APPENDIX D: DISASTER RELIEF AND OTHER STATUTORY PROGRAMS

This Appendix describes some of the statutory programs that either mandate or encourage hazard mitigation planning. Many of these programs make funds available for a wide variety of activities, including mitigation. Even when not required by law, plans can ensure that grant funds are used in the most effective manner possible by predetermining that every possibility for mitigation will be pursued at the appropriate time. This is particularly important during the critical period immediately following a disaster when opportunities for mitigation arise which must be capitalized upon as quickly as possible. This is essential in situations where the community wishes to rebuild or replace structures that have been damaged or destroyed by a natural hazard to comply with construction standards that are more stringent than those that were in place at the time of the disaster. A plan which is already in place and which addresses improving the disaster area can provide a meaningful framework for making sound mitigation decisions the moment funds become available.

SECTION 409 OF THE FEDERAL STAFFORD DISASTER RELIEF AND EMERGENCY ASSISTANCE ACT

Section 409 of the Federal Stafford Disaster Relief and Emergency Assistance Act conditions receipt of federal disaster assistance funds on creation of a plan which specifically addresses hazard mitigation.

> As a further condition of any loan or grant made under the provisions of this Act, the State or local government shall agree that the natural hazards in the areas in which the proceeds of the grants and loans are used shall be evaluated and appropriate action shall be taken to mitigate such hazards…

The regulations implementing Section 409 make it clear that state and local governments are to prepare and implement hazard mitigation plans as the method for "evaluating the natural hazards" and for "identifying appropriate actions" to reduce the risk from these hazards. (Note that although mitigation planning is a requirement for federal disaster assistance, to date FEMA has not withheld disaster assistance from any state that has not prepared a plan. However, FEMA does withhold grant funds that are issued under the Hazard Mitigation Grant Program (HMGP) of Section 404 of the Stafford Act.)

HAZARD MITIGATION GRANT PROGRAM (HMGP)

Section 404 of the Stafford Act establishes the Hazard Mitigation Grant Program (HMGP), administered by FEMA's Mitigation Directorate. HMGP provides 75% federal/25% state or local cost sharing funding for mitigation measures through the post-disaster planning process. The state (or local) share may be met with cash or in-kind services. HMGP funds (like all federal disaster aid) is supplemental only; the regulations of Subpart N prohibit Section 404 funds from being used as a substitute or replacement to fund projects or programs that are available under other Federal programs except in dire circumstances such as extraordinary threats to lives, public health or safety, or improved property (44 C.F.F. 206.43(d)). HMGP funds are often used in combination with other federal state, local, or private funding sources when appropriate to develop a comprehensive mitigation solution. However, HMGP funds cannot be used by a local or state government as a direct match for another federal project and other federal funds cannot be used as a match for HMGP funds (44 C.F.R. Subpart N § 206.43(e).[*] The total amount of HMGP funds available for each disaster is equivalent to 15% of the federal funds spent on Public Assistance and Individual Assistance programs, minus administrative expenses.

HMGP funds are available to state and local governments, Indian tribes, and private non-profits following a Presidential disaster declaration. Eligible applicants apply for the program through the State, as the state administers the program. Application forms and information on deadlines can be obtained by contacting the State Hazard Mitigation Officer. Applications should be submitted to the state as soon as possible after the disaster occurs so that opportunities to do mitigation are not lost during reconstruction. (Ideally, these mitigation opportunities should be identified before a hazard event occurs as part of a sound mitigation planning process – see discussion below). Each state has a hazard-mitigation administrative plan that explains procedures for administering the HMGP. Pre-disaster planning allows for development of a rational proactive plan to spread the costs over a period of years and should result in an expeditious and well-conceived post-disaster mitigation project. Immediately after a disaster, the following steps must occur:

1. The Federal Emergency Management Agency and the state hold a briefing for community officials to explain Public Assistance and the Hazard Mitigation Grant Program.

2. The State notifies local emergency coordinators and floodplain managers of each community that the community needs to submit a letter of interest in the HMGP to the State Hazard Mitigation Officer.

3. The community notifies the State of their intent to participate in the HMGP within 60 days after the disaster declaration.

4. Community officials form or activate their floodplain planning committee to determine extent of damage; types of feasible projects; land re-use

[*] An exception to this is that Community Development Block Grant (CDBG) and Small Business Administration (SBA) funds can be used as match for HMGP projects because those funds are considered to lose their federal identity once they are passed on to the State for distribution to communities.

options; availability of replacement housing; relocation assistance needs; funding sources; and technical assistance needed from FEMA and other Federal agencies, the state, local universities and others.

5. State meets with community officials and the planning committee to explain details of the HMGP and, where appropriate, the acquisition/relocation/elevation process.

