: ongoing budget item*)



Graphic courtesy of Design4Impact.com for RCQuinn Consulting, Inc.

Priority M-2: The Department of Public Safety should assist communities in creating accurate floodplain maps.

DPS Action: DPS should hire two people with engineering backgrounds and experience to review mapping and remapping projects undertaken by FEMA to ensure that the resulting maps are correct and appropriate for floodplain management by our communities. *(Funding: \$100,000 per year ongoing)*

Priority M-3: New Mexico communities should use the best information available for floodplain management.

Community Action: When the NMFMA has developed techniques and tools to estimate floodplain areas, flood depths and other factors needed for floodplain management, communities should adopt and implement these tools and techniques. *(Funding: no cost)*

Community Action: Whenever a community experiences a flood in an area where no floodplain has been mapped, that community should make all reasonable efforts to document the area flooded and the depth of flooding throughout the area. Then the community should adopt the flooded area as floodplain and use the flood elevation as the basis for floodplain management in that area. *(Funding: no cost)*

NMFMA Action: The NMFMA, in cooperation with DPS, should develop techniques and tools to estimate floodplain areas, flood depths and other factors needed for floodplain management. These techniques and tools should be relatively easy to use and rely only upon data that is readily available. *(Funding: ongoing budget, grants)*

Regulatory and Management Issues: *(For more detail, see discussion on page 11.)*

Priority R-1: Current minimum statutory and regulatory requirements should be implemented and enforced.

DPS Action: In coordination with FEMA, conduct 22 Community Assistance Visits (CAVs) per year for the next three years so that all New Mexico communities participating in the NFIP will have had CAVs within five years. After three years, DPS and FEMA should schedule CAVs for 20% of all NFIP communities in New Mexico each year. *(Funding: current staff)*

Construction Industries Division (CID) and Manufactured Home Division (MHD) Action:

Ensure that all new buildings built in floodplains and all manufactured homes installed in floodplains comply with local community floodplain management ordinances. *(Funding: current staff; training and procedures as needed)*

State Agencies Action: Ensure that all new State-funded buildings comply with floodplain management standards. *(Funding: current staff)*

FEMA Action: In coordination with DPS, conduct 22 CAVs per year for the next three years so that all New Mexico communities participating the NFIP will have had CAVs within five years. After three years, DPS and FEMA should schedule CAVs for 20% of all NFIP communities in New Mexico each year. *(Funding: current staff)*

Community Action: Adopt a floodplain ordinance, certify a local floodplain manager and join the NFIP. *(Funding: for each community \$300 initial year, then \$200 per year)*

NMFMA Action: Encourage communities to adopt floodplain management ordinances, certify a local floodplain manager and join the NFIP. *(Funding: ongoing budget item)*

NMFMA Action: Provide assistance to communities to enable them to adopt an ordinance, certify a local floodplain manager and join the NFIP. *(Funding: ongoing budget item)*

Priority R-2: An Interagency Council on Floodplain Management should be established to coordinate floodplain management in New Mexico.

Governor Action: Instruct appropriate State agencies to participate in a workshop to organize an Interagency Council on Floodplain Management. *(Funding: No cost)*

State and Federal Agencies Action: Participate in a workshop to organize an Interagency Council on Floodplain Management. Send representatives who are familiar with the policies, responsibilities and capabilities of their agencies. *(Funding: current staff time)*

NMFMA Action: In cooperation with DPS, develop a workshop program and invite State and federal agencies involved in floodplain management. The purpose of this workshop would be to organize an Interagency Council on Floodplain Management. *(Funding: ongoing budget item, grants)*

Priority R-3: Communities should adopt and enforce higher floodplain management standards.

Community Action: Adopt and enforce appropriate higher regulatory standards. *(Funding: no cost)*

NMFMA Action: In cooperation with DPS, determine which higher floodplain management standards are appropriate for New Mexico communities. *(Funding: ongoing budget item)*

NMFMA Action: In cooperation with DPS, recommend that New Mexico communities adopt and enforce appropriate higher regulatory standards. *(Funding: ongoing budget item)*

Training and Education Issues: *(For more detail, see discussion on page 13.)*

Priority T-1: DPS should officially recognize the NMFMA Certified Floodplain Manager Program.

DPS Action: Provide NMFMA with a letter recognizing the NMFMA Certified Floodplain Manager Program. *(Funding: no cost)*

Priority T-2: New Mexico should declare a State Flood Awareness Week.

Governor Action: Upon request from the NMFMA, declare a New Mexico Flood Awareness Week. *(Funding: no cost)*

Community Action: Promote New Mexico Flood Awareness Week with materials provided by NMFMA. *(Funding: no cost)*

NMFMA Action: Develop materials for communities to use during a State Flood Awareness Week. *(Funding: ongoing budget item, grants)*

The Very Real Threat of a Large Flood Event

Floodplain management has generally had a low priority in New Mexico's communities and state agencies because we have experienced little flooding in recent decades. This is due solely to the random nature of weather systems. Every state adjacent to New Mexico has had costly and deadly floods since 1990. New Mexico's turn will come and the New Mexico Floodplain Managers Association wants our communities to be prepared. Flood events have occurred in New Mexico in the past and they will happen again.

If, this winter, an unusually warm March storm drops seven inches of rain on an unusually heavy accumulation of snow somewhere in the mountains of New Mexico, the resulting runoff would exceed the capacity of all of the downstream dams. New Mexicans would watch helplessly as the rivers flood their homes, businesses, farms and ranches.

Or, perhaps, next July, an unusually strong thunderstorm creates a downpour of rain on a watershed upstream from a New Mexico town. In addition to the damage to homes, businesses, farms and ranches, several people would die because they were unaware of the threat and unable to respond in time.

Sooner or later, New Mexicans will experience the types of flood damage experienced by our neighbors in Arizona, Texas, Oklahoma and Colorado:



Flood event in Albuquerque's Southeast Heights, 1999

- ◆ Homes will be damaged or destroyed. Hundreds, perhaps thousands, of families may need temporary housing immediately.
- ◆ Businesses will be damaged or destroyed. There will be loss of revenue for the owners and loss of income for the employees. Some businesses may never reopen; some jobs may never be refilled.
- ◆ Farms will be flooded and crops will be lost. Irrigation systems and farm equipment will be damaged or destroyed.
- ◆ Ranches will be flooded. Animals will drown, be injured or starve.
- ◆ Water treatment systems will be damaged or destroyed. No clean drinking water will be available until these systems are repaired or replaced.
- ◆ Sewage treatment facilities will be damaged or destroyed. The result will be the pollution of downstream water supplies and groundwater.
- ◆ Streets, highways and bridges will be destroyed. Road access will be problematic until repairs can be made.
- ◆ Fire, police and ambulance service will be unavailable to some areas.
- ◆ Other public and private infrastructure will be damaged or destroyed. The ability to provide electricity, telephone and vital government services will be greatly impaired.
- ◆ The worst damage may also occur: People may be killed, drowned or battered by trees and boulders.

Although this all sounds horrifying, it will happen here in New Mexico - just ask the leader of a community that has been flooded and had not addressed the potential damage from floods, thinking "It won't happen to us."

