



## **Floodplain Regulations**

for Maricopa County

Published by:  
Flood Control District of Maricopa County  
2801 West Durango Street, Phoenix, Arizona 85009, 602-506-1501

FCDMC 2006 Revision

**1301.027**



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## **FINDINGS OF FACT**

It is the finding of the Board of Directors of the Flood Control District of Maricopa County that:

1. The flood hazard areas of Maricopa County are subject to periodic inundation that 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.
2. These flood losses are caused in part by the cumulative effect of obstructions in Special Flood Hazard Areas that increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.
3. Pursuant to the authority granted in A.R.S. 48-3609(B), judicious floodplain management requires the permitting of Development within a watercourse or areas designated by the Floodplain Administrator as Special Flood Hazard Areas as authorized in A.R.S. 48-3609(A) with contributing watersheds that have flows greater than 50 cubic feet per second (cfs) during a 100-year flood event so as not to cause obstruction, retardation, or diversion of flows within the area of jurisdiction

## **ARTICLE I. AUTHORITY, PURPOSE, TITLE AND APPLICABILITY**

### **Section 101. Statutory Authority**

Sections 48-3603 and 48-3609 of the Arizona Revised Statutes direct each County Flood Control District Board of Directors to adopt and enforce floodplain regulations consistent with criteria adopted by the Director of Arizona Department of Water Resources pursuant to A.R.S. 48-3605. Therefore, the Board of Directors of the Flood Control District of Maricopa County, Arizona adopts these regulations.

A Floodplain Regulation for Maricopa County has been in force since February 25, 1974. The version that these Regulations supersede are the Floodplain Regulations for Maricopa County, Arizona that were adopted on August 4, 1986, and amended March 23, 1987, April 6, 1988, September 18, 1989, September 3, 1991, December 15, 1993 and November 1, 2000. These Regulations supersede all previous Regulations and continue the Statutory Authority vested in the District to regulate Development

### **Section 102. Statement of Purpose**

It is the purpose of these Regulations to comply with the directive of A.R.S 48-3609 and 44 CFR Ch.1. et seq. (pertaining to the National Flood Insurance Program) to promote and protect the health, peace, safety, comfort, convenience, and general welfare of the residents within the jurisdictional area of Maricopa County, Arizona, to minimize public and private losses due to flood conditions in specific areas, and to enable Maricopa County and its residents to participate in the National Flood Insurance Program, receive Federal Disaster Assistance, obtain flood insurance and reduce the cost of flood insurance.

It is the intent of the Flood Control District Board of Directors to:

1. Protect the life, health, and property of county residents;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;

5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, fiber optics and sewer lines, streets and bridges located in Special Flood Hazard Areas;
6. Help maintain a stable tax base by regulating Development of Special Flood Hazard Areas so as to minimize future flood blight areas;
7. Take all reasonable action so that potential buyers have notice that property is in a Special Flood Hazard Area;
8. Take reasonable action so that those who occupy the Special Flood Hazard Areas assume responsibility for their actions;
9. Minimize flood damages and reduce the height and violence of floods that are caused by obstructions restricting the capacity of floodways;
10. Prevent unwise encroachment, building and Development within Special Flood Hazard Areas;
11. Reduce the financial burden imposed on the community, its governmental units and its residents when such land is flooded;
12. Protect the natural and beneficial function of the floodplains; and
13. Maintain eligibility for disaster relief.

### **Section 103. Title**

These Regulations may be referred to as the Floodplain Regulations for Maricopa County.

### **Section 104. Applicability**

These Regulations are applicable to all lands located within delineated floodplains and watercourses or areas designated by the Floodplain Administrator as Special Flood Hazard Areas as authorized in A.R.S. 48-3609(A) with contributing watersheds that have flows greater than 50 cfs during a 100-year flood event that is within the Area of Jurisdiction of the Flood Control District of Maricopa County.

## **ARTICLE II. RULES, GENERAL PROVISIONS, AND CONSTRUCTION AND INTERPRETATION**

### **Section 201. Rules**

When not inconsistent with the context, words used in the present tense include the future tense, words in the singular include the plural; words in the plural include the singular. Words or phrases not specifically defined in these Regulations shall be interpreted so as to give them the meaning they have in common usage. The word "shall" is mandatory and the word "may" is permissive. No provision of these Regulations shall be construed to require written authorization for those exemptions set forth in A.R.S. 48-3613(B) nor shall the Board of Directors prohibit said exemptions; however, those Exempt Uses must comply with A.R.S. 48-3613(C) which states: Before any construction authorized by Subsection B of this section may begin, the person must submit plans for the construction to the Board for review and comment.