6. Community officials identify funding sources and submit HMGP application to the State Hazard Mitigation Officer.

7. If funds are received, the community prepares a local administrative plan and proceeds with projects.

Regulations at 44 C.F.R. Part 206, Subpart N make the state (with local input) responsible for identifying and selecting hazard mitigation projects. Communities are encouraged to begin identification of potential HMGP projects before a disaster as part of a sound mitigation planning process. If this has not been done, communities working with the State should identify opportunities as soon as possible after an event in order to expedite the recovery process. Projects are to be identified through the hazard mitigation planning process and must be consistent with the State's 409 Plan. Projects may also be identified by other mitigation plans or by recommendations of the Hazard Mitigation Survey Teams that are activated by FEMA immediately following a declaration to conduct hazard mitigation surveys. Local participation in identification of potential mitigation proposals can be through a regional Council of Governments, a local government, a local floodplain coordinator, or local emergency management office. Note, too, that the reports produced by the Hazard Mitigation Survey Team can also provide substantial guidance for other local mitigation activities, not just those to be carried out through the HMGP process.

Types of projects for which HMGP funds can be used include, but are not limited to:

- Construction activities that will result in protection from hazards;
- Retrofitting of facilities;
- Acquisition or relocation;
- Development of state or local mitigation standards;
- Development of comprehensive hazard mitigation programs with implementation as an essential component; and,
- Structural hazard control or protection projects.

NOTE: The purchase of equipment to improve preparedness and response capability is not an eligible activity.

The minimum criteria for project eligibility are specified in 44 C.F.R. Subpart N §206.434. To be eligible for the HMGP a project must:

- Be in conformance with the State Section 409 Hazard Mitigation Plan;
- Have beneficial impact upon the designated disaster area, whether or not located in the designated area;
- Be in conformance with applicable floodplain management and wetlands protection and environmental regulations (44 C.F.R. Part 9. Floodplain Management and Protection of Wetlands, and 44 C.F.R. Part 10, Environmental Considerations);
- Solve a problem independently or constitute a functional portion of a solution where there is assurance that the project as a whole will be completed;
- Be cost effective; and,
- Substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major disaster.

The community demonstrates cost effectiveness and reduction of future losses by documenting that the project:

- Addresses a problem that has been repetitive or a problem that poses a significant risk to public health and safety if left unresolved;
- Will not cost more than the anticipated value of the reduction in both direct damages and subsequent negative impacts to the area if future disasters were to occur;
- Has been determined to be the most practical, effective and environmentally sound alternative after consideration of a range of options;
- Contributes, to the extent practicable, to a long-term solution to the problem it is intended to address; and,
- Considers long-term changes to the areas and entities it protects and has manageable future maintenance and modification requirements.

COMMUNITY RATING SYSTEM (CRS)

Communities that regulate new development in their floodplains may join the National Flood Insurance Program (NFIP). In return, the NFIP provides federally backed flood insurance for existing and new properties in participating communities.

The National Flood Insurance Program's (NFIP) Community Rating System (CRS) was implemented in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP standards. The National Flood Insurance Reform Act of 1994 codified the Community Rating System in the NFIP. Under the CRS, flood insurance premium rates are adjusted to reflect the reduced flood risk resulting from community activities that meet the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and, (3) promote the awareness of flood insurance.

There are ten CRS classes: class 1 requires the most credit points and gives the largest premium reduction; class 10 receives no premium reduction. The CRS recognizes 18 creditable activities, organized under four categories numbered 300 through 600:

- *Public Information (Series 300):* This series credits programs that advise people about the flood hazard, flood insurance, and ways to reduce flood damage. These activities also provide data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community and work toward all three goals of the CRS.

- *Mapping and Regulations (Series 400):* This series credits programs that provide increased protection to new development. These activities include mapping areas not shown on the FIRM, preserving open space, enforcing higher regulatory standards, and managing stormwater. The credit is increased for growing communities. These activities work toward the first and second goals of the CRS, damage reduction and accurate insurance rating.

- *Flood Damage Reduction (Series 500):* This series credits programs for areas in which existing development is at risk. Credit is provided for a comprehensive floodplain management plan, relocating or retrofitting floodprone structures, and maintaining drainage systems. These activities work toward the first goal of the CRS, damage reduction.

- *Flood Preparedness (Series 600):* This series credits flood warning, levee safety, and dam safety programs. These activities work toward the first and third goals of the CRS, damage reduction and hazard awareness.

Credit points earned, classification awarded, and premium reductions given for communities in the National Flood Insurance Program Community Rating System.

