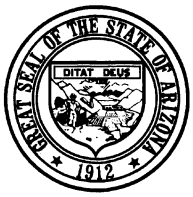
HANDBOOK FOR ARIZONA COMMUNITIES
On Floodplain Management and the National Flood Insurance Program

APPENDIX F



Janet Napolitano
Governor

Herbert R. Guenther
Director

STATE OF ARIZONA

FLOODPLAIN MANAGEMENT

MODEL ORDINANCE

for
(Non-Colorado River Communities)

May 2006

This Arizona Model Floodplain Management Ordinance has been developed as a tool to help communities meet the minimum requirements of the National Flood Insurance Program (NFIP). Communities choosing not to use this model ordinance must ensure their ordinance meets the minimum requirements of the NFIP.

Arizona Department of Water Resources

INSTRUCTIONS
FOR
CREATING YOUR COMMUNITY'S FLOODPLAIN MANAGEMENT ORDINANCE

Provide community specific information as requested in brackets:

- Select the 'Statutory Authorization' that applies to your community (counties or cities and towns) in Section 1.1 and Section 3.1.
- This model ordinance contains {brackets} that must be replaced with community specific information such as your community's name, address, or name of the responsible party.
- If you choose to renumber the sections in your ordinance differently than what is presented in this model, please check that the cross-referenced sections in your document match.

Define Accessory Structure:

- Your community must further define what the limitations are for the size and value of an "accessory structure" in Section 2. These limitations and the construction requirements in Section 5.1.C.5 allow for the permitting of accessory structures within special flood hazard areas **without a variance.**

Determine if your community wants to adopt higher standards recommended by the State of Arizona:

- This model ordinance meets the minimum standards required to participate in the National Flood Insurance Program. Community adoption of higher standards can be applied towards credit under the Community Rating System (CRS) program and result in reduced premiums for the entire community. The State of Arizona recommends the following, which are found in the Appendix:
  "Determining Market Value of Existing Structures"
  "Increased Cost of Compliance (ICC) Coverage – Repetitive Loss Provisions"

Prior to adoption, send a draft of the floodplain management ordinance to your contact at the Arizona Department of Water Resources or the Federal Emergency Management Agency, Region IX.

After the floodplain management ordinance is adopted, send a copy, certified by the city/county clerk, to your contact at the Arizona Department of Water Resources or the Federal Emergency Management Agency, Region IX.

Contact Information:

Arizona Department of Water Resources
Brian Cosson
602-771-8657
btcosson@azwater.gov

Arizona Department of Water Resources
Maureen Freark
602-771-8662
mcfreark@azwater.gov

Federal Emergency Management Agency, Region IX
If a FEMA Region IX representative reviewed your community's ordinance, please contact that person directly.

SECTION 1.0
STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

1.1 STATUTORY AUTHORIZATION. – As it applies to counties. Counties must adopt floodplain management regulations according to A.R.S. §§48-3603 and 48-3609.

In A.R.S. §§ 48-3601 through 48-3627, the Arizona State Legislature has delegated the responsibility to each county flood control district to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the Flood Control District of **{County}**, Arizona, does ordain as follows:

1.1 STATUTORY AUTHORIZATION. – As it applies to Cities and Towns. Cities and Towns, which assume responsibility for management of their floodplains according to A.R.S. §48-3610.

In A.R.S. § 48-3610, the Arizona State Legislature enabled the **{City or Town}** to adopt regulations in conformance with A.R.S. § 48-3603 designed to promote the public health, safety and general welfare of its citizenry. Therefore, the **{City Council, Town Council}** of the **{City or Town}**, Arizona, does ordain as follows:

1.2 FINDINGS OF FACT

A. The flood hazard areas of the **{County or Municipality}** are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

B. These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities and, when inadequately anchored, cause damage in other areas. Uses that are inadequately flood proofed, elevated or otherwise protected from flood damage, also contribute to the flood loss.

1.3 STATEMENT OF PURPOSE

It is the purpose of this ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

A. Protect human life and health;

B. Minimize expenditure of public money for costly flood control projects;

C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

D. Minimize prolonged business interruptions;

E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in areas of special flood hazard;

F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize blight areas caused by flooding;

G. Ensure that potential buyers are notified that property is in an area of special flood hazard;

H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions,

I. Maintain eligibility for disaster relief.

1.4 METHODS OF REDUCING FLOOD LOSSES

These regulations take precedence over any less restrictive conflicting local laws, ordinances and codes.