Virtually every village, town, city, county, pueblo and Indian reservation in New Mexico has floodplains. In almost all of our communities, there are buildings that are subject to flooding. As our population grows and we build more structures in or near the floodplain, there will be more flood-prone buildings unless we take preventative action now.

Floods are the most frequent and costly disasters our nation faces. Taking a pro-active role will add New Mexico to the dozens of other states that are working to protect their citizens and property before a catastrophe strikes.

The Status of Floodplain Management in New Mexico

Floodplain management in New Mexico and most of the nation dates from the National Flood Insurance Act of 1968. This act of Congress made federally subsidized flood insurance available in communities that agreed to manage future floodplain development. Even today, insurance for structures is still not generally available except through this National Flood Insurance Program (NFIP).

The NFIP provides insurance against flood damage that a standard casualty policy does not. In order to purchase NFIP insurance for a home or business, a community must participate in the NFIP. If the community is not participating in the NFIP, an individual cannot buy this flood insurance.

In 1975, New Mexico enabled counties and municipalities to adopt ordinances to regulate new development in floodplains in accordance with the minimum requirements for participation in the NFIP. Las Cruces entered the NFIP in 1971. After the enabling legislation passed in 1975, more and more communities sought to participate in the NFIP.

In 2003, the statutes were revised to require that any community with identified flood hazards adopt an ordinance and join the NFIP. Currently, 75 New Mexico communities participate in the NFIP. However, 22 New Mexico communities with identified flood hazards have chosen not to participate in the NFIP. It is also likely that, with re-examination, many of the 42 New Mexico communities with no previously identified flood hazards will have identified flood hazards based on current conditions. (See Appendix B.)

The Community Rating System (CRS) is an NFIP Program that identifies communities that voluntarily exceed the NFIP minimum requirements for floodplain management. Of almost 19,000 NFIP communities in the United States, fewer than 1,000 (5%) participate in the CRS Program. New Mexico can be proud of its ten CRS communities (14% of New Mexico communities currently participating in the NFIP). (See Appendix B.)

Property owners in CRS communities receive specific percentage discounts on their individual NFIP policies. Property owners in the ten New Mexico CRS communities receive annual discounts of \$140,000 on flood insurance premiums for more than 6,000 buildings.

The State of New Mexico has not provided substantive support for its 95 community floodplain managers. NMFMA recommends that there be more professionally-trained state staff to review all community floodplain maps, to assist communities with technical issues when they work with the Federal Emergency Management Agency (FEMA) and to assist communities with technical issues when they work with developers. The State Department of Public Safety (DPS) currently has only one full-time employee dedicated to floodplain management, with the majority of funding provided by the federal government. NMFMA recommends that the State provide funding for additional staffing and partial funding for updated floodplain maps. (Priorities M-1 and M-2)

In addition, New Mexico needs state-wide floodplain management standards for unmapped floodplains. The State has neither appropriated money for floodplain mapping nor for other technical floodplain related needs. (Priority M-1)

There are many weaknesses in floodplain management in New Mexico. Many State agencies undertake activities in the State's floodplains with little or no regard for floodplain management. There is a need for a coordinating council of State and federal agencies to coordinate programs and resources. (Priority R-2)



Damage from a flood went in chaves County, 1980's

Recent Accomplishments in New Mexico's Floodplain Management

Much has been accomplished in floodplain management since the formation of the New Mexico Floodplain Managers Association (NMFMA) in 1995.

In 1996, the NMFMA published the first of its quarterly newsletters for floodplain managers. These newsletters keep New Mexico floodplain managers informed of State and national floodplain management issues and developments.

Since 1997, the NMFMA has held two conferences each year. These conferences provide floodplain managers with important information on how to manage floodplain development and give participants opportunities to learn from each other.

In 1999, a Certified Floodplain Manager Program was established by the national Association of State Floodplain Managers (ASFPM). In 2000, the New Mexico Floodplain Managers Association became the second state program accredited by ASFPM to provide state certification. An individual who passes the state exam and fulfills the additional educational requirements receives the Certified Floodplain Manager (CFM) designation, which must be renewed every two years. As of September 2003, New Mexico has 95 Certified Floodplain Managers.

In the spring of 2001, the New Mexico Legislature approved statutory revisions initiated by the NMFMA that require all communities that participate in the NFIP to have a CFM on staff to review development permits in flood hazard areas. As of September 2003, 52 communities had CFMs on staff.

New Mexico has taken a national leadership role by becoming the first state to require that its communities have CFMs review permits for floodplain development. Currently, New Mexico has more CFMs per capita than any other state. We credit this to the State requirement to have the certification in order to review floodplain permits.

Early this year, the NMFMA was successful in getting legislation adopted that requires any community with identified flood hazards to adopt a floodplain management ordinance and join the NFIP. This will reduce future flood damage in those communities and enable their property owners to purchase flood insurance.

The NMFMA invited all New Mexico communities without a floodplain ordinance to a workshop in July 2003, and seven communities participated. DPS and FEMA assisted in this workshop. The workshop discussed floodplain management, certification, the floodplain management ordinance and joining the NFIP. The participants were provided with a model ordinance tailored to the needs of New Mexico communities. The NMFMA will continue to encourage these communities, and the 15 that did not attend, to comply, and will assist them in becoming compliant.

Several other accomplishments will be completed later this fall. First, the NMFMA is developing a *Handbook for New Mexico Floodplain Managers* (a comprehensive reference manual on all aspects of floodplain management) and a *Reference Guide* (to be used for daily reference by New Mexico floodplain managers). Also, the New Mexico Construction Industries Division (CID) will be adding a signature block for the local CFM to the State building-permit application. CID's building permits will not be issued until the local CFM has reviewed the application.



Logo for the national Certified Floodplain Manager Program

Benefits of Floodplain Management

New Mexico's floodplains are a valuable resource. Floodplains:

- ◆ store flood waters;
- ◆ slowly release flood waters to recharge acquifers;
- ◆ contain soils and plants to filter toxins from polluted runoff;
- ◆ provide recreational opportunities such as municipal parks, golf courses, hiking, biking and equestrian uses;
- ◆ provide interpretive opportunities such as cultural history study, nature observation and photography; and
- ◆ provide habitat for wildlife.