### **Section 202. Floodplain Administrator**

The Floodplain Administrator as designated by the Board of Directors shall be the Chief Engineer and General Manager of the District who shall administer and enforce these Regulations. The Floodplain Administrator may delegate signature authority to District staff for permitting purposes.

For those Communities who have delegated that the District shall assume powers and duties as authorized in A.R.S. 48-3610.1(D), each Community shall appoint a Community National Flood

Insurance Program (NFIP) Coordinator who will be responsible to coordinate with the District's staff for providing floodplain management responsibility, and to verify that the Community's participation in the NFIP is maintained and remains in good standing through adoption and enforcement of these Regulations.

Violators of any provision of these Regulations shall be notified by the Floodplain Administrator, or his designee, who shall state the nature of the violation and order corrective action.

Failure to comply with ordered corrective action may result in submission of a declaration for denial of flood insurance for otherwise insurable structures to the Administrator of the Federal Insurance Administration pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

Failure to appeal the Floodplain Administrator's order pursuant to a variance to the Floodplain Review Board within the time period set forth in Section 602 shall render the order of the Floodplain Administrator final and enforceable as provided in Article XI of these Regulations. Failure to appeal the Floodplain Administrator's order pursuant to a violation hearing to the Board of Hearing Review within the time period set forth in Section 1102 shall render the order of the Floodplain Administrator final and enforceable as provided in Article XI of these Regulations.

### Section 203. Construction and Interpretation

These Regulations shall be liberally construed to effectuate its purposes. The requirements set out herein shall be construed as minimum requirements.

Nothing contained in these Regulations shall be construed to limit or repeal any powers granted to the Flood Control District of Maricopa County under state statute. If the provisions of these Regulations conflict with or overlap with other regulations, ordinances and statutes, the regulation, ordinance or statute which imposes the more stringent requirement or restriction shall prevail.

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.

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

1. Considered as minimum requirements;
2. Liberally construed in favor of the governing body; and
3. Deemed neither to limit nor repeal any other powers granted under state statutes.

### Section 204. Coordination

The Board and the Floodplain Administrator shall coordinate the provisions of these Regulations with all other interested and affected political subdivisions, federal and state agencies, as required by A.R.S 48-3609 and 48-3610.

### Section 205. Definitions

In these Regulations, unless the context requires otherwise, the following words shall be used as set forth in this article:

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

**Active Alluvial Fan Hazard:** Active alluvial fan flooding is a type of flood hazard that occurs only on alluvial fans. It is characterized by flow path uncertainty so great that this uncertainty cannot be set-aside in realistic assessments of flood risk or in the reliable mitigation of the hazard. An active alluvial fan flooding hazard is indicated by three related criteria: (A) Flow path uncertainty below the hydrographic apex, (B) Abrupt deposition and ensuing erosion of sediment as a stream or debris flow loses its

competence to carry material eroded from a steeper, upstream source area, and (C) An environment where the combination of sediment availability, slope and topography creates a hazardous condition for which elevation on Fill will not reliably mitigate the risk.

**Administrative Floodway:** The Special Flood Hazard Area designated on either the Flood Insurance Rate Maps (FIRM) or flood management maps as areas that are subject to local regulation requirements. These areas may include Active Alluvial Fan Flooding, Alluvial Fan High Hazard Area Flooding, Inactive Alluvial Fan Flooding, and Conveyance Corridors. These areas are designated as the corridors that must be reserved to maintain the continuity of flow and sediment for the one (1) percent flood event without causing cumulative adverse impact to adjacent properties.

**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 in the valley floors and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition, and channel migration.

**Alluvial Fan Flooding:** Flooding occurring on the surface of an Alluvial Fan that originates at the apex and is characterized by high velocity flows, sediment transport and deposition, and unpredictable flow paths.

**Alluvial Fan High Hazard Area (AFHH):** An area of active Alluvial Fan Flooding that is reserved to convey and receive sediment and floodwater without altering and thereby increasing the distribution of hazard across the fan to inactive areas and to areas downslope.

**Alluvial Fan Uncertain Flow Distribution Area (AFUFD):** A transitional area for sheet flooding and channelized flow located below the AFHH area.

**Approximate Alluvial Fan Floodways (AAFF):** Major conveyance corridors defined within AFUFD and AFZA areas for unimpeded through flow of floodwater and sediment.

**Alluvial Fan Zone A (AFZA):** An area of inactive Alluvial Fan Flooding characterized by flooding along stable flow paths and sheet flow or sheet flooding. These stable flow paths may still be subject to erosion hazards, channel bed and bank scour, and deposition.