In order to accomplish its purposes, this ordinance includes methods and provisions to:

A. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;

B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

C. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;

D. Control filling, grading, dredging, and other development which may increase flood damage; and

E. Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

SECTION 2.0
DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

A zone. See "Special flood hazard area".

Accessory structure, low-cost and small. A structure that is:

1. Solely for the parking of no more than 2 cars; or limited storage (small, low cost sheds); and
2. **{Insert size and cost constraints}**.

Appeal. A request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance or a request for a variance.

Area of shallow flooding. A designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard. The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. These areas are designated as Zone A, AE, AO, AH, and A1-30 on the FIRM and other areas determined by the criteria adopted by the Director of the Arizona Department of Water Resources. See "Special flood hazard area")

Base flood. A flood which has a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood").

Base flood elevation (BFE). The elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1-30, VE and V1-V30 that indicates the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

Basement. Any area of the building having its floor sub-grade - i.e., below ground level - on all sides.

Building. See "Structure."

Community. Any state, area or political subdivision thereof, or any Indian tribe or authorized tribal organization, or authorized native organization, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction..

Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Encroachment. The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Erosion. The process of the gradual wearing away of landmasses. This peril is not, per se, covered under the Program.

Flood or flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of floodwaters; (2) the unusual and rapid accumulation or runoff of surface waters from any source; and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.

Flood Boundary and Floodway Map (FBFM). The official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated both the areas of special flood hazards and the floodway.

Flood Insurance Rate Map (FIRM). The official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood Insurance Study (FIS). The official report provided by the Federal Emergency Management Agency that includes flood profiles, Flood Insurance Rate Maps, Flood Boundary and Floodway Maps and the water surface elevation of the base flood.

Floodplain or flood-prone area. Any land area susceptible to being inundated by water from any source. See "Flood or flooding."

Floodplain Administrator. The community official designated by title to administer and enforce the floodplain management regulations.

Floodplain Board. The Board of Directors of the Flood Control District of **{Governing}** County, or the **{City, Town}** Council of **{Governing Body}**, at such times as they are engaged in the enforcement of this ordinance. (Floodplain Board as defined in A.R.S. §48-3601 for counties.)

Floodplain management. The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management regulations. The ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other application of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

Floodproofing. Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.

Flood-Related Erosion. The collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

Floodway. The area of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as "Regulatory Floodway."

Functionally dependent use. A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

Governing body. The local governing unit, i.e. county or municipality, that is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry.

Hardship. As related to **Section 6.0 {or the numbering system used by the community}** of this ordinance, meaning the exceptional hardship that would result from a failure to grant the requested variance. The **{community governing body}** requires that the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the

disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure. Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

   a. By an approved state program as determined by the Secretary of the Interior or

   b. Directly by the Secretary of the Interior in states without approved programs.

Lowest floor. The lowest floor of the lowest enclosed area, including the basement. See "Basement." An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

Manufactured home. A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".

Manufactured Home Park or Subdivision. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Market value. Defined in the substantial damage and substantial improvement procedures.

Mean sea level. For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

New construction. For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

Obstruction. Including, but not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One-hundred-year flood or **100-year flood.** The flood having a one percent chance of being equaled or exceeded in any given year. See "Base flood."

Person. An individual or the individual's agent, a firm, partnership, association or corporation, or an agent of the aforementioned groups, or this state or its agencies or political subdivisions.

Recreational vehicle. A vehicle which is:

1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light-duty truck; and
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory Flood Elevation (RFE). An elevation one foot above the base flood elevation for a watercourse for which the base flood elevation has been determined and shall be determined by the criteria developed by the Director of the Arizona Department of Water Resources for all other watercourses.

Regulatory floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Riverine. Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Sheet flow area. See "Area of shallow flooding."

Special flood hazard area (SFHA). An area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. It is shown on a Flood Boundary and Floodway Map or Flood Insurance Rate Map as Zone A, AO, A1-A30, AE, A99, or, AH.

Start of construction. Includes substantial improvement and other proposed new development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure. A walled and roofed building that is principally above ground; this includes a gas or liquid storage tank or a manufactured home.