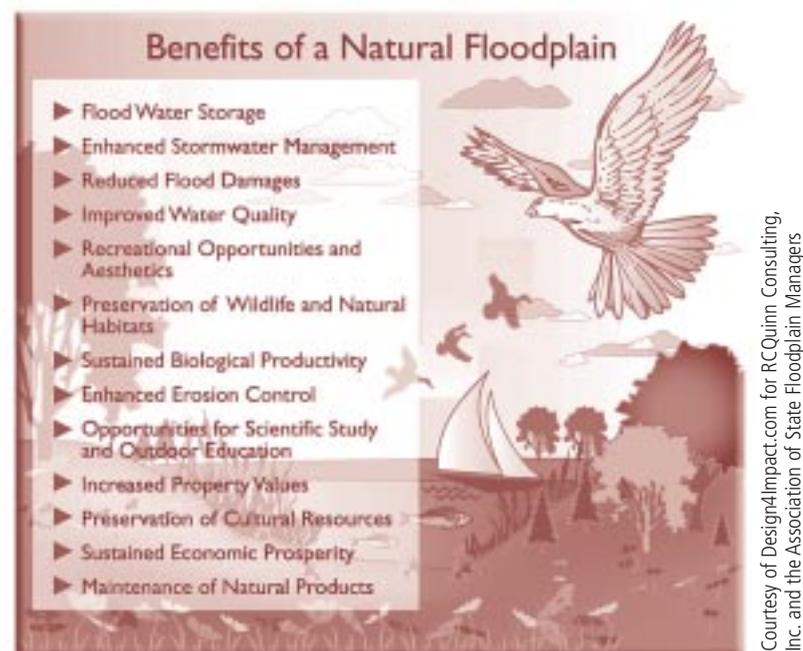
Through floodplain management techniques, new development can be built without increasing the threat of flooding. Subdivisions containing large lots can locate the actual structures outside the floodplain. The floodplain portions of the lots can be used for recreation, landscaping, orchards and other uses that will not suffer major damage from floods.

Most existing floodplain usage would not be affected by new floodplain management policy. In comparison to other types of development, existing uses of floodplains, such as ranching and most types of farming, tend to minimize floods. Actually, in many cases ranching, farming and recreational uses of floodplains represent good examples of floodplain management. The open space allows for the temporary storage of floodwater during high flows. During a flood, more water recharges groundwater basins. As the flood subsides, the water stored in the floodplain returns to the river at a rate and force that can be managed by the natural stream system. In addition, the temporary storage provided by floodplains reduces downstream flooding.

Does this vision infringe on the rights of property owners? Courts all over the country have said that floodplain management is a necessary regulation of land use to preserve public health, safety and welfare. In fact, comprehensive floodplain management techniques actually serve to limit the liability of property owners taking development action and to protect property owners downstream.

Floodplain management is an inexpensive way to reduce potential flood damage in New Mexico. An investment of approximately \$800,000 per year by the State, and approximately \$50,000 by New Mexico's communities (all communities combined), will prevent hundreds of millions of dollars in potential damage each time a major flood occurs.

For example, in Maricopa County, Arizona, legislative action requires builders and developers to comply with strict standards for flood control and stormwater management for residential, commercial and industrial properties. It is estimated that the \$292,000 spent on "cost of compliance" saved \$2.9 billion in avoided damages during one flood in 2000.



A Call for Action: Future Actions to Improve Floodplain Management in the State

Floodplain Mapping Issues:

Good floodplain maps are needed for good floodplain management. Good floodplain maps are based on recent, detailed topographic mapping and good estimates of the size of a flood expected at a specific location. Because they are based on detailed topographic maps and hydrologic and hydraulic analyses performed by experienced professionals, good floodplain maps are expensive.

One way to reduce the cost of mapping is to obtain topographic mapping for large areas at one time. This reduces the cost per acre. Many local, State and federal agencies have a need for detailed topographic mapping. If these agencies combined their resources, it might be possible to obtain data for large areas of the state.

Virtually all floodplain maps used by New Mexico communities for floodplain management were provided by the Federal Emergency Management Agency (FEMA) to implement the National Flood Insurance Program (NFIP). Many of these maps were estimates of floodplain areas with no flood elevations provided and are more than 20 years old. The initial identification of floodprone areas in New Mexico was done almost 30 years ago, and no recent effort has been made to determine if there are floodprone areas that have not been identified.



One example of how conditions may change over many years. Without periodic updates to maps, flood hazards may not be accurately represented. (Calabacillas Arroyo erosion, Albuquerque)

The United States Congress has recognized that the nation's floodplain maps are out of date, and has appropriated \$300 million for "NFIP Map Modernization." FEMA will contract for new floodplain mapping studies based on several things: the number of floodprone buildings in a community; the growth rate of the community; the ability of the community to assist financially in the study; and other parameters. Because New Mexico has relatively few floodprone structures, we can expect a relatively small portion of the mapping funds. A State contribution to pay part of the mapping cost will increase the portion of FEMA's funding that New Mexico will receive. A State-wide mapping program would be one way for New Mexico to contribute.

Communities are required to manage floodplain areas delineated by FEMA, but they may also adopt other floodplain maps if they are available. Occasionally, State or federal agencies other than FEMA produce floodplain maps. Also, a community can pay for studies that produce floodplain maps or may declare that an area flooded by a recent or historic flood is a floodplain, and include that area under its floodplain management ordinance. It is also possible to develop methods to estimate flood depths and floodplain widths based on statistical analyses of detailed studies that have been done throughout the State. These estimates can be applied to areas where no detailed studies are available.

Priority M-1: The State of New Mexico should support improved floodplain mapping for its communities.

State Legislature Action: The Legislature should provide funds to improve New Mexico's priority for FEMA floodplain mapping funds. This will increase the amount of mapping money apportioned to New Mexico by FEMA.

The willingness of others to participate financially in the development of new floodplain maps is one of the criteria FEMA uses to set its priorities. There is no "formula" for this criteria. If a community or state is willing to share the cost of floodplain mapping, that community or the communities in that state are a higher priority for FEMA's new

floodplain maps than those that do not share the cost. A reasonable contribution from the State (\$500,000) might increase FEMA funding for maps for New Mexico communities by several million dollars.

State Legislature Action: The Legislature should direct the Department of Public Safety to work with the Office of the State Engineer to determine the need for additional river gauges to improve flood hydrology throughout the State.

The level of flooding at a specific point on a stream depends on the amount of floodwater estimated to flow past that specific point. If there is no flood data at that location, the quantity of flow is estimated from the flow on other streams in the area. The more data that is available for streams in New Mexico, the more accurate the estimates. The numerous users of river gauge data, and the Interagency Council on Floodplain Management (see Priority R-2 below) could look for ways to combine resources to meet the needs of multiple users.

State and Federal Agencies Action: The Interagency Council on Floodplain Management (see Priority R-2 below) should develop specifications for state-wide topographic mapping or digital-terrain modeling to serve the needs of all agencies. The Council should then seek funding for such mapping or digital-terrain modeling.

All State agencies, federal agencies and NMFMA members should work together to identify mapping needs and to combine resources to obtain topographic mapping or digital-terrain models that would meet the needs of the various agencies, including topographic mapping for floodplain mapping purposes.

FEMA Action: FEMA should examine all New Mexico communities with no identified flood hazard areas and determine if flood hazards should be identified.

There are 42 New Mexico communities (not counting Indian tribal communities) that have “no identified flood hazards.” These include a number of counties and communities along the Gila River, Rio Grande River, Pecos River and other major streams. It is obvious that many of these

communities do have flood hazards that are not yet identified.

NMFMA Action: Participate on the Interagency Council on Floodplain Management (see Priority R-2 below) to develop specifications for state-wide topographic mapping or digital-terrain modeling to serve the needs of all agencies. The Council should then seek funding for such mapping or digital-terrain modeling.

Priority M-2: The Department of Public Safety should assist communities in creating accurate floodplain maps.