**Approximate Study:** A graphic illustration of a delineation of the floodplain by the Floodplain Administrator made from the most reliable sources available where neither a floodplain nor a floodway has been determined by detailed methodology.

**Apex:** A point on an Alluvial Fan below which the flow of the major stream that formed the fan becomes unpredictable and Alluvial Fan Flooding may occur.

**Appeal:** A request for a review of the Floodplain Administrator's interpretation of any provision of these Regulations, or any determination made under these Regulations.

**Area Drainage Master Study (ADMS):** A study to develop hydrology for a watershed, to define watercourses, identify potential flood problem areas, drainage problems and recommend solutions and standards for sound floodplain and stormwater management. The ADMS will identify alternative solutions to a given flooding or drainage problem.

**Area Drainage Master Plan (ADMP):** A plan that identifies the preferred alternatives of those identified in an ADMS. An ADMP provides minimum criteria and standards for flood control and drainage relating to land use and Development.

**Area of Jurisdiction:** The 100-year Delineated Floodplains in the incorporated and unincorporated areas of Maricopa County, including public lands, excluding those incorporated areas of cities or towns that have elected to assume floodplain management powers and duties pursuant to A.R.S 48-3610. For Floodplain Management purposes, Area of Jurisdiction includes watercourses or areas designated by the Floodplain Administrator as Special Flood Hazard Areas as authorized in A.R.S. 48-3609(A) with contributing watersheds with flows greater than 50 cfs in the unincorporated areas of the county.

**Area of Shallow Flooding:** An area with flood depths from one to three feet where a clearly defined channel does not exist, the path of flooding is indeterminate, and where ponding may be evident.

**Backfill:** The placement of Fill Material within a specified depression, hole or excavation pit below the surrounding adjacent ground level, as a means of improving flood water conveyance, or to restore the land to the natural contours existing prior to excavation.

**Basement:** The lowest level or story of any area of a Building that has its floor sub grade (below ground level) on all sides.

**Base Flood or One-Hundred-Year Flood:** A flood that has a one percent chance of being equaled or exceeded in any given one-year period.

**Base Flood Elevation:** The water surface elevation produced by a base flood or one hundred year flood.

**Breakaway Wall:** A wall that is not part of the Building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the Building or the supporting foundation system.

**Board:** The Board of Directors of the Flood Control District of Maricopa County.

**Building:** A Structure affixed to the land having a roof supported by columns or walls built for housing, shelter or enclosure of persons, animals, or property of any kind.

**Clearing/Grubbing:** Removal of vegetation without disturbance of existing land surface contours.

**Conveyance Corridor:** A land area adjoining a body of water or adjacent to or located partially or wholly within a Floodplain which due to the soil instability, is likely to suffer flood related erosion damage. Conveyance corridors are areas that may not be defined by traditional encroachment methods due to directional changes when trying to achieve the increase in base flood of one foot or less.

**Community:** Any state, area or political subdivision thereof, or any Indian tribe or authorized tribal organization who is charged with the authority to implement and administer laws, ordinances and regulations for that community.

**Community NFIP Coordinator:** For Communities who have delegated that the District shall assume powers and duties as authorized in 48-3610.1(D), each Community shall appoint a Community Official to coordinate with the District's staff for providing floodplain management responsibility to verify that the Community's participation in the National Flood Insurance Program is maintained and remains in good standing through adoption and enforcement of these Regulations.

**Compensation of Flood Volume Displacement:** The replacement of the quantity of stormwater volume below the Base Flood Elevation that could be lost due to import of Fill by the proposed Development.

**Cumulative Substantial Damage:** The total of all repairs to a repetitive loss Structure shall not cumulatively increase the market value of the Structure more than 50 percent of the market value during the life of the Structure. This term does not, however, include either:

Any project for improvement of a Structure to correct existing violations of 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

Any repair of flood damage to "historic Structure," provided the repair will not preclude the Structure's continued designation as a "historic Structure."

**Cumulative Substantial Improvement:** Improvements, modifications, or additions to existing Buildings are counted cumulatively for at least five (5) years and reconstruction and repairs to damaged Buildings are counted cumulatively for at least five (5) years. When the improvements, modifications,

additions, reconstruction or repairs reach the 50% substantial improvement threshold, the Structure must be brought into compliance.

**Delineated Floodplain:** A graphic illustration of the area susceptible to inundation by a 100-year flood based upon the results of an authorized study that is included on either the Flood Management Maps for Maricopa County or the Flood Insurance Rate Maps, or both.