Credit Points	Class	Premium Reduction SFHA*	Premium Reduction Non-SFHA**
4,500+	1	45%	5%
4,000 - 4,499	2	40%	5%
3,500 – 3,999	3	35%	5%
3,000 – 3,499	4	30%	5%
2,500 – 2,999	5	25%	5%
2,000 – 2,499	6	20%	5%
1,500 – 1,999	7	15%	5%
1,000 – 1,499	8	10%	5%
500 – 999	9	5%	5%
0 – 499	10	0	0

***Special Flood Hazard Area**

****Preferred Risk Policies are available only in B, C, and X Zones for properties that are shown to have a minimal risk of flood damage. The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies. Although they are in SFHAs, Zones AR and A99 are limited to a 5% discount. Premium reductions are subject to change.**

There are now nearly 900 communities receiving flood insurance premium discounts based on their implementation of local mitigation, outreach, and educational activities that go well beyond minimum NFIP requirements. While premium discounts are one of the benefits of participation in CRS, it is more important that these communities are carrying out activities that save lives and reduce property damage. These nearly 900 communities represent a significant portion of the Nation's flood risk as evidenced by the fact that over 66% of the NFIP's policy base is located in these communities. Communities receiving premium discounts through the CRS cover a full range of sizes from small to large and a broad mixture of flood risks including coastal and riverine.

The CRS application process has been greatly simplified over the past several years based on community comments to make the CRS more user friendly. Extensive technical assistance is also available for communities who request it.

Community application for the CRS is voluntary. Any community that is in full compliance with the rules and regulations of the NFIP may apply for a CRS classification better than class 10. The applicant community submits documentation that it is doing activities recognized in the CRS. A community applies by sending completed application worksheets with appropriate documentation to its FEMA Regional Office.

A community's CRS classification is assigned on the basis of a field verification of the activities described in its application. These verifications are conducted by the Insurance Services Office, Inc. (ISO), an organization that provides rating, actuarial, and forms writing services to the insurance industry. ISO is the entity that has been conducting community grading for fire insurance for many years and is now performing the grading

of communities under the newly implemented Building Code Effectiveness Grading Schedule. This organization's resources provide an efficient means to carry out the fieldwork involved with the CRS.

It is important to note that reduced flood insurance rates are only one of the rewards a community receives from participating in the CRS. There are several other benefits.

The CRS encourages state, local, and private programs and projects that preserve or restore the natural state of floodplains and protect these functions. The CRS also encourages communities to coordinate their flood loss reduction programs with Habitat Conservation Plans and other public and private activities that preserve and protect natural and beneficial floodplain functions.

In addition to regular credit points, activities under the CRS receive additional points if they are initiated in accordance with a local comprehensive floodplain management plan.

FEMA recognizes that there is no one ideal floodplain management plan; each plan must be created to address local issues. The objective of the CRS incentive therefore, is to ensure that a planning process was followed that enables selection of the best measures for a particular community to combat its unique flood hazard situation. FEMA considers the following six steps essential to a sound planning process under the Community Rating System. (For more details see the CRS Coordinator's Manual.)

- *Problem Identification:* In this step community planners collect or calculate flood hazard data to define the flood problem. Such data include source of water, depth of flooding, velocities, historical flood damages, repetitive loss areas, and special hazards.

- *Flood Hazard Area Inventory*: Community planners collect data on the number of types and elevations of buildings; development trends; development constraints such as bad soils, ownership, and federal and state regulations; critical facilities such as hospitals, fire stations, and chemical storage companies; and, community goals and plans for the area.

- *Review of Possible Activities*: In this step community planners review the various public information, mapping, regulatory, damage reduction, and flood preparedness activities that can prevent or reduce flood losses.

- *Selection of Appropriate Activities:* Activities appropriate to the community's resources. Flood hazard and vulnerable properties are selected and spelled out in a floodplain management plan that clearly identifies who does what and when. A schedule must be included for each subsequent year. A budget for those activities, which are not financed from normal operating funds, must be included.

- *Public Input:* One or more public meetings must be held during the planning process.

- *Implementation:* The plan must be officially adopted by the community's governing body and needed funds must be budgeted.

CRS credit is not based on preparing a plan per se, but on implementing it. Continued credit for the floodplain management plan is dependent on the annual progress report that shows how implementation is progressing. The annual report should include the following elements:

- A review of the original plan;
- A review of any floods that occurred during the year;
- A review of each element or objective of the original plan including how much was accomplished during the previous year;
- A discussion of why any objectives were not reached or why implementation is behind schedule; and,
- If appropriate, new projects or revised objectives.

Communities with repetitive loss properties must prepare a Repetitive Loss Plan in order to stay eligible for CRS credit. The Repetitive Loss Plan must meet the same minimum criteria as the floodplain management plan of Section 240. The creation of the Repetitive Loss Plan provides bonuses to the credit points for eligible activities.