DPS Action: DPS should hire two people with engineering backgrounds and experience to review mapping and remapping projects undertaken by FEMA to ensure that the resulting maps are correct and appropriate for floodplain management by our communities.

Flood Insurance Studies and the floodplain maps that result are technically complex studies; “professional judgment” must be used in the creation of these maps. There is also room for errors that can cause the maps to be unreasonable. It is beyond the capability of most New Mexico communities to review these studies or maps and ensure that they are correct. It is, therefore, necessary that the State have experienced staff to do so.

Priority M-3: New Mexico communities should use the best information available for floodplain management.

Community Action: When the NMFMA has developed techniques and tools to estimate floodplain areas, flood depths and other factors needed for floodplain management, communities should adopt and implement these tools and techniques.

In order for any floodplain maps or mapping methods to be effective, communities must adopt and apply them. As these tools are developed, the NMFMA, DPS and FEMA will urge communities to adopt them voluntarily. If that does not work, it may be necessary for DPS to adopt rules requiring their use or for the statutes to be revised to require their use.

Community Action: Whenever a community experiences a flood in an area where no floodplain has been mapped, that community should make all reasonable efforts to document the area flooded and the depth of flooding throughout the area. Then the community should adopt the flooded area as a floodplain and use the flood elevation as the basis for floodplain management in that area.

A flood occurrence is the best possible indicator of flood elevation and areas subject to flooding. Most floods will be smaller than the base flood normally used for floodplain management, so generally a historic flood will indicate a minimum area to be regulated in the future. The NMFMA, DPS and FEMA should assist in documenting the area flooded and the depth of flooding at various locations immediately after a flood.

NMFMA Action: The NMFMA, in cooperation with DPS, should develop techniques and tools to estimate floodplain areas, flood depths and other factors needed for floodplain management. These techniques and tools should be relatively easy to use and rely only upon data that is readily available.

Where FEMA has mapped floodplains without detailed studies, and on stream reaches where no floodplains have been delineated, good floodplain management is not possible. Other states and communities have developed methods for estimating flood elevation, floodplain widths and floodway widths that can be used for floodplain management. These methods can greatly reduce future flood damage in these floodplains.

Regulatory and Management Issues:

Floodplain management is basically management of land use in areas subject to flooding. A flood in a developed floodplain damages buildings and the owners need financial assistance to recover. If development is managed, buildings are built above the flood elevation and suffer little or no flood damage. Management of grading and fill can reduce flood damage to existing buildings. When floodwater enters water systems, the systems are contaminated and need to be cleaned. When floodwater enters wells, it can contaminate groundwater supplies. If floodwater damages sewage or septic systems, raw sewage can

contaminate the floodwater. If a road in a floodplain is not properly designed, it can increase flooding. Better coordination is needed among agencies that are involved in floodplain management to lessen the damages that occur due to flooding.

Floodplain management in New Mexico is a community responsibility, and is accomplished through adoption and enforcement of a floodplain ordinance. Although the New Mexico statutes were recently revised to require that communities adopt floodplain ordinances; have them administered by a Certified Floodplain Manager (CFM); and join the NFIP; a number of communities are not yet compliant. However, some development, such as state buildings, schools, roads, wells and septic tanks, are not regulated or permitted by the community and are therefore the responsibility of the State.

Priority R-1: Current minimum statutory and regulatory requirements should be implemented and enforced.

§3-18-7 NMSA1978 (see Appendix C) requires that communities with identified flood hazards adopt a floodplain management ordinance; have a CFM on staff to review floodplain development; and join the NFIP. §13-5-3 NMSA1978 requires that all buildings built or funded by the State comply with floodplain ordinance requirements.

DPS Action: In coordination with FEMA, conduct 22 Community Assistance Visits (CAVs) per year for the next three years so that all New Mexico communities participating in the NFIP will have



Periodic Community Assistance Visits are necessary to review problem areas and come up with solutions. (Blacktop break-up due to flood damage, Chaves County)

had CAVs within five years. After three years, DPS and FEMA should schedule CAVs for 20% of all NFIP communities in New Mexico each year.

A CAV allows FEMA or DPS to thoroughly review the community's floodplain management program, its permitting procedures and its knowledge of its floodplain management responsibilities. This is important to ensure that the requirements of the statutes and the NFIP are being met. In most New Mexico communities, the current Floodplain Administrator has never had a CAV. In 1999, the NMFMA membership resolved that FEMA and DPS should conduct CAVs for all 75 NFIP Communities in New Mexico within three years. In the three years since that resolution, FEMA and DPS have conducted 20 CAVs.

CID and MHD Action: Ensure that all new buildings built in floodplains and all manufactured homes installed in floodplains comply with local community floodplain management ordinances.

In communities with no building inspection programs, the Construction Industries Division (CID) of the Department of Licensing and Regulation issues building permits and certificates of occupancy for new construction. CID needs to ensure that these buildings are compliant with the requirements of community floodplain ordinances.

Placement of manufactured housing is permitted by the Manufactured Housing Division (MHD) in most communities. MHD needs to ensure that manufactured homes are compliant with the requirements of community floodplain ordinances.

The NMFMA is working with CID and MHD to establish policies and procedures to ensure that buildings and manufactured homes permitted by these divisions are compliant with community ordinances.

State Agencies Action: Ensure that all new State-funded buildings comply with floodplain management standards.

State agencies need to be aware of the statutory requirement and ensure that it is complied with for all buildings that are wholly or partially funded by

the State, including schools and buildings that are built for the specific purpose of lease by State agencies.

FEMA Action: In coordination with DPS, conduct 22 CAVs per year for the next three years so that all New Mexico communities participating in the NFIP will have had CAVs within five years. After three years, DPS and FEMA should schedule CAVs for 20% of all NFIP communities in New Mexico each year.

Community Action: Adopt a floodplain ordinance, certify a local floodplain manager and join the NFIP.

NMFMA Action: Encourage communities to adopt floodplain management ordinances, certify a local floodplain manager and join the NFIP.

The requirement for communities to have floodplain development reviewed by a CFM became effective in June 2000. As of September, 2003, 52 of the 75 communities with floodplain management ordinances have CFMs. The NMFMA offers training for the CFM exam and offers the exam at least three times each year. Each time the exam is offered, more communities come into compliance with this requirement.

The requirement for communities to adopt floodplain management ordinances and join the NFIP became effective in June 2003. There are 22 communities with identified flood hazards that have not yet adopted an ordinance. (See Appendix B.)

NMFMA Action: Provide assistance to communities to enable them to adopt an ordinance, certify a local floodplain manager and join the NFIP.

Priority R-2: An Interagency Council on Floodplain Management should be established to coordinate floodplain management in New Mexico.

The floodplain management issues of mapping, hydrology, regulation and management standards cross many disciplines and agencies. An Interagency Council on Floodplain Management could improve floodplain

management and avoid duplication of efforts. Numerous agencies collect and use hydrologic data for different purposes. Data collection efforts should be coordinated and all hydrologic data shared among agencies. Numerous agencies use topographic mapping. A coordinated effort should be made to develop statewide topographic mapping. Floodplain mapping studies are done for a variety of reasons. These studies should be coordinated and the results shared among agencies. Numerous agencies have regulatory responsibilities that extend into floodplains. These regulations should be coordinated. An Interagency Council on Floodplain Management would establish objectives and procedures to improve floodplain management and reduce costs.

