STATE OF ARIZONA
DEPARTMENT OF WATER RESOURCES
Five-Year Floodplain Management Work Plan

I. State Authority: Cite Your State Authority to Implement Floodplain Management

The Governor of Arizona signed Executive Order No. 77-6 into law in September of 1977, thereby authorizing all state agencies to comply with the National Flood Insurance Program, National Flood Insurance Act of 1968, and the Flood Disaster Protection Act of 1973.

In 1980, the Arizona State Legislature designated the newly created agency Arizona Department of Water Resources (ADWR) as the state coordinating agency for the National Flood Insurance Program (NFIP). State statutes pertaining to floodplain management are located in Arizona Revised Statutes § 45-1441 through 45-1595 and § 48-3601 through 48-3627.

Several key components in statute give authority to the director of ADWR to do the following:

- Act as the official representative for the state with regard to floodplain activities, including investigation, study, survey, and compilation of data, and to keep the public informed;
- Assist in the establishment of floodplain boundaries;
- Assist the flood control districts with topographic mapping if sufficient funds are available;
- Contract with private businesses or other government agencies for floodplain management activities; and
- Act as the state coordinator for assistance to local jurisdictions in the National Flood Insurance Program; to coordinate with the Army Corp of Engineers flood management services; and to coordinate research among federal, state, and local agencies, including making recommendations.

II. Over The Next Five Years, State Your Vision For Floodplain Management

The two primary purposes of floodplain management are to reduce the damage and disruption caused by floods and to protect the natural resources and functions of floodplains. The NFIP is the core component in Arizona's floodplain management program. ADWR is the state coordinating agency for the NFIP and is responsible for completing the following objectives outlined in the Community Assistance Program – State Support Services Element (CAP-SSSE):

- Technical assistance to local governments and property owners
- Monitoring local floodplain management programs
- Educating and training local officials and other professionals
- Coordination and participation in the Arizona Floodplain Managers Association (AFMA) and the Association of State Floodplain Managers (ASFPM).

While ADWR has been actively participating in the objectives listed above, this agency would like to achieve even more by increasing the level of activity for each of the objectives.

In addition, ADWR has identified three additional primary objectives for the future:

- Provide monies to communities to assist them with obtaining improved topographic maps and identifying flood hazards;
- Provide engineering technical assistance that would be used for initiating new flood studies, reviewing new and existing flood studies, and making recommendations for best floodplain management practices; and
- Assist communities with mapping needs.

As recently as the mid-1990s, ADWR's Dam Safety and Flood Mitigation Program had two planners and an engineer able to devote their time and energy to the program. Unfortunately, due to the budget shortfalls over the past three years, a reduction in engineering staff and monetary resources has limited the Department's ability to provide hydrologic/hydraulic assistance for detailed engineering analysis and financial assistance. For Federal Fiscal Year 2005, the combined CAP-SSSE and state matching funds support approximately one full-time employee (FTE) dedicated to floodplain management activities.

ADWR could benefit greatly by a GIS team on staff to create large-scale maps for floodplain areas in those regions of the state that lack to resources to generate their own maps.

A weakness in ADWR's flood program is its lack of authority to take compliance action against violators of floodplain ordinances.

III. Outline Your Strategy To Improve Floodplain Management

Community Assistance Program

Community Assistance Visit and Community Assistance Contact: The purpose of a Community Assistance Visit (CAV) and Community Assistance Contact (CAC) is to update a participating NFIP community on state and federal floodplain management program changes, provide technical and/programmatic assistance, compliance verification, local floodplain management ordinance assistance, and address concerns of the community regarding floodplain management.

The goal of ADWR is to visit or contact each participating NFIP community at least once every five years. In Arizona, there are 97 participating NFIP communities that have identified Special Flood Hazard Areas. If staffing levels remain the same for Federal Fiscal Years 2005-2009, ADWR will visit 20% of the participating NFIP communities each year for the next five years.

Our strategy is to increase the duration of each visit and the time allotted for follow-up, and to increase the actual number of visits and contacts. If funding levels are increased, ADWR anticipates increasing the number of visits for each fiscal year from 20% to 25%.