Substantial damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement. Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations or state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Variance. A grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

Violation. The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Water surface elevation. The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum (NAVD) of 1988, or other datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Watercourse. A lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

SECTION 3.0
GENERAL PROVISIONS

3.1 LANDS TO WHICH THIS ORDINANCE APPLIES – As it applies to Counties.

This ordinance shall apply to all areas of special flood hazards within the boundaries of the **{County}** except those incorporated cities and towns which have adopted a resolution in accordance with A.R.S. §48-3610.

3.1 LANDS TO WHICH THIS ORDINANCE APPLIES – As it applies to Cities and Towns.

This ordinance shall apply to all areas of special flood hazards within the corporate limits of the **{City or Town}**.

3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for **{County or Municipality (exact title of study)}** dated **{date}**, with accompanying Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs) dated **{date}**, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this ordinance. This FIS and attendant mapping is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this ordinance and which are recommended to the Floodplain Board by the Floodplain Administrator. The Floodplain Board, within its area of jurisdiction, shall delineate (or may, by rule, require developers of land to delineate) for areas where development is ongoing or imminent, and thereafter as development becomes imminent, floodplains consistent with the criteria developed by the Federal Emergency Management Agency and the Director of the Arizona Department of Water Resources. The FIS and FIRM panels are on file at **{list the address or the building (i.e. County Administration Building, Department of Planning, Public Works etc.)}**.

3.3 COMPLIANCE

All development of land, construction of residential, commercial or industrial structures, or future development within delineated floodplain areas is subject to the terms of this ordinance and other applicable regulations.

3.4 ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this ordinance and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

3.5 INTERPRETATION

In the interpretation and application of this ordinance, all provisions shall be:

A. Considered as minimum requirements;

B. Liberally construed in favor of the governing body; and

C. Deemed neither to limit nor repeal any other powers granted under state statutes.

3.6 DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the **{governing body}**, any officer or employee thereof, the State of Arizona or the Federal Emergency Management Agency, for any flood damages that result from reliance on this ordinance or any administrative

decision lawfully made hereunder.

3.7 STATUTORY EXEPTIONS

In accordance with A.R.S. § 48-3609(H), unless expressly provided, this and any regulation adopted pursuant to this article do not affect:

A. Existing legal uses of property or the right to continuation of such legal use. However, if a nonconforming use of land or a building or structure is discontinued for twelve months, or destroyed to the extent of 50 percent of its value as determined by a competent appraiser, any further use shall comply with this article and regulations of the **{governing body}**;

B. Reasonable repair or alteration of property for the purposes for which the property was legally used on August 3, 1984, or any regulations affecting such property takes effect, except that any alteration, addition or repair to a nonconforming building or structure which would result in increasing its flood damage potential by 50 percent or more shall be either floodproofed or elevated to or above the regulatory flood elevation;

C. Reasonable repair of structures constructed with the written authorization required by A.R.S. § 48-3613; and

D. Facilities constructed or installed pursuant to a Certificate of Environmental Compatibility issued pursuant to A.R.S. Title 40, Chapter 2, Article 6.2.

Before any authorized construction begins for the exceptions listed below, the responsible person must submit plans for the construction to the Floodplain Board for review and comment. In accordance with A.R.S. § 48-3613, written authorization shall not be required, nor shall the Floodplain Board prohibit:

E. The construction of bridges, culverts, dikes and other structures necessary to the construction of public highways, roads and streets intersecting or crossing a watercourse;

F. The construction of storage dams for watering livestock or wildlife, structures on banks of a watercourse to prevent erosion of or damage to adjoining land if the structure will not divert, retard or obstruct the natural channel of the watercourse or dams for the conservation of floodwaters as permitted by A.R.S. Title 45, Chapter 6;

G. Construction of tailing dams and waste disposal areas for use in connection with mining and metallurgical operations. This paragraph does not exempt those sand and gravel operations that will divert, retard or obstruct the flow of waters in any watercourse from complying with and acquiring authorization from the Floodplain Board pursuant to regulations adopted by the Floodplain Board under this article;

H. Other construction upon determination by the Floodplain Board that written authorization is unnecessary;

I. Any flood control district, county, city, town or other political subdivision from exercising powers granted to it under A.R.S. Title 48, Chapter 21, Article 1;

J. The construction of streams, waterways, lakes and other auxiliary facilities in conjunction with development of public parks and recreation facilities by a public agency or political subdivision; and

K. The construction and erection of poles, towers, foundations, support structures, guy wires and other facilities related to power transmission as constructed by any utility whether a public service corporation or a political subdivision.