Governor Action: Instruct appropriate State agencies to participate in a workshop to organize an Interagency Council on Floodplain Management.

State and Federal Agencies Action: Participate in a workshop to organize an Interagency Council on Floodplain Management. Send representatives who are familiar with the policies, responsibilities and capabilities of their agencies.

NMFMA Action: In cooperation with DPS, develop a workshop program and invite State and federal agencies involved in floodplain management. The purpose of this workshop would be to organize an Interagency Council on Floodplain Management.

Priority R-3: Communities should adopt and enforce higher floodplain management standards.

The minimum floodplain management requirements under the NFIP and the New Mexico statutes are inadequate. They do not provide the level of protection for floodplain development that they are intended to provide. (One example is that regulatory standards allow for the flood elevation to be raised by one foot without requiring development to be elevated above that one foot rise. Another example is that the current Federal Insurance Rate Maps [FIRMs] do not adequately take into account sediment and erosion. Higher standards will provide more protection.) Experienced floodplain managers, including some NMFMA members, are familiar with higher standards used in other parts of the country, and can assist in developing higher standards that are appropriate for New Mexico floodplains.



Courtesy of Design4Impact.com for RCQuinn Consulting, Inc. and the Association of State Floodplain Managers.

Community Action: Adopt and enforce appropriate higher regulatory standards.

NMFMA Action: In cooperation with DPS, determine which higher floodplain management standards are appropriate for New Mexico communities.

NMFMA Action: In cooperation with DPS, recommend that New Mexico communities adopt and enforce appropriate higher regulatory standards.

Training and Education Issues:

The NMFMA, DPS, FEMA and others work together to provide training to floodplain managers, community leaders, staff and others on an ongoing basis. More of an effort is needed to educate the public on floodplain management issues.

Priority T-1: DPS should officially recognize the NMFMA Certified Floodplain Manager Program.

DPS Action: Provide NMFMA with a letter recognizing the NMFMA Certified Floodplain Manager Program.

The NMFMA has administered a nationally accredited program to certify floodplain managers in New Mexico. DPS staff assisted in the development of the NMFMA Certified Floodplain

Management Program, and the New Mexico State NFIP Coordinator (a DPS employee) is automatically on the NMFMA Certification Board. There is no other certification program for floodplain managers in New Mexico. DPS recognition would identify the NMFMA CFM Program as the official State certification program.

The Association of State Floodplain Managers (ASFPM) oversees the national CFM Program. In 2000, NMFMA became the second state program accredited by the ASFPM. NMFMA coordinates with the ASFPM on an annual basis to update the list of CFMs in New Mexico, review eligibility criteria and continuing education credit criteria. The NMFMA CFM program must renew accreditation every five years.

Priority T-2: New Mexico should declare a State Flood Awareness Week.

Most states have a Flood Awareness Week, a Hurricane Awareness Week, a Flash Flood Awareness Week, or some similar period during which they undertake a statewide campaign to educate the public on the hazards of flooding and actions the public can take to reduce flood damage, avoid injury and avoid death. In New Mexico, the National Weather Service (NWS) has designated a week in June as National Flood Awareness Week, but it has not been supported by State government or communities. The NMFMA proposes State and community activities, coordinated with the efforts of the NWS.

Governor Action: Upon request from the NMFMA, declare a New Mexico Flood Awareness Week.

Once the NMFMA has developed material for use by communities, they will request the declaration by the governor.

Community Action: Promote New Mexico Flood Awareness Week with materials provided by NMFMA.

Using materials developed by the NMFMA as well as materials from other sources, New Mexico communities should adopt resolutions declaring a Flood Awareness Week and undertake activities to increase public awareness of flood hazards in their communities.

NMFMA Action: Develop materials for communities to use during a State Flood Awareness Week.

For a Flood Awareness Week to be effective, it needs to be enacted by communities and supported by community resolutions and public awareness campaigns. The NMFMA needs to develop materials for New Mexico communities to use for this purpose. An example would be to send the new statute, with an introduction summarizing the changes, to all federal mortgage providers.



Open space stores flood waters and provides a slow release into the surface and ground water systems. (Chaves County, 1980s)

NMFMA: Vision for the Future

Floodplain management in the United States is a program implemented at the local level to federal standards.

- ◆ The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP), which provides basic financial protection to individual building owners in the event of a flood.
- ◆ FEMA, other federal agencies, state agencies and communities assist in the costly development of floodplain maps.
- ◆ Community floodplain managers regulate new development to minimize impacts from flooding.
- ◆ The New Mexico Floodplain Managers Association (NMFMA) and the Department of Public Safety (DPS) provide floodplain management education to New Mexico community floodplain managers and others involved in floodplain management.

The NMFMA envisions the State's floodplains as largely undeveloped areas. In urban areas, floodplains will provide linear parks with recreational facilities, trails and areas of natural habitat. In rural areas, floodplains will be almost entirely undeveloped. Floodplains will make up part of ranches and farms. Floodplains will make up part of the undeveloped areas of 5, 10 and 40-acre lots.

All buildings that are in or near New Mexico's floodplains will be protected by flood insurance. The cost of these insurance premiums will be very reasonable because the buildings will be protected from flooding.

The State will:

- ◆ Recognize the NMFMA Certified Floodplain Manager (CFM) Program as the State certification program;
- ◆ Provide professional expertise for communities, including assisting FEMA in performing Community Assistance Visits in all NFIP participating communities;
- ◆ Review existing floodplain maps and help establish priorities within the state to get the maps revised;
- ◆ Oversee the development of updated accurate maps that meet the needs of New Mexico communities;
- ◆ Develop techniques for managing floodplain development in unmapped and inadequately mapped floodplains throughout the state;
- ◆ Provide technical assistance to communities upon request; and
- ◆ Ensure that all State buildings are safe from flooding.

NMFMA will:

- ◆ Continue to manage the New Mexico CFM Program;
- ◆ Continue to conduct conferences and provide other training opportunities for New Mexico floodplain managers and other interested parties;
- ◆ Continue to produce a quarterly floodplain management newsletter;
- ◆ Continue to educate the Legislature, the public and any group, organization or professional organization involved in floodplain management or use; and
- ◆ Continue to seek ways to reduce flood damage throughout the state.

In the future, when a major flood comes there could be very little damage with the inclusion of effective floodplain management practices. A few buildings may be flooded in a very large storm event, but there will be little damage to streets and other public and private infrastructure because proactive steps will have been taken to ensure that the infrastructure was built or modified based on accurate flood data.

Local floodplain managers will work with State agencies to ensure that all State projects are safe from flood damage and do not cause flood damage to other properties. All new development, including State highway construction, bridges, culverts, water treatment plants, sewage treatment plants, schools, hospitals and other infrastructure will be designed to manage the base flood.