If a community adopts and implements a floodplain management plan, the credits for the elements implemented in accordance with the plan are increased by ten percent. Communities are reminded that all activities in the community's floodplain plan should meet the community's overall goals and objectives. Communities should not be deterred from including them in their plans merely because the CRS does not give them points. A community's first priority should be to develop a plan that meets its needs, not one assigned solely on the basis of CRS credit.

FLOOD MITIGATION ASSISTANCE PROGRAM (FMAP)

The Flood Mitigation Assistance Program (FMAP) is authorized by the National Flood Insurance Reform Act of 1994 (Title V of the Community Development and Regulatory Improvement Act) Sections 553 and 554. The statute is implemented by regulations found at 44 C.F.R. Part 78. FMAP expands FEMA's mitigation to states, communities, and individuals by providing grants for cost-effective measures to reduce or eliminate the long-term risk of flood damage to the built environment and real property with its priority goal to reduce repetitive losses to the National Flood Insurance Program (NFIP).

Unlike the HMGP, which is available only after a Presidentially declared disaster, FMAP is available to eligible communities every year. To be eligible for FMAP grants, a community must be a participant in the NFIP and must have jurisdiction over a particular area having special flood hazards (44 C.F.R. 78.3(a)). The FMA Program provides grants for planning assistance to states and communities in determining flood risks and in identifying actions to reduce that risk; provides a process for approving flood mitigation plans; and, provides grants to implement measures to reduce flood losses (44 C.F.R. 78.1). Creation and approval of a flood risk mitigation plan is a prerequisite to receiving flood mitigation assistance project grants.

Regulations specify what entails development of a flood mitigation plan for the purposes of the FMA Program. Section 78.8(a) describes the plan content stating, "a Flood Mitigation Plan shall articulate a comprehensive strategy for mitigation activities for the area affected by the plan." At a minimum, the plan must include the following elements:

- Description of the existing flood risk;
- Identification of repetitive loss properties;
- Identification of alternative feasible solutions
- Evaluation of each alternative type of solution;
- Presentation of an overall strategy for reducing flood risks;
- Strategies for continued compliance with the NFIP;
- Summary of the public involvement process; and,
- Documentation of plan approval by the legal entity submitting the plan. (44 C.F.R. 78.8(a)(1-8)).

The regulations do not mandate that FMAP plans be limited to flood hazards (although funds will only be provided for the flood portion of any mitigation plan (44 C.F.R. 78.7(b)(2)). The FMAP plan is not meant to create an additional planning requirement for states and localities. Communities are encouraged to create multi-hazard plans and to coordinate with existing plans. The regulations indicate that approved Community Ratings System (CRS) plans will meet FMAP requirements and that local plans satisfy Section 409 Hazard Mitigation Plan requirements. Plans that include all of the elements described in 44 C.F.R. 78.8(a) (listed in the preceding paragraph) can be approved as Flood Mitigation Plans.

The regulations require that the Flood Mitigation Plan be formally adopted by the community following a public involvement process which allows federal, state, and local

officials and private citizens the opportunity to participate in the development of the plan through workshops, public meetings or forums, or public hearings (44 C.F.R. 78.8(c)).

Once a community has a flood mitigation plan approved by the Regional Director it is eligible for flood mitigation assistance grants. Examples of types of projects that would be eligible for funding through the FMAP are listed at 44 C.F.R. 78.12 and include:

- Elevation and/or dry floodproofing of pre-FIRM structures;
- Acquisition of real property and property rights including insured structures;
- Relocation or demolition of insured structures;
- Minor structural projects including flood retention ponds, flood proofing sewers, and modifying culverts that are not fundable by State or other Federal programs;
- Beach nourishment activities; and,
- Technical Assistance.

PUBLIC ASSISTANCE PROGRAM (PA)

Section 406 of the Stafford Act authorizes the Public Assistance (PA) Program, administered by FEMA under regulations at 44 C.F.R. Part 206. This post-disaster program provides aid to help communities save lives and property in the immediate aftermath of a disaster and help a community rebuild damaged facilities. Grants cover eligible costs associated with the repair, replacement and restoration of facilities owned by state or local governments and non-profit organizations.

Four categories of assistance are available after a major disaster declaration.

- *Debris Removal* provides 75% of funds to state or local governments or private non-profit organizations to eliminate threats to life, public health, or property. Debris may be removed from private property when in the public interest.

- *Emergency Work* or protective measures to eliminate threats to life, public safety, or property. Includes ensuring emergency access, removal of public health and safety hazards, demolition of structures, establishment of emergency communication links, and emergency public transportation.

- *Repair, Restoration, Relocation, or Replacement* of damaged facilities to return public and non-profit facilities to their pre-disaster condition. Grantees must comply with certain insurance purchase requirements.

- *Community Disaster Loans* to units of local government that lose a substantial part of their tax base because of a disaster.