Community Outreach: Local floodplain management programs are administered by community elected officials and hired staff. Floodplain management workshops provide updated information and training to these community officials, staff and other interested parties.

If funding levels remain the same for FY 05-09, ADWR is proposing to conduct four workshops throughout the state during each fiscal year. Workshops may include such topics as:

- Duties of the local floodplain administrator;
- Elevation certificates;
- Substantial improvement and damage for structures located in floodplains; and
- *Requirement for Floodplain and Floodway Delineation in Riverine Environments* (State Standard 2-96).

If funding were available, ADWR would increase the number of workshops from four to six each fiscal year.

AFMA Conference: Arizona Floodplain Management Association (AFMA) is an organization of Arizona professionals involved in floodplain management, flood hazard mitigation, the NFIP and flood preparedness, warning and recovery. Their biannual conferences are held in the spring and fall of each year. Currently, one FTE from ADWR attends the conferences.

Ultimately, ADWR would like to increase participation at the conference.
ASFPM Conference: The Association of State Floodplain Managers (ASFPM) is an organization of professionals involved in floodplain management, flood hazard mitigation, the NFIP and flood preparedness, warning and recovery. The annual ASFPM Conference is held in the spring of each year. One individual who performs the tasks of the CAP attends. Two employees would best represent ADWR.

Coordination Meetings: As required by FEMA, one representative from ADWR will attend the coordination meeting with FEMA - Region IX participants as scheduled by the regional staff. This is a beneficial way for training of staff through the sharing of

information with other states in the region. One individual who performs the tasks of the CAP will attend. Again, ideally two employees would represent ADWR.

Arizona Floodplain Management Association (AFMA) Newsletter: As changes occur in the NFIP, policies and procedures evolve. Floodplain administrators, local elected officials and other affected parties need to be informed on issues regarding flood hazard mitigation, and floodplain regulations at local, state and national levels. Currently ADWR contributes only occasionally to the AFMA newsletter due to time constraints.

ADWR would like to enhance the dissemination of information by creating and distributing its own quarterly newsletter. Articles would be of broader scope, more technically detailed, and more in depth. This could only be accomplished, however, with increased funding.

Non-Engineering Technical Assistance: Requests from the public for information or assistance relating to the NFIP are received by telephone, in writing and in person from various constituencies such as community officials and citizens. Timely responses assure compliance with local, state and NFIP rules and regulations. Public information requests are unscheduled and highly time-intensive for the current FEMA funded FTE.

One additional planner would improve response time and provide a backup to the primary FTE.

Engineering Technical Assistance: Often individuals, communities, state agencies and federal agencies need the specialized technical guidance of a qualified engineer. This need may include assistance with project review and comment under various permitting processes, flood insurance studies, map revisions, hydrology/hydraulic modeling, and technical training. Currently, there is no FTE able to fill this crucial role.

State Standards For Floodplain Management

The State Standards Workgroup was formed in 1990 to develop standards and provide technical assistance to promote consistent responsible floodplain management.

To accomplish this goal, the State Standards Workgroup is developing a comprehensive set of publications and resources for consistent floodplain management and watercourse use through:

- Utilizing input and expertise from local, state, federal and private entities
- Seeking sufficient funding needed to successfully implement our mission
- Providing training opportunities on State Standards and related issues in cooperation with the educational community

The membership of the State Standards Workgroup consists of representatives from the following agencies or organizations who donate their time and resources to support the goals of the workgroup:

- Arizona Department of Water Resources
- 2 Urban Counties
- 2 Rural Counties
- AFMA Technical Committee

Funding for the State Standards Program is obtained by voluntary donations from agencies and others who benefit from the State Standards. Additional staff would improve participation in the Workgroup.