In addition to other penalties or remedies otherwise provided by law, this state, a political subdivision or a person who may be damaged or has been damaged as a result of the unauthorized diversion, retardation or obstruction of a watercourse has the right to commence, maintain and prosecute any appropriate action or pursue any remedy to enjoin, abate or otherwise prevent any person from violating or continuing to violate this section or regulations adopted pursuant to this Article. If a person is found to be in violation of this Section, the court shall require the violator to either comply with this Section if authorized by the Floodplain Board or remove the obstruction and restore the watercourse to its

original state. The court may also award such monetary damages as are appropriate to the injured parties resulting from the violation including reasonable costs and attorney fees.

3.8 UNLAWFUL ACTS

A. It is unlawful for a person to engage in any development or to divert, retard or obstruct the flow of waters in a watercourse if it creates a hazard to life or property without securing the written authorization required by A.R.S. § 48-3613. Where the watercourse is a delineated floodplain, it is unlawful to engage in any development affecting the flow of waters without securing written authorization required by A.R.S. § 48-3613.

B. Any person found guilty of violating any provision of this ordinance shall be guilty of a misdemeanor. Each day that a violation continues shall be a separate offense punishable as hereinabove described.

3.9 DECLARATION OF PUBLIC NUISANCE STATUTE

All development located or maintained within any area of special flood hazard after August 8, 1973, in violation of this ordinance, is a public nuisance per se and may be abated, prevented or restrained by action of this political subdivision.

3.10 ABATEMENT OF VIOLATIONS

Within 30 days of discovery of a violation of this ordinance, the Floodplain Administrator shall submit a report to the Floodplain Board which shall include all information available to the Floodplain Administrator which is pertinent to said violation. Within 30 days of receipt of this report, the Floodplain Board shall either:

A. Take any necessary action to effect the abatement of such violation; or

B. Issue a variance to this ordinance in accordance with the provisions of Section **6.0 {or the numbering system used by the community}** herein; or

C. Order the owner of the property upon which the violation exists to provide whatever additional information may be required for their determination. Such information must be provided to the Floodplain Administrator within 30 days of such order and the Floodplain Administrator shall submit an amended report to the Floodplain Board within 20 days. At the next regularly scheduled public meeting, the Floodplain Board shall either order the abatement of said violation or they shall grant a variance in accordance with the provisions of Section **6.0 {or the numbering system used by the community}** herein; or

D. Submit to the Federal Emergency Management Agency a declaration for denial of insurance, stating that the property is in violation of a cited state or local law, regulation or ordinance, pursuant to Section 1316 of the National Flood Insurance Act of 1968 as amended.

3.11 SEVERABILITY

This ordinance and the various parts thereof are hereby declared to be severable. Should any Section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof other than the Section so declared to be unconstitutional or invalid.

SECTION 4.0
ADMINISTRATION

4.1 DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The **{job title}** is hereby appointed to administer, implement and enforce this ordinance by granting or denying development permits in accordance with its provisions.

4.2 DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties of the Floodplain Administrator shall include, but not be limited to:

A. PERMIT REVIEW

Review all development permits to determine that:

1. The permit requirements of this ordinance have been satisfied;
2. All other required state and federal permits have been obtained;
3. The site is reasonably safe from flooding;
4. The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this ordinance, "adversely affect" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point.

B. SUBSTANTIAL IMPROVEMENT AND SUBSTANTIAL DAMAGE PROCEDURES

1. Develop detailed procedures for identifying and administering requirements for substantial improvement and substantial damage, to include defining "Market Value."
2. Assure procedures are coordinated with other departments and divisions and implemented by community staff.

C. USE OF OTHER BASE FLOOD DATA

When base flood elevation data has not been provided in accordance with Section **3.2 {or the numbering system used by the community}**, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer Section **5.0 {or the numbering system used by the community}**. Any such information shall be consistent with the requirements of the Federal Emergency Management Agency and the Director of the Arizona Department of Water Resources and shall be submitted to the Floodplain Board for adoption.

D. OBTAIN AND MAINTAIN FOR PUBLIC INSPECTION

1. The certified regulatory flood elevation required in Section **5.1.C.1 {or the numbering system used by the community}**;
2. The floodproofing certification required in Section **5.1.C.2 {or the numbering system used by the community}**;
3. The flood vent certification required in Section **5.1C.3a. {or the numbering system used by the community}**
4. The elevation certification required for additional development standards, including subdivisions, in Section **5.4.A.2. {or the numbering system used by the community}**
5. The floodway encroachment certification required in Section **5.7.A {or the numbering system used by the**

community}.