Section 409 of the Stafford Act refers to minimum standards for all repairs and reconstruction done under the PA program. The “standards” referred to are codes, specifications, and standards that are in use and are locally enforced at the time of the major disaster. Under the PA program, the costs of bringing a facility up to current codes, specifications, and standards is an eligible cost.

Minimum standards may include hazard mitigation standards and can be in place at the time of the disaster or can be adopted prior to approval of a particular reconstruction project. Thus, improved minimum standards that are adopted by a state or local government prior to FEMA’s approval of the repair or replacement of a damaged facility become eligible for Federal funding under the PA program.

Th public assistance program also authorizes funding for appropriate cost-effective hazard mitigation measures related to damaged public facilities. The Regional Director may authorize hazard mitigation measures that are not required by codes, specifications, and standards if the measures are in the public interest thus fulfilling the following criteria:

- The mitigation measures must substantially alleviate or eliminate recurrence of the damage done to the facility by the disaster;

- The measures are feasible from the standpoint of sound engineering and construction practices;
- The measures are cost-effective in terms of the life of the structure, anticipated future damages, and other mitigation alternatives; and,
- Floodplain management and applicable environmental regulations are met.

Hazard mitigation funding for damaged public facilities and minimum standards are covered under PA regulations at 44 C.F.R. 206 Subpart H.

Communities can use the Section 409 hazard mitigation planning process to identify potential mitigation measures for funding under the Public Assistance Program. The Hazard Mitigation Survey Team or Interagency Mitigation Team can be particularly useful in this regard. In addition, the Damage Survey Reports used by inspectors to make site-specific recommendations or repairs following a disaster can also serve to identify mitigation opportunities.

SMALL BUSINESS ADMINISTRATION (SBA) DISASTER ASSISTANCE PROGRAM

The United States Small Business Administration (SBA) administers the Disaster Assistance Program under Section 7(a)(a) of the Small Business Act (P.L. 85-536, 15 U.S.C 636(b) et.seq) with regulations at 13 C.F.R. 123.25. The SBA issues physical disaster loans to businesses affected by declared physical-type disasters for uninsured losses. The assistance is in the form of direct loans to businesses to repair or replace uninsured disaster damages to property owned by the business including real estate, machinery, equipment, inventory, and supplies. Businesses of any size are eligible. Also eligible are non-profit organizations such as charities, private universities, etc. Loan amounts are limited by law to $1,500.00. The actual amount of each loan is limited to the verified disaster loss minus any insurance or other recovery assistance. Refinancing of existing mortgages or liens on real estate and machinery and equipment repair/replacement are eligible in some cases up to the amount of the loan for real estate and machinery and equipment repair/replacement. The $1,500.00 statutory limit for business loans applies to the confirmation of physical and economic injury and to all disaster loans to a business and its affiliates arising from any one disaster. If a business is a major source of employment the SBA has authority to waive the $1,500.00 statutory limit. Loan amounts may be increased by up to 20% for devices that mitigate against damage to real property caused by the same type of disaster.

The SBA also provides loans to the victims of declared physical-type disasters for uninsured losses. Loans to homeowners or renters are made to repair or replace uninsured disaster damages to real estate or personal property owned by the victim. Renters are eligible for their uninsured personal property losses. Loan amounts are limited by regulations to $200,000 to repair/replace real estate and $40,000 to repair/replace personal property. Refinancing of existing mortgages on homes is eligible in some cases up to the amount of the loan for real estate repair/replacement. Loan amounts may be increased by up to 20% for devices that mitigate against damage to real property caused by the same type of disaster.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

The Community Development Block Grant Program (CDBG) is administered by the Department of Housing and Urban Development (HUD), Community Planning and Development (CPD). The objective of the CDBG is to develop viable urban communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for low-to-moderate income individuals. Formula grants to entitlement communities (metropolitan cities and urban counties) are provided. (A State's program of the CDBG provides formula grants to states for non-entitlement communities.)

Upon Presidential declaration of a Major Disaster or Emergency under the Stafford Act, disaster-related assistance is one of numerous areas in which community development type activities may be eligible under the CDBG program. The most appropriate disaster-related use of funds is for long-term needs, such as acquisition, rehabilitation, or reconstruction, or reconstruction of damaged properties and facilities and redevelopment of disaster-affected areas. Funds may also be used for emergency response activities, such as debris clearance and demolition, and extraordinary increases in the level of necessary public services.

Because conditions may change from the time a community develops its plans for how it expects to use its CDBG funds to the time the funds actually get used, program rules authorize amending the planned use to delete activities and substitute others. This means that, when a disaster occurs, a community may elect to amend its planned use of funds instead for those disaster response and recovery activities that do not duplicate activities reimbursable by FEMA or available through the Small Business Administration disaster loan programs or may reprogram other unexpended CDBG funds for those purposes.