Arizona Statewide Flood Mitigation System

The ADWR Flood Mitigation Section (FMS) is responsible for assisting in the planning, design, and construction and maintenance of flood warning systems. The FMS also coordinates with local, state, and federal agencies during times of flood emergencies. Statutory authorities for the activities of FMS are found in ARS § 45-105, 45-1501 et seq., and § 48-3601 et seq. The mission of the FMS is described below:

To reduce the loss of lives, property, and water resources in Arizona by providing appropriate flood information through the development of a statewide flood warning system to the National Weather Service and local entities.

Dam Safety Program

The Arizona Revised Statutes (A.R.S.) § 45-1201 assigns the responsibility for supervision of the safety of non-federal dams to the Director of ADWR. The Office of Dam Safety and Flood Mitigation's objective is to maximize the protection of the public against loss of life and property by reducing the likelihood of catastrophic failure of dams within ADWR's jurisdiction. This goal is achieved by maintaining a Dam Safety Program within ADWR staffed by technical specialists trained and experienced in the design, construction, operation and maintenance of dams. Dam Safety staff requires that current dam safety standards be met during the design review, new construction, enlargement, repair, alteration, operation and maintenance, and removal of dams within jurisdiction.

Partnerships

Effective state floodplain management programs need to extend into the many facets of state government in Arizona. Partnership with the Arizona Department of Transportation (ADOT), Arizona Division of Emergency Management (ADEM) and the Arizona State Land Department (ASLD) is critical to achieve a strong floodplain management program in the State of Arizona.

<u>ADOT</u>
ADOT plans and constructs new roads, upgrades existing roads and bridges, maintains and inspects roads and drainage facilities and establishes drainage standards. ADOT has increased their effort to avoid adverse impacts to floodplains by requiring identification

of flood hazard areas and to perform an analysis of impacts during the planning phase of projects, both new roads and to upgrade existing roads and bridges. Better communication between ADWR and ADOT in identifying when a road project may encroach in a floodprone area is one of our objectives.

ADEM

One of the goals of ADEM is to protect lives and property of citizens from the effects of natural and human-made emergencies and disasters by coordinating the State's emergency preparedness, mitigation, response and recovery efforts. The elements of ADEM that are related to floodplain management include:

- Preparation and implementation of the State hazard mitigation plan;
- Providing technical and financial assistance to communities for preparing risk assessment and mitigation plans;
- Coordinating emergency response plans for floods and dam failures;
- Facilitating community involvement in pre-disaster mitigation through public outreach;
- Coordinating recovery efforts from events declared as state disasters; and
- Administration of mitigation grant programs, such as the Hazard Mitigation Grant Program and the Flood Mitigation Assistance Program, to reduce future damage and loss.

Currently, following the completion of a CAV, ADWR does not have the resources to inform ADEM of structures that may be considered candidates for Flood Mitigation Assistance money. However, ADWR would like to begin to assist ADEM in this effort.

ASLD

The ASLD manages and provides support for resource conservation programs for the well being of the public and the State's natural environment. ADWR is in a unique position to identify those floodplain areas that may make the best candidates for restoration of riparian habitat. This is another example of how ADWR would like to augment our partnership with ASLD in the future.

Arizona Office of Manufactured Housing: An owner of a pre-fabricated structure may not be aware of the recommended minimum safe elevation for a structure sited in a floodplain. Enhanced communication with the Office of Manufactured Housing could be a key component in rectifying this situation.

IV. Needs Analysis And Gap Assessments

Please see chart on next page.

V. Map Modernization Activities

The State of Arizona is not participating in FEMA's Map Modernization program. However, ordinance review activity will increase dramatically as a result of Map Modernization. Implementation will require communities to amend or adopt new floodplain management ordinances that adopt the most recent Flood Insurance Rate Maps. Before the new maps become effective, staff at FEMA, Region IX will take the lead role in determining whether a community's floodplain management ordinance adopts the new map. ADWR will assist FEMA, Region IX staff in this activity.