6. Maintain a record of all variance actions, including justification for their issuance, and report such variances issued in its biennial report submitted to the Federal Emergency Management Agency.

7. Obtain and maintain improvement calculations.

E. NOTIFICATION OF OTHER ENTITIES

1. Whenever a watercourse is to be altered or relocated:

   a. Notify adjacent communities and the Arizona Department of Water Resources prior to such alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency through appropriate notification means; and

   b. Assure that the flood carrying capacity of the altered or relocated portion of said watercourse be maintained.

2. Base flood elevation and rate of flow due to physical alterations:

   a. Base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, the Floodplain Administrator shall notify the Federal Emergency Management Agency of the changes by submitting technical or scientific data in accordance with Volume 44 Code of Federal Regulations section 65.3. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

   b. Within one hundred twenty (120) days after completion of construction of any flood control protective works which changes the rate of flow during the flood or the configuration of the floodplain upstream or downstream from or adjacent to the project, the person or agency responsible for installation of the project shall provide to the governing bodies of all jurisdictions affected by the project a new delineation of all floodplains affected by the project. The new delineation shall be done according to the criteria adopted by the Director of the Arizona Department of Water Resources.

3. Corporate Boundary Changes:

   a. Notify the Federal Emergency Management Agency and the Arizona Department of Water Resources of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

F. MAP DETERMINATIONS

Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazards (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section **6.0 {or the numbering system used by the community}**.

G. REMEDIAL ACTIONS

Take actions on violations of this ordinance as required in Section **3.10 {or the numbering system used by the community}** herein.

H. BIENNIAL REPORT

Complete and submit a Biennial Report to the Federal Emergency Management Agency.

4.3 ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be obtained before construction or development begins, including placement of manufactured homes, within any area of special flood hazard established in Section **3.2 {or the numbering system used**

by the community}. Application for a Development Permit shall be made on forms furnished by the Floodplain Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions and elevation of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing. Specifically, the following information is required:

A. Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all structures. In Zone AO, elevation of existing highest adjacent natural grade and proposed elevation of lowest floor of all structures;

B. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed;

C. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section **5.1.C.2 {or the numbering system used by the community}**;

D. Base flood elevation data for subdivision proposals or other development greater than 50 lots or 5 acres; and

E. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

SECTION 5.0
PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 STANDARDS OF CONSTRUCTION

In all areas of special flood hazards the following standards are required:

A. Anchoring

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy; and

2. All manufactured homes shall meet the anchoring standards of section **5.5.B {or the numbering system used by the community}**.

B. Construction Materials and Methods

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;

2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;

3. All new construction, substantial improvement and other proposed new development shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding; and

4. Within Zones AH or AO, adequate drainage paths shall be constructed around structures on slopes to guide floodwaters around and away from proposed structures.

C. Elevation and Floodproofing

1. **Residential construction**

Residential construction, new or substantial improvement, shall have the lowest floor, including basement,

a. In an AO Zone, elevated to or above the regulatory flood elevation, or elevated at least two feet above the highest adjacent grade if no depth number is specified.

b. In an A Zone where a BFE has not been determined, elevated to or above the regulatory flood elevation or be elevated in accordance with the criteria developed by the Director of the Arizona Department of Water Resources.

c. In Zones AE, AH and A1-30, elevated to or above the regulatory flood elevation.

Upon completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the community's building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

2. **Nonresidential construction**

Nonresidential construction, new or substantial improvement, shall either be elevated to conform with Section **5.1.C.1 {or the numbering system used by the community}** or together with attendant utility and sanitary facilities:

a. Be floodproofed below the elevation recommended under Section **5.1.C.1 {or the numbering system used by the community}** so that the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

c. Be certified by a registered professional engineer or architect that the standards of this section are satisfied. Such certification shall be provided to the Floodplain Administrator.

3. **Flood openings**

All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must meet or exceed the following criteria:

a. Have a minimum of two openings, on different sides of each enclosed area, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater; or

b. If it is not feasible or desirable to meet the openings criteria stated above, a registered engineer or architect may design and certify the openings.