Citizen participation procedures must be followed for CDBG activities; waivers for this requirement are discouraged, although the process may be accelerated. At least 70 percent of funded activities must benefit low and moderate-income persons.

NATIONAL EARTHQUAKE HAZARDS REDUCTION PROGRAM (NEHRP)

The National Earthquake Hazards Reduction Program (NEHRP) is authorized by the Earthquake Hazards Reduction Act, P.L. 95-124, as amended in 1990 by NEHRP Reauthorization Act, P.L. 101-614, 42 U.S.C. 7701 et seq., with regulations at 44 C.F.R. Part 361. The NEHRP involves four agencies at the Federal level: FEMA, the U.S. Geological Survey (USGS), the National Science Foundation (NSF), and the National Institute of Standards and Technology (NIST).

The fundamental goal of the NEHRP is to reduce the impacts of earthquakes and subsequent loss of lives, property damage, and economic loss. To this end, the NEHRP provides financial and technical assistance to all levels of government and to the private sector to implement earthquake hazard mitigation measures. The NEHRP has fostered the development and implementation of seismic design and construction standards and techniques, technical assistance materials, education and risk reduction programs, consortia and centers, and information dissemination.

While FEMA acts as the lead agency, and is responsible for planning, coordinating, directing and stimulating actions to reduce earthquake hazards, the program combines research, planning, and response activities conducted within each of the four agencies. Eligible states submit work plans annually. A percentage of the total state-federal funding must be used for mitigation activities.

The USGS provides the NEHRP with earth science data and assessments for warnings, land-use planning, engineering design, and emergency preparedness decisions. Assessing and characterizing earthquake zones is one of the first steps toward reducing hazards. USGS funds are available for project grants to universities, profit and non-profit organizations and state and local governments.

The NSF supports siting and fundamental geotechnical engineering research, structural analysis and design research, research on architectural and nonstructural components, and research facilities. The NSF awards grants for earthquake engineering and geosciences research.

NIST and FEMA are responsible for working with state and local officials, model building code groups, architects, engineers, and others to see that scientific and engineering research is translated into improved building codes, standards and practices for structures and lifelines, and post-earthquake studies.

U.S. Department of Agriculture

U.S. Forest Service

During emergencies the Forest Service may install emergency measures on National Forest land for runoff retardation and soil erosion prevention to safeguard life and property on the downstream side from watershed lands suddenly damaged by fire, flood, and other natural disasters. Where natural disasters cover National Forest as well as state and/or private lands, the Forest Service works closely with the NRCS, state, and local government entities in coordination of mitigation activities.

U.S. Natural Resources Conservation Service (NRCS)

The Natural Resources Conservation Service (NRCS) can provide technical assistance in the conservation development and productive use of soil and water resources. Its activities include watershed protection and flood protection projects, floodplain management studies, resource conservation and development, emergency watershed protection, conservation technical assistance, soil surveys, snow surveys, and water supply forecasting.

Watershed Protection and Flood Protection Projects

The Watershed Protection and Flood Prevention Act (Public Law 83-566) authorizes the NRCS to provide technical assistance to local organizations to plan and install works of improvement for watershed protection, flood prevention, agricultural water management, and other approved purposes.

Floodplain Management Studies

The NRCS provides assistance for cooperative Floodplain Management Studies to local communities or units of government. The objective of these studies is to provide information and large-scale mapping needed in alleviating potential flood dangers. The cooperative studies require financial assistance from participating communities to be at least 20 percent of the direct study costs. The final product includes a comprehensive report with detailed mapping and information to be used in implementing effective floodplain management programs. Authority for floodplain analyses is provided by Section 6 of Public Law 83-566.

Resource Conservation and Development

The NRCS administers the Resource Conservation and Development (RC&D) Program authorized under Public Law 88-703 Section 102 of the Food and Agriculture Act of 1962. Under this program technical and financial assistance is available to communities in New Mexico for installation of flood prevention measures. Assistance can be provided for control of erosion on critical eroding areas, flood damage reduction, recreation developments, fish and wildlife developments, water supply developments, and water quality improvement. Funding for this program is limited.

Emergency Watershed Protection Assistance

Funding for Emergency Watershed Protection (EWP) Assistance is authorized under Sections 403-405 of the Agriculture Credit Act of 1978. The EWP program provides

technical and financial assistance to safeguard people and property following natural disasters such as floods, fires, wind storms, earthquakes, and droughts.

Through the EWP Program the NRCS reduces the threat to life and property by providing assistance to prevent further damage from flooding, runoff, and erosion. EWP work may include repairing existing water controls (i.e., levees, dikes, or other flood control structures), removing debris and sediment from watercourses to prevent future flooding, establishing vegetative cover, and protecting streambanks. This assistance protects homes, businesses, and other properties from further damage in the event of subsequent storms. NRCS pays up to 75 percent of construction costs of eligible emergency treatments.