An Interagency Council on Floodplain Management will meet quarterly to coordinate the efforts of State and federal agencies in topographic mapping, floodplain mapping, hydrologic data collection, floodplain regulation, Flood Awareness Week and other related issues.

NMFMA: Our Organization, History and Funding

The New Mexico Floodplain Managers Association (NMFMA) was started by a group of community zoning officials who had become acquainted through the New Mexico League of Zoning Officials (NMLZO). Many zoning officials were also assigned the duties of local floodplain managers for their communities. During the early 1990s, there was a lack of training opportunities for local floodplain managers. The National Flood Insurance Program (NFIP) State Coordinator initiated the development of floodplain management training and a State certification program. The State's first certification exam was given twice in 1994.

The NMFMA was formed in 1996 in recognition of a need for better floodplain management by New Mexico communities and out of a desire by its members to educate themselves, their agencies and the citizens of New Mexico about floods, flood hazards, floodplain management and flood damage reduction.

The NMFMA corporate certificate was filed in August 1995 and the NMFMA Constitution and Bylaws were fashioned after those of the NMLZO. The first officers of the NMFMA Board of Directors were volunteers. In 1996, the first Board of Directors was elected by the membership. In 1998 the Regional Directors, representing parts of the State, were added to the Board. The Board appointed its first Executive Director of the NMFMA in 1998.

In the spring of 1999, NMFMA was approved as a chapter member of the Association of State Floodplain Managers (ASFPM), the largest and most influential floodplain management organization in the country.

For the NMFMA to gain greater recognition throughout the State, several actions were taken. The first NMFMA newsletter was mailed in the summer of 1997. The newsletter, now called *High Waters*, is an invaluable tool through which to spread news about the most recent developments to our membership and to increase the awareness of the NMFMA to others interested in floodplain management. Printing and mailing of our quarterly newsletter is supported by the Department of Public Safety (DPS) with funds provided by the Federal Emergency Management Agency (FEMA). In 1999, the NMFMA began a Website and in 2000, the official NMFMA logo was developed.

In September 2000, the NMFMA membership adopted 13 resolutions intended to improve floodplain management throughout New Mexico. Additional resolutions have been adopted since 2000. The NMFMA Board of Directors approved the concepts presented in this document that describe the resolutions in more detail. The NMFMA has moved beyond training and education of its members to educating and requesting action from State resources to accomplish the goals stated in the resolutions. A strategic plan outlining goals and priorities was created and approved by the membership in 2002.

Since 2000, New Mexico has been a leader in certification of its floodplain managers. As of September, 2003, New Mexico has 95 Certified Floodplain Managers (CFMs). Only four states - Illinois, Oklahoma, Texas and Virginia - have more. New Mexico is the first state to require CFMs to review floodplain development.

The 2001 Arid West Conference in Albuquerque brought a regional floodplain management conference to New Mexico. This exposed New Mexico floodplain managers to state and local floodplain managers from six Western states; speakers from numerous educational institutions; and policy makers from a number of federal agencies. Excellent ideas were exchanged and the motivation to move forward with our goals was solidified.

Since the first conference sponsored by the newly formed NMFMA in April of 1996, NMFMA has offered two conferences per year to provide a forum for the exchange of ideas, to further the profession of floodplain management in New Mexico and to improve current programming and delivery of services. CFMs can obtain continuing education credits for attendance at the technical sessions. In addition, there is a preparatory NFIP review course and CFM exam given at every conference.

In 2002 and again in 2003, the NMFMA received the Tom Lee Award for Excellence in State Programs from the ASFPM. These awards were in recognition of the accomplishments achieved by the NMFMA.

In its first eight years, membership in the NMFMA has grown to approximately 160. We now have membership from 17 counties, 44 cities-towns-villages

NMFMA: Our Organization, History and Funding (continued)

and one pueblo, for a total of 62 communities. We also have members from six flood-related local agencies, eight State and federal agencies and 26 private firms. The NMFMA has produced several publications for its members, including the *Handbook for New Mexico Floodplain Managers*, a major resource for community floodplain managers, to be printed this fall. A number of other publications are planned pending availability of funds.

Funding for NMFMA activities has come primarily from members' dues, profits from conferences, profits from workshops and contributions from its members. NMFMA's work is achieved through volunteer member time and grants for individual projects, such as the *Handbook* described above. Our individual dues are \$35 per year; our conference registration fees have been \$70 (for members) for a two-day conference.

NMFMA expenditures have helped members attend national floodplain management conferences, have provided for executive office equipment and provided training materials for New Mexico floodplain managers. On occasion, NMFMA reimburses members for travel expenses when conducting NMFMA business.

Since 1997, DPS has reimbursed the cost of printing and mailing the newsletter (approximately \$2,500 per year). From time to time, DPS has reimbursed per diem expenses for community floodplain managers who attend NMFMA conferences. In Fiscal Year 2003, DPS provided a grant of \$10,000 to support NMFMA training and education activities. It appears that additional grant money, perhaps \$50,000, will be provided from year-end FEMA funds in Fiscal Year 2003.



NMFMA Conference policy committee meeting



NMFMA Conference training workshop

Appendix A: Status of Priorities from *A Call for Action* April 2002

The first edition of *A Call for Action* was published in 2002. It included the ten priorities listed below.

Priority #1: Require National Flood Insurance Program participation for communities with identified flood hazards. (Required by New Mexico statute as of 2003)

Priority #2: Require that new development be protected to the current regulatory standard. (Required by New Mexico statute as of 2003)

Priority #3: Require that new state buildings be protected to the current regulatory standard. (Required by New Mexico statute as of 2003)

Priority #4: Fund two more floodplain management positions. (Revised as Priority M-2)

Priority #5: Train Department of Public Safety staff to conduct Community Assistance Visits. (Revised as Priority R-1)

Priority #6: Conduct Community Assistance Visits. (Revised as Priority R-1)

Priority #7: Review Flood Insurance Rate Maps and set priorities for remapping. (Revised as Priority M-1)

Priority #8: Determine river gauge needs. (Revised as Priority M-1)

Priority #9: Develop floodplain management parameters for unmapped streams. (Revised as Priority M-1)

Priority #10: Re-examine communities with no identified flood hazards. (Revised as Priority M-1)



Ranch land stores flood waters and provides a slow release into the surface and ground water systems. (Chaves County, 1980s)