4. **Manufactured homes**

a. Manufactured homes shall also meet the standards in Section **5.5 {or the numbering system used by the community}**

5. **Garages and low cost accessory structures**

a. Attached garages.

1. A garage attached to a residential structure, constructed with the garage floor slab below the regulatory flood elevation, must be designed to allow for the automatic entry of flood waters. See Section 5.1.C.3. Areas of the garage below the regulatory flood elevation must be constructed with flood resistant materials. See Section 5.1.B.

2. A garage attached to a nonresidential structure must meet the above requirements or be dry floodproofed.

b. Detached garages and accessory structures.

1. "Accessory structure" used solely for parking (2 car detached garages or smaller) or limited storage (small, low-cost sheds), as defined in Section 2.0, may be constructed such that its floor is below the regulatory flood elevation, provided the structure is designed and constructed in accordance with the following requirements:

a) Use of the accessory structure must be limited to parking or limited storage;

b) The portions of the accessory structure located below the regulatory flood elevation must be built using flood-resistant materials;

c) The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;

d) Any mechanical and utility equipment in the accessory structure must be elevated or floodproofed to or above the regulatory flood elevation;

e) The accessory structure must comply with floodplain encroachment provisions in Section 5.7; and

f) The accessory structure must be designed to allow for the automatic entry of flood waters in accordance with Section 5.1.C.3.

2. Detached garages and accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 5.1.

5.2 STANDARDS FOR STORAGE OF MATERIALS AND EQUIPMENT

A. The storage or processing of materials that could be injurious to human, animal or plant life if released due to damage from flooding is prohibited in special flood hazard areas.

B. Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning

5.3 STANDARDS FOR UTILITIES

A. All new or replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.

B. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

C. Waste disposal systems shall not be installed wholly or partially in a regulatory floodway.

5.4 ADDITIONAL DEVELOPMENT STANDARDS, INCLUDING SUBDIVISIONS

A. All new subdivision proposals and other proposed development (including proposals for manufactured home parks and subdivisions), greater than 50 lots or 5 acres, whichever is the lesser, shall:

1. Identify the area of the special flood hazard area and the elevation of the base flood

2. Identify on the final plans the elevation(s) of the proposed structure(s) and pads. If the site is filled above the base flood elevation, the final lowest floor and grade elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.

B. All subdivision proposals and other proposed development shall be consistent with the need to minimize flood damage.

C. All subdivision proposals and other proposed development shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

D. All subdivision proposals and other proposed development shall provide adequate drainage to reduce exposure

to flood hazards.

5.5 STANDARDS FOR MANUFACTURED HOMES

All manufactured homes that are placed on site or substantially improved shall:

A. Be elevated so that the bottom of the structural frame or the lowest point of any attached appliances, whichever is lower, is at or above the regulatory flood elevation; and

B. Be securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

5.6 STANDARDS FOR RECREATIONAL VEHICLES

All recreational vehicles placed on site shall:

A. Be on site for fewer than 180 consecutive days, or

B. Be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

C. Meet the permit requirements of Section **4.0 {or the numbering system used by the community}** of this ordinance and the elevation and anchoring requirements for manufactured homes in Section **5.5 {or the numbering system used by the community}**.

5.7 FLOODWAYS

Located within areas of special flood hazard established in Section **3.2 {or the numbering system used by the community}** are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

A. Prohibit encroachments, including fill, new construction, substantial improvements and other development, unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

B. If Section **5.7 {or the numbering system used by the community}** is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Section **5.0 {or the numbering system used by the community}**.

SECTION 6.0
VARIANCE PROCEDURE

6.1 NATURE OF VARIANCES

The variance criteria set forth in this section of the ordinance are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants or the property owners.

It is the duty of the **{governing body}** to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below the regulatory flood elevation are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this ordinance are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

6.2 APPEAL BOARD

A. The Floodplain Board of the **{governing body}** shall hear and decide appeals and requests for variances from the requirements of this ordinance.

B. The Floodplain Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this ordinance.

C. In passing upon such applications, the Floodplain Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger of life and property due to flooding or erosion damage;

3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

4. The importance of the services provided by the proposed facility to the community;

5. The necessity to the facility of a waterfront location, where applicable;

6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;

7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

9. The safety of access to the property in time of flood for ordinary and emergency vehicles;

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,

11. The costs of providing governmental services during and after flood conditions, including maintenance and

repair of public utilities and facilities such as sewer, gas, electrical, water system and streets and bridges.