Work must make sense from an economic, engineering, and environmental standpoint. EWP must be sponsored by a public entity such as a division of state government, a city, county, or special district (water, conservation, etc.). Work may be done on private property. Applications for assistance must be submitted within 60 days of the disaster.

Local sponsors of EWP projects are responsible for obtaining the necessary landrights and permits, providing 25 percent cost-share, and providing for the operation and maintenance of completed emergency measures. The sponsors determine priorities for emergency assistance and coordinate work with other federal and local agencies. Local sponsors may provide their share of construction costs in the form of landowner contributions, local public funds, or *in-kind* services (such as labor or equipment).

Conservation Technical Assistance

In addition to specific program activities, the NRCS can provide Conservation Technical Assistance under Public Law 74-46. Assistance can be provided to land users in the planning and application of conservation treatments to control erosion and reduce upstream flooding along with other purposes (sediment reduction).

Snow Surveys

The NRCS administers the cooperative Snow Survey Program in cooperation with other federal, state, and local agencies as well as private organizations and individuals. The NRCS publishes a monthly accounting of snowpack values and basin water contents. These monthly reports are available December 31 through May 30 each runoff season. This information is gathered from snowtel reporting stations. This information and data is beneficial to flood forecasters and flood emergency operations.

U.S. Department of Defense

U.S. Army Corps of Engineers

The Corps of Engineers (COE) is involved in developing and implementing plans for flood control, navigation, hydropower, recreation, and water supply. The COE also has authority for emergency operations, bank protection, permit administration, and technical assistance. COE programs operate under five different authorities: 1)

Feasibility Studies and Projects; 2) Continuing Authority Projects; 3) Emergency Operations; 4) Floodplain Management Services; and, 5) Permit Issuance.

Feasibility Studies and Projects

Congress can authorize the COE to perform feasibility studies that may result in projects for flood control, navigation, hydropower, water supply, and recreation.

Continuing Authority Projects

The COE has discretionary authority to implement certain types of water resource projects without congressional authority. These projects are typically limited in scope and cost. Applicable continuing authorities projects and federal cost limitations are Section 14: Emergency Streambank Protection of Public Facilities - $225,000; Section 205: Small Flood Control Project - $4 million; and Section 208: Snagging and Clearing for Flood Control - $225,000.

Emergency Operations

Under the provisions of Public Law 84-99, the COE has the authority to respond to flood emergencies. The authority includes flood fighting, constructing advance measures (temporary) in anticipation of imminent flooding, and repair of damaged flood control works after the flood event. Emergency activities could include: providing sandbags, providing rock for erosion protection, constructing emergency levees, providing inspectors for the Damage Survey Teams, floodlight assistance, engineering expertise, flood drainage assessment, and advice on applicable COE programs.

Floodplain Management Services

The COE can provide assistance in evaluating flood hazards to a site, floodplain delineation, and technical assistance and guidance in wise floodplain management.

Permit Authority

The COE by law has the authority to issue Section 10 permits to cover construction, excavation, and other related work in or over navigable waterways and Section 404 permits covering the discharge of dredged or fill materials in all waters of the U.S. and adjacent wetlands.

U.S. Department of Commerce

National Weather Service

The National Weather Service is responsible for 36-48 hour weather forecasting issuing severe weather warnings and watches, flash flood warnings and watches, and flood warnings.

U.S. Department of Transportation

Federal Highway Administration

The Federal Highway Administration provides highway construction grants to the states and directs federal highway construction appropriations. It ensures that the construction

and maintenance of highways built with federal aid complies with existing regulations and directives. These regulations provide for the flooding of roadway embankments and bridge embankments and bridge structures located in floodplains. This agency is also concerned with stream channel changes in rural areas and detention facilities in urban areas which affect highway routes. The design of bridge projects occasionally involves reshaping channels for short distances upstream or downstream. The agency is involved with debris removal and erosion control during the construction stage as well as channel cleaning as part of the maintenance of its projects. The Federal Highway Administration also provides funds to aid in the cost of maintaining traffic and rebuilding flood damaged highway facilities on the federal aid system when such work is beyond the financial capability of the owner of the highway. The agency will also assist in surveying roadway damage in flood stricken areas.

U.S. Department of the Interior

U.S. Bureau of Reclamation

The U.S. Bureau of Reclamation administers the federal program in western states for water resource development and use which provides multiple purpose projects furnishing fish and wildlife protection and recreation opportunities, water for farm irrigation, municipal and industrial use, hydroelectric power, flood control, and other natural resource conservation benefits. The program was established by the Reclamation Act of Congress in 1902.