Appendix B: New Mexico Community Status

The following information is current as of September 1, 2003

COMMUNITY NAME	IDENTIFIED FLOOD HAZARDS	NFIP	CFM	CRS
Alamogordo, City of	Y	Y	2	Y
Albuquerque, City of	Y	Y	1	Y
Angel Fire, Village of*	N	N	0	N
Artesia, City of	Y	Y	1	N
<i>Aztec, City of</i>	Y	Y	0	N
<i>Bayard, City of</i>	Y	Y	0	N
<i>Belen, City of</i>	Y	Y	1	N
Bernalillo County	Y	Y	1	Y
<i>Bernalillo, Town of</i>	Y	Y	0	N
<i>Bloomfield, City of</i>	Y	Y	0	N
Bosque Farms, Village of	Y	Y	1	N
Capitan, Village of	Y	N	0	N
Carlsbad, City of	Y	Y	1	N
Carrizozo, Town of	Y	N	0	N
Catron County*	N	N	0	N
Causey, Village of*	N	N	0	N
<i>Chama, Village of</i>	Y	Y	0	N
Chaves County	Y	Y	1	N
Cibola County	Y	Y	1	N
Cimarron, Village of	Y	Y	1	N
<i>Clayton, Town of</i>	Y	Y	0	N
Cloudcroft, Village of*	N	N	0	N
Clovis, City of	Y	Y	1	Y
Colfax County	Y	Y	1	N
Columbus, Village of	Y	N	0	N
Corona, Village of*	N	N	0	N
Corrales, Village of	Y	Y	1	N
Cuba, Village of	Y	N	0	N
Curry County	Y	N	0	N
De Baca County*	N	N	0	N
Deming, City of**	N	Y	1	N
Des Moines, Village of*	N	N	0	N
Dexter, Town of	Y	N	0	N
Dona Ana County	Y	Y	4	Y
Dora, Village of*	N	N	0	N
Eagle Nest, Village of	Y	N	0	N
Eddy County	Y	N	0	N
Edgewood, Town of*	N	N	0	N
Elephant Butte, City of*	N	N	0	N
Elida, Town of*	N	N	0	N
Encino, Village of*	N	N	0	N
Espanola, City of	Y	Y	1	N
<i>Estancia, Town of</i>	Y	Y	0	N
<i>Eunice, City of</i>	Y	Y	0	N
Farmington, City of	Y	Y	1	Y
Floyd, Village of*	N	N	0	N

Appendix B: continued

COMMUNITY NAME	IDENTIFIED FLOOD HAZARDS	NFIP	CFM	CRS
Folsom, Village of*	N	N	0	N
<i>Ft. Sumner, Village of</i>	Y	Y	0	N
<i>Gallup, City of</i>	Y	Y	0	N
Grady, Village of*	N	N	0	N
Grant County	Y	Y	1	N
Grants, City of	Y	Y	1	N
Grenville, Village of*	N	N	0	N
Guadalupe County*	N	N	0	N
Hagerman, Town of*	N	N	0	N
Harding County*	N	N	0	N
Hatch, Village of	Y	Y	▲	N
Hidalgo County*	N	N	0	N
Hobbs, City of	Y	Y	2	Y
Hope, Village of*	N	N	0	N
House, Village of*	N	N	0	N
Hurley, Town of*	N	N	0	N
Jal, City of	Y	Y	1	N
<i>Jemez Springs, Village of</i>	Y	Y	0	N
Lake Arthur, Town of*	N	N	0	N
Las Cruces, City of	Y	Y	1	Y
Las Vegas, City of	Y	Y	1	N
Lea County*	N	N	0	N
Lincoln County	Y	N	0	N
Logan, Village of**	N	Y	0	N
<i>Lordsburg, City of</i>	Y	Y	0	N
Los Alamos, City/County	Y	Y	1	N
Los Lunas, Village of	Y	Y	2	N
Los Ranchos de Albuquerque, Village of	Y	Y	2	N
Loving, Village of	Y	N	0	N
Lovington, City of	Y	Y	1	N
Luna County	Y	Y	1	N
Magdalena, Village of	Y	N	0	N
Maxwell, Village of	Y	N	0	N
McKinley County	Y	N	0	N
Melrose, Village of*	N	N	0	N
Mesilla, Town of	Y	Y	▲	N
Milan, Village of	Y	Y	1	N
Mora County	Y	Y	1	N
<i>Moriarty, City of</i>	Y	Y	0	N
Mosquero, Village of*	N	N	0	N
Mountainair, Town of*	N	N	0	N
Otero County	Y	Y	4	N
Pecos, Village of*	N	N	0	N
Portales, City of	Y	Y	1	Y
Quay County*	N	N	0	N
Questa, Village of	Y	N	0	N
Raton, City of	Y	Y	1	N
<i>Red River, Town of</i>	Y	Y	0	N
Reserve, Village of	Y	N	1	N

Appendix B: continued

COMMUNITY NAME	IDENTIFIED FLOOD HAZARDS	NFIP	CFM	CRS
Rio Arriba County	Y	Y	2	N
Rio Rancho, City of	Y	Y	4	N
Roosevelt County*	N	N	0	N
Roswell, City of	Y	Y	1	Y
Roy, Village of	Y	N	0	N
Ruidoso, Village of	Y	Y	1	N
Ruidoso Downs, City of	Y	Y	1	N
San Jon, Village of	Y	Y	1	N
San Juan County	Y	N	1	N
<i>San Miguel County</i>	Y	Y	0	N
San Ysidro, Village of*	N	N	0	N
<i>Sandoval County</i>	Y	Y	0	N
Santa Clara, Village of	Y	N	0	N
Santa Fe, City of	Y	Y	3	N
Santa Fe County	Y	N	1	N
Santa Rosa, City of	Y	N	0	N
Sierra County	Y	Y	1	N
Silver City, Town of	Y	Y	1	N
Socorro, City of	Y	Y	1	N
Socorro County*	N	N	0	N
<i>Springer, Town of</i>	Y	Y	0	N
Sunland Park, City of	Y	N	0	N
<i>Taos County</i>	Y	Y	0	N
Taos, Town of	Y	Y	1	N
Taos Ski Valley, Village of*	N	N	0	N
<i>Tatum, Town of</i>	Y	Y	0	N
Texico, City of*	N	N	0	N
Tijeras, Village of	Y	Y	1	N
<i>Torrance County</i>	Y	Y	0	N
Truth or Consequences, City of	Y	Y	1	N
Tucumcari, City of	Y	Y	1	N
Tularosa, Village of*	N	N	0	N
Union County*	N	N	0	N
Valencia County	Y	Y	2	N
Vaughn, Town of*	N	N	0	N
Virden, Village of*	N	N	0	N
Wagon Mound, Village of*	N	N	0	N
Willard, Village of*	N	N	0	N
<i>Williamsburg, Village of</i>	Y	Y	0	N
<i>Zuni, Pueblo of</i>	Y	Y	0	N

Notes:

bold = non compliant (community with identified flood hazard not participating in the NFIP: Priority R-1)

italic = non compliant (community participates in NFIP but does not have a Certified Floodplain Manager: Priority R-1)

* = community has no flood hazard identified and do not participate in the NFIP (FEMA Action to map hazards: Priority M-1)

** = community has no flood hazard identified and do participate in the NFIP (FEMA Action to map hazards: Priority M-1)

▲ = floodplain management administered by Dona Ana County Flood Commission

Appendix C: New Mexico Statute 1978 as Amended

The floodplain management enabling Statute in NMSA 1978 as amended in April 2003 by legislation sponsored by NMFMA:
3-18-7 ADDITIONAL COUNTY AND MUNICIPAL POWERS—FLOOD AND MUDSLIDE HAZARD AREAS—
FLOOD PLAIN PERMITS—LAND USE CONTROL—JURISDICTION—AGREEMENT.—