D. Upon consideration of the factors of Section **6.2(c) {or the numbering system used by the community}** and the purposes of this ordinance, the Floodplain Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

E. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage, and

2. Such construction below the base flood level increases risks to life and property; and

3. The land upon which the variance is granted shall be ineligible for exchange of state land pursuant to the flood relocation and land exchange program provided by A.R.S. Title 26, Chapter 2, Article 2. A copy of the notice shall be recorded in the office of the **{county}** County Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

F. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance and report such variances issued in its biennial report submitted to Federal Emergency Management Agency.

6.3 CONDITIONS FOR VARIANCES

A. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood elevation, provided the procedures of Sections **4.0** and **5.0 {or the numbering system used by the community}** of this ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

B. Variances may be issued for the repair, rehabilitation or restoration of structures listed in the National Register of Historic Places or the State Inventory of Historic Places, upon a determination that the proposed repair or rehabilitation will not preclude the structures continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

C. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

E. Variances shall only be issued upon a:

1. Showing of good and sufficient cause;

2. Determination that failure to grant the variance would result in exceptional hardship to the applicant;

3. Showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section **2.0 {or the numbering system used by the community}** of this ordinance in the definition of "Functionally Dependent Use"; and,

4. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.

APPENDIX

HIGHER STANDARDS RECOMMENDED BY THE STATE OF ARIZONA

This model ordinance meets the minimum standards required to participate in the National Flood Insurance Program. Community adoption of higher standards can be applied towards credit under the Community Rating System (CRS) program and result in reduced premiums for all flood insurance policy holders within the entire community. The State of Arizona recommends:

1.0 DETERMINING MARKET VALUE OF EXISTING STRUCTURES

Replace the "Market value" definition in Section 2.0 with:

"Market value" shall be determined by estimating the cost to replace the structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the structure was constructed.

A. The cost of replacement of the structure shall be based on a square foot cost factor determined by reference to a building cost estimating guide recognized by the building construction industry.

B. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the structure and functional obsolescence as approved by the floodplain administrator, but shall not include economic or other forms of external obsolescence.

Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences.

2.0 INCREASED COST OF COMPLIANCE (ICC) COVERAGE – REPETITIVE LOSS PROVISIONS

This provision allows communities the opportunity for flood insurance policy holders to have ICC coverage made available in repetitive loss situations.

Modify the definition of "Substantial damage" as follows:

"Substantial damage" means:

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred; or

Flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. This is also known as "repetitive loss."

ADDITIONAL DEFINITIONS

Accessory use. A use which is incidental and subordinate to the principal use of the parcel of land on which it is located.

Alluvial fan. A geomorphologic feature characterized by a cone or fan-shaped deposit of boulders, gravel, and fine sediments that have been eroded from mountain slopes, transported by flood flows, and then deposited on the valley floors, and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition, and channel migration.

Apex. A point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

Area of special flood-related erosion hazard. The land within a community which is most likely to be subject to severe flood-related erosion losses. The area may be designated as Zone E on the Flood Insurance Rate Map (FIRM).

Existing manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before **{insert date your first floodplain management ordinance was adopted}**.

Expansion to an existing manufactured home park or subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Flood-related erosion. The collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical level or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge, or by some similarly unusually and unforeseeable event which results in flooding.

Flood-related erosion area or **Flood-related erosion prone area** A land area adjoining the shore of a lake or other body of water, which due to the composition of the shoreline or bank and high water levels or wind-driven currents, is likely to suffer flood-related erosion damage.

Flood-related erosion area management. The operation of an overall program of corrective and preventive measures for reducing flood-related erosion damage, including but not limited to emergency preparedness plans, flood-related erosion control works, and floodplain management regulations.

Floodway fringe. That area of the floodplain on either side of the "Regulatory Floodway" where encroachment may be permitted.

Fraud and victimization. As related to **Section 6.0** of this ordinance, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the **{community governing body}** will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for fifty to one-hundred years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates.

Levee. A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

Levee system. A flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accord with sound engineering practices.

New manufactured home park or subdivision. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the community.

Program deficiency. A defect in a community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management regulations.

Public safety and nuisance. As related to **Section 6** of this ordinance, means that the granting of a variance must not result

in anything which is injurious to safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Remedy a violation. To bring the structure or other development into compliance with State or local floodplain management regulations, or if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing State or Federal financial exposure with regard to the structure or other development.