U.S. Geological Survey

Congress established the U.S. Geological Survey (USGS) on March 3, 1879, to classify public lands and examine the geological structure, mineral resources, and products of the country. Over the years other congressional acts have enlarged its duties and functions to include making geological and topographic maps, gauging streams, and determining water supplies of the United States. The USGS can assist communities and state agencies in collecting, developing, and computing basic data and information for floodplain engineering studies and investigations.

Information available from the USGS includes records of water gauge heights, discharge runoff, times of travel, sediment discharge, historic flood peaks, and inundated areas. Reports of magnitude, frequency, and duration of flood flows are also kept. Flood prone areas subject to inundation by floods of approximately the 100-year frequency have been delineated on topographic maps for selected areas within New Mexico and can be obtained through this agency.

U.S. Bureau of Land Management

The Bureau of Land Management (BLM) has district offices located in the 11 western states and Alaska. These offices are involved in land use planning for public lands. Each district office maintains a file of floodplain maps that are available for public inspection.

National Park Service
The National Park Service (NPS) is responsible for flood hazard mitigation in the following areas in New Mexico.

- Bandelier National Park

On August 6, 1979, the NPS revised its management policies on construction, shoreline processes, and limitation of visitor use. With respect to floodplains and wetlands, the revisions provide that facilities and structures will not be located, except where no practicable alternative exists, in 100-year floodplains and that schools, hospitals, and museums will not be located within 500-year floodplains. Furthermore, the impact from construction activities will be avoided in floodplains and wetlands except where no "reasonable alternative" exists. Whenever new facilities and structures must be located in floodplains and wetlands "their design and siting shall be based on scientific, engineering and architectural studies; consideration to protection of human life, natural processes and cultural resources; and consideration to their planned life span." The same scrutiny will be applied to existing structures and facilities needing rehabilitation or replacement. Such scrutiny will be one factor in the case of historic structures.

In natural zones, shoreline processes, such as erosion, deposition, dune formation, and inlet formation, will be allowed to take place naturally except where control measures are necessary to protect life and property in neighboring areas. In historic zones, the threat to the cultural resources and the imminence of the threat also are taken into account. In development zones, a management policy of phasing out, systematically relocating, or providing alternative development to existing development will be followed; no new development will be placed unless it is essential to meet the park's purpose and no practical alternative locations are available.

Energy, Minerals, and Natural Resources Department

New Mexico State Forestry
The catastrophic fire season of 1996 made clear to many the unhealthy conditions of our forests. Over the past few decades there has been a very large accumulation of biomass in our forests, the result of which is a dramatic fuel build up which can lead to disastrous fires and epidemic insect and disease outbreaks.

With these factors in mind the Energy, Minerals, and Natural Resources Department introduced legislation to create an Inmate Work Camp Program. Program and funding was approved for the establishment of a camp, personnel, and needed equipment. The purpose of the program is to use trained, well-supervised minimum security inmates to carry out a wide variety of natural resource projects which will help improve forest health and the safety of citizens living in and near forested lands. Examples of possible projects for inmate crews: thin forest stands; improve watersheds; conduct new fence lines, fire breaks, and trails; and, perform trail maintenance. Projects can be carried out only on publicly owned lands.

The inmate work camp program presents a win-win situation. The program is a "win" for our natural resources and the benefits derived from work projects. The program is also a "win" for New Mexico minimum security inmates which will provide constructive work under supervised conditions. It is an opportunity for inmates to learn new skills, work with each other as a team, and provide benefits for New Mexico citizens while maintaining and improving the conditions of New Mexico's natural resources.

Work projects will generally be accepted that are within one-and-half hours' travel time from the camp. Projects that are located outside the travel time boundary will be considered where support facilities can be provided by the requesting agency.

The Forestry Division is accepting requests for project work. Project requests for work will be graded on the following criteria:

- Public benefit;
- Operational readiness;
- Projects that do not take work from the private sector, but would not be accomplished without Inmate Work Camp participation;
- Length of time to complete;
- Travel distance from the Camp; and,
- Requesting agency's ability to pay a cost of $175/day/crew.*****

The requesting agency will be asked to preplan the project, provide the necessary project materials, provide special equipment or tools if needed, and provide a project liaison person to insure work performed meets the requesting agency's standards.

*****Inability to pay by requesting agency will not prohibit acceptance of project request.

Written requests for work performed by the Inmate Work Camp Program, providing information on Proposed Project Plan should be addressed to:

New Mexico Forestry Division
Inmate Work Camp
Central Minimum Unit
3201 Highway 314 SW
Los Lunas, New Mexico 87031
(505) 841-5360

Forestry Division
Energy, Minerals, and Natural Resources Department
P.O. Box 1948
Santa Fe, New Mexico 87504
(505) 827-5830