- A. For the purpose of minimizing or eliminating damage from floods or mudslides in federal emergency management agency and locally designated flood-prone areas and for the purpose of promoting health, safety and the general welfare, a county or municipality with identified flood or mudslide hazard areas shall by ordinance:
- (1) designate and regulate flood plain areas having special flood or mudslide hazards;
 - (2) prescribe standards for constructing, altering, installing or repairing buildings and other improvements under a permit system within a designated flood or mudslide hazard area;
 - (3) require review by the local flood plain manager for development within a designated flood or mudslide hazard area provided final decisions are approved by the local governing body;
 - (4) review subdivision proposals and other new developments within a designated flood or mudslide hazard area to ensure that:
 - (a) all such proposals are consistent with the need to minimize flood damage;
 - (b) all public utilities and facilities such as sewer, gas, electrical and water systems are designed to minimize or eliminate flood damage; and
 - (c) adequate drainage is provided so as to reduce exposure to flood hazards;
 - (5) require new or replacement water supply systems or sanitary sewage systems within a designated flood or mudslide hazard area to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters and require on-site waste disposal systems to be located so as to avoid impairment of them or contamination from them during flooding; and
 - (6) designate and regulate floodways for the passage of flood waters.
- B. A flood plain ordinance adopted pursuant to this section shall substantially conform to the minimum standards prescribed by the federal insurance administration, regulation 1910 issued pursuant to Subsection 7(d), 79 Stat. 670, Section 1361, 82 Stat. 587 and 82 Stat. 575, all as amended.
- C. A county or municipality that enacts a flood plain ordinance shall designate a person, certified pursuant to the state-certified flood plain manager program, as the flood plain manager to administer the flood plain ordinance.
- D. A county or municipality that has areas designated by the federal emergency management agency and the county or municipality as flood-prone shall participate in the national flood insurance program.
- E. A county or municipality shall have exclusive jurisdiction over flood plain permits issued under its respective flood plain ordinance in accordance with this section and so long as all structures built in flood plains are subject to inspection and approval pursuant to the Construction Industries Licensing Act. Notwithstanding Section 3-18-6 NMSA 1978, when a municipality adopts a flood plain ordinance pursuant to Paragraph (2) of Subsection A of this section, the municipality's jurisdiction under the flood plain ordinance may take precedence over a respective county flood plain ordinance within the municipality's boundary and within the municipality's subdividing and platting jurisdiction.
- F. A county or municipality shall designate flood plain areas having special flood or mudslide hazards in substantial conformity with areas identified as flood- or mudslide-prone by the federal insurance administration pursuant to the national flood insurance program and may designate areas as flood- or mudslide-prone that may not be so identified by the federal insurance administration.
- G. A municipality or county adopting a flood plain ordinance pursuant to this section may enter into reciprocal agreements with any agency of the state, other political subdivisions or the federal government in order to effectively carry out the provisions of this section.
- H. The department of public safety is designated as the state coordinating agency for the national flood insurance program and may assist counties or municipalities when requested by a county or municipality to provide technical advice and assistance.

13-5-3 PUBLIC BUILDINGS—COMPLIANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM.—

A building that receives state appropriations for its construction or that is repaired or improved with state appropriations in an amount greater than fifty percent of the building's value before the repair or improvement shall comply with standards of the national flood insurance program and Section 3-18-7 NMSA 1978.

Appendix D: Glossary of Terms

The following terms have been used throughout the document and are included here for convenient reference:

- **Association of State Floodplain Managers (ASFPM):** The largest and most influential floodplain management organization in the country. ASFPM has over 4,000 members nationwide, including the members of its 12 state chapters.
- **Base flood:** The flood which has a 1% chance of being equalled or exceeded each year. This is also known as the *100 year flood* or *1% chance flood event*.
- **Community Assistance Visit (CAV):** Periodically, the Federal Emergency Management Agency conducts CAVs for the National Flood Insurance Program (NFIP) communities. The purpose of these visits is to ensure that the community is complying with State and NFIP floodplain management standards.
- **Community Rating System (CRS):** A voluntary program within the NFIP that rates a community's floodplain management program according to the Community Rating System Schedule. Class 1 is the highest rating and Class 10 is the lowest. Class rating designates a specific discount on insurance premiums for residents in that community.
- **Construction Industries Division (CID):** In New Mexico, the Construction Industries Division of the Regulation and Licensing Department has responsibility for the issuance of building permits.
- **Department of Public Safety (DPS):** New Mexico's cabinet-level department with responsibility for Emergency Management, State Police and the New Mexico Law Enforcement Academy.
- **Federal Emergency Management Agency (FEMA):** Most of the NFIP field work and community coordination are done by the 10 FEMA Regional Offices. New Mexico is within FEMA Region VI, which is headquartered in Denton, Texas.
- **Flood Insurance Rate Maps (FIRMs):** An official map of a community on which FEMA has delineated both the Special Flood Hazard Areas and the risk premium zones applicable to the community.
- **Floodplain:** Any land area susceptible to being inundated by flood waters from any source. A Flood Insurance Rate Map identifies most, but not necessarily all, of a community's floodplain as the Special Flood Hazard Area.
- **Floodway:** The channel of a river and the portion of the overbank floodplain that carries most of the base flood. The floodway must be kept open so that floods can proceed downstream and not be obstructed or diverted onto other properties. The NFIP regulations allow construction in the floodway provided that it does not obstruct flood flows or increase flood heights.
- **Manufactured Home Division (MHD):** In New Mexico, the Manufactured Home Division of the Regulation and Licensing Department has responsibility for the placement of manufactured and mobile homes.
- **National Flood Insurance Program (NFIP):** The National Flood Insurance Program was established by the National Flood Act of 1968 as amended. It provides flood insurance for buildings and building contents in communities that agree to manage development in floodplains.
- **New Mexico Floodplain Managers Association (NMFMA):** NMFMA is a nonprofit organization formed in 1996 in recognition of a need for better floodplain management by New Mexico communities. NMFMA is a Chapter of the ASFPM and is recognized by the ASFPM as the official Certified Floodplain Manager Program in New Mexico.

NMFMA Mission

The New Mexico Floodplain Managers Association is a non-profit professional organization working to improve floodplain management and reduce the costs of floods to New Mexico residents, local government and State government.

Acknowledgements

The NMFMA would like to thank those members that contributed to the creation of this document. Appreciation is extended to the local governments, State government, private businesses and institutional entities that have contributed to the development of NMFMA through supporting employee involvement. It is this broad based support from across the State that demonstrates recognition of flood potential and the necessity of floodplain mitigation measures.

The NMFMA is particularly appreciative of financial support by the New Mexico Department of Public Safety and the Federal Emergency Management Agency. This support has enabled us to provide training and education that we would not have been able to provide without this support.

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Les Bond, CFM, Leslie A. Bond Associates

Grant Pinkerton, CFM, Chaves County

More information about the NMFMA and floodplain management in New Mexico is available on the NMFMA Website (<http://www.nmfma.org>)

Contact NMFMA:



New Mexico Floodplain Managers Association

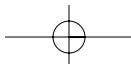
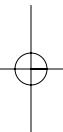
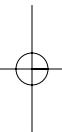
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