[Community Name (e.g., Town of Clarkdale)], **Arizona**
Ordinance No. 2007-xxx

AN ORDINANCE OF THE MAYOR AND COUNCIL OF *[Community Name]*, [COUNTY NAME] COUNTY, ARIZONA, PERTAINING TO THE NATIONAL FLOOD INSURANCE PROGRAM, ADOPTING BY REFERENCE REVISED FLOOD INSURANCE STUDY AND FLOOD INSURANCE RATE MAPS, AND FLOODPLAIN MANAGEMENT REGULATIONS; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING PENALTIES.

WHEREAS, the *[Community Name]*, Arizona joined the National Flood Insurance Program (NFIP) as a separate community on *[date Community joined the Regular Program of the NFIP]*; and,

WHEREAS, the *[Community Name]*, under the National Flood Insurance Program is the entity responsible for floodplain administration within the City/Town; and,

WHEREAS, the continued participation in the National Flood Insurance Program is in the best interest of the citizens of the *[Community Name]*; and,

WHEREAS, the Federal Emergency Management Agency published a Flood Insurance Study [Date], and Flood Insurance Rate Map [Date], for *[Name of Municipality or County]*; and,

WHEREAS, each community that participates in the National Flood Insurance Program is required to adopt floodplain management regulations consistent with Federal criteria; and,

WHEREAS, the *[Community Name]*, has previously delegated the responsibility of floodplain management to the Flood Control District of *[Name of County]* as provided for in ARS 48-3610; and,

WHEREAS, the Flood Control District of *[Name of County]* has adopted Floodplain Regulations that meet the requirements of the National Flood Insurance Program; and

WHEREAS, those certain documents entitled "Flood Insurance Study for *[Name of Municipality or County]"* dated *[Date]* and Flood Insurance Rate Maps dated *[Date]* and "Floodplain Management Regulations for *[Name of County]* County" *[Date]* and all subsequent amendments and/or revisions are hereby designated as public records.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Council of the *[Community Name]*, Arizona, as follows:

Section 1. The *[Community Name]* continues to delegate the responsibility of floodplain management to the Flood Control District of *[Name of County]* as provided for in ARS 48-3610. *The [City/Town (Title of a community official)]* is appointed/designated as the Floodplain Manager for the City/Town and is responsible for coordinating with the Flood Control District of *[Name of County]* and will serve as the community point of contact on National Flood Insurance Program issues for County, State and Federal officials.

Section 2. Those public records entitled "Flood Insurance Study (FIS) for *[Name of Municipality or County (exact title of study)]"* dated *[Date]* with accompanying Flood Insurance Rate Maps (FIRMs) dated *[Date]* and all subsequent amendments and/or revisions, three copies of which shall be kept on file in the office of the City/Town Clerk, are hereby adopted by reference, as the basis for establishing the special flood hazard areas for floodplain management in the *[Community Name]*. The special flood hazard areas documented in the Flood Insurance Study and Flood Insurance Rate Maps are the minimum area of applicability of the floodplain management regulations and may be supplemented by studies for other areas as allowed in the regulations.

Section 3. That public record designated as the Floodplain Management Regulations for *[Name of County]* County, *[Date]*, and all subsequent amendments and/or revisions, three copies of which shall be kept on file in the office of the City/Town Clerk, is hereby adopted as the legal basis for implementing floodplain management in this community.

Section 4. Repeal of conflicting ordinances. All ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.

Section 5. Severability. If any portion of this ordinance is determined by a court of competent jurisdiction to be invalid, all remaining portions of this ordinance shall remain in full force and effect.

Section 6. Providing for penalties. *[Insert the City/Town penalty clause, reference the City/Town ordinance, or make reference to the penalties outlined in the County Floodplain Regulations]*.

PASSED, ADOPTED AND APPROVED by the Mayor and Council of the *[Community Name]*, *[County]* County, Arizona, this ___day of _____, 2007.

ATTESTED:

_____
City/Town Clerk

APPROVED:

_____
Mayor

APPROVED AS TO FORM:

_____
City/Town Attorney

Note: The NFIP only requires one copy of the documents. However, the State or some communities could have a higher number of copies required. If the community or the State does require more copies to be kept on file, that number should be used in the ordinance.

Date: September, 2007