VI. Describe Your System For Evaluating Your State's Performance

Appendix 1
List of Suggested Performance Measures as Developed by the Workgroup

Outcome/Output	Method of Measurement
*Maintain or improve the % of communities that adopt new maps by the FIRM effective date.	ADWR will track of the numbers for each year and try to increase it by 10% from the previous year.
**Increase the percentage of communities that adopt new maps prior to the 30-day letter being sent.	ADWR will compare the number of communities in FY 04 that received a 30-day letter with the number in subsequent years and report it as a percentage increase.
Increase the number of flood prone communities enrolled in the NFIP in your State.	Currently, every community that has an identified floodprone area participates in the NFIP. There may be additional communities eligible for participation as they become incorporated. This may increase by about 5%.
Decrease the number of variances granted statewide through technical assistance to local officials.	Compare the number of variances reported in the most recent CAV report with the number reported during the prior CAV report. The target would be to decrease the number by 4.
Increase the number of technical assistance contacts (CAVs and CACs to communities in your State that result in increased compliance)	Compare the number of CACs and CAVs reported in CIS and compare the number to subsequent year totals. The goal is to increase the number from 20% to 25%. See Table 1
Numeric or percentage of repetitive loss structures mitigated, with special emphasis on those repetitive loss properties on target list.	Coordinate with ADEM to develop projects for HMGP that address mitigation or repetitive loss structures. Have ADEM report to FEMA Region IX the percentage of repetitive loss structures mitigated.
Increase floodplain management Training in the State.	Compare the number of local officials, surveyors and engineers attending workshops in FY 04 to subsequent years.
Increase the number of certified floodplain managers (CFM) in your State by x%.	Coordinate with the AFMA to increase the number of certified floodplain managers (CFM). ADWR will report the gain or loss from the previous year as a percentage.
Increase the number or percentage of State Floodplain Management staff that are CFMs.	Compare the number of CFMs in FY 04 with the number in subsequent years. ADWR will report the gain or loss from the previous year as a percentage.
Establish or increase participation in a State Floodplain Management Associations.	Compare the number of AFMA participants in FY 04 with the number in subsequent years. ADWR will report the gain or loss from the previous year as a percentage.

Increase the number of floodplain management violations that are brought into compliance.	Dedicate more time for CAV follow-up to work with communities to correct identified program deficiencies/violations and track the number of violations brought in to compliance. The goal is to increase this by 10% each year.
Quantify general technical assistance calls that your office handles	Document all general technical assistance by category and record the constituent group that placed the call.

Table 1

(Scheduling, number of visits and locations are subject to change with revised priorities)

CAVs FY 2005 Year 1	CAVs FY 2006 Year 2	CAVs FY 2007 Year 3	CAVs FY 2008 Year 4	CAVs FY 2009 Year 5
Clifton	Paradise Valley	Mesa	Apache County	Carefree
Duncan	Chandler	Buckeye	St. Johns	Cave Creek
Greenlee	Scottsdale	Peoria	Winslow	El Mirage
Apache Junction	Pinal County	Tolleson	Maricopa County	Wickenburg
Queen Creek	Florence	Bullhead City	Phoenix	Fountain Hills
Goodyear	Eloy	Mohave County	Glendale	Gila Bend
Gilbert	Marana	Kingman	Patagonia	Avondale
Mammoth	Camp Verde	LaPaz County	Santa Cruz County	Williams
Kearney	Chino Valley	Parker	Nogales	Casa Grande
Hayden	Yavapai County	Lake Havasu City	Thatcher	Sahuarita
Winkelman	Prescott	Quartzsite	Safford	Fredonia
Clarkdale	Cochise County	Snowflake	Pima	Coconino County
Cottonwood	Willcox	Taylor	Graham County	Colorado City
Prescott Valley	Sierra Vista	Eagar	Superior	Flagstaff
Sedona	Fort Huachuca	Springerville	Globe	Yuma County
Pima County	Bisbee	Holbrook	Miami	Yuma County
Tucson	Douglas	Navajo County	Gila County	Show Low
Oro Valley	Surprise	Winslow	Payson	Pinetop
CAC's	CAC's	CAC's	CAC's	CAC's
Coolidge	Benson	Tempe	Guadalupe	Youngtown
South Tucson	Tombstone	Litchfield Park		