**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, drilling operations, and storage of materials and equipment located within the Special Flood Hazard Area.

**District:** The Flood Control District of Maricopa County.

**Dwelling:** A residential Building intended for human habitation.

**Enclosure:** That portion of a Building that is below the residential lowest floor and is above ground.

**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 landmass.

**Erosion Control Zone:** A land area adjoining a body of water or adjacent to or located partially or wholly within a Delineated Floodplain which due to the soil instability, is likely to suffer flood related erosion damage.

**Erosion Hazard Zone Delineation and Development Guidelines:** The document developed by the District to aid in identifying and delineating Erosion Control Zones and Erosion Setbacks.

**Erosion Setback:** The minimum horizontal distance between a Structure and a channel bank necessary to protect the Structure from flood related erosion damage.

**Exempt Use:** Any use of the Delineated Floodplain specifically exempted from these Regulations by applicable law.

**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, construction of streets and either final site grading or the pouring of concrete slabs) was completed before the August 8, 1973 effective date of the floodplain management regulations adopted by the community.

**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).

**Fill:** The placement of Fill Material at a specified location to bring the ground surface up to a desired elevation.

**Fill Material:** Natural sand, dirt, soil and rock. For the purposes of Floodplain Management, Fill Material may include concrete, cement, soil cement, brick or similar material as approved by the Floodplain Administrator on a case-by-case basis.

**Flood or Flooding:** A general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of flood waters; (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 Control Advisory Board:** A Board of seven members appointed by the Board of Directors. Five members shall be resident taxpayers and qualified electors of the District, at least three of whom shall be residents of the cities in the District. At least one of the Board members who are residents of cities shall be a resident of the largest city in the District. The city engineer of the largest city in the District and the chief engineer or manager of a major irrigation or agricultural improvement District, or their representatives, shall be ex officio members of the advisory Board with all rights and privileges granted to other Board members.

**Flood Hazard Zone:** Any land area located partially or wholly within a Delineated Floodplain susceptible to flood related damage as designated on the Floodplain Management Maps. Such Flood Hazard Zones may include but not limited to areas highly susceptible to erosion, stream meander sensitivity, moveable bed, scour, wave action, and subsidence.

**Flood Insurance Rate Map (FIRM):** An official map on which the Federal Insurance Administration has delineated both the 100-year flood Special Flood Hazard Areas and the risk premium zones applicable to a community.

**Flood Insurance Study:** The official report provided by the Federal Insurance Administration. The report includes flood profiles and Base Flood Elevations.

**Flood Management Map:** An official map, which can be either hard copy or in electronic format, for Maricopa County on which the Floodplain Administrator has Delineated Floodplains and other flood related Flood Hazard Zones for the purpose of Floodplain administration.

**Floodplain:** The area adjoining the channel of a watercourse susceptible to inundation by a base flood including areas where drainage is or may be restricted by man made Structures that have been or may be covered partially or wholly by flood water from the one hundred year flood.

**Floodplain Administrator:** The individual appointed by the Board to administer and enforce these Regulations.

**Floodplain Clearance:** Review and approval of a use of property in or adjacent to a Delineated Floodplain or other delineated flood related hazard zone for which a Floodplain Use Permit is not required as specified in Section 505 and Section 506.

**Floodplain Regulations:** These Regulations and other codes, ordinances and regulations adopted pursuant to the authority granted in A.R.S 48-3603 through 48-3628 relating to the use of land and construction within a Delineated Floodplain and Floodway or other Special Flood Hazard Areas.

**Floodplain Use Permit:** A permit that must be obtained from the Floodplain Administrator prior to commencement or continuance of any non-exempt use within the Area of Jurisdiction.

**Flood Proofing:** Any combination of structural and non-structural additions, changes or adjustments to Structures that reduce or eliminate flood damage to real estate or improved property, water and sanitary facilities, Structures and their contents.

**Floodway:** The channel of a river or other watercourse and the adjacent land areas necessary in order to discharge the one hundred year flood without cumulatively increasing the water surface elevation more than one foot.

**Floodway Fringe:** The areas of a Delineated Floodplain adjacent to the Floodway where encroachment may be permitted.

**Grading:** Disturbance of existing land contours.

**Hazardous Waste:** Garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, or other discarded materials, including solid, liquid, semisolid or contained

gaseous material, resulting from industrial, commercial, mining, and agricultural operations or from community activities that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating irreversible illness, or pose a substantial present or potential hazard to human health or the environment if improperly treated, stored, transported, disposed of or otherwise managed, or any waste identified as hazardous pursuant to A.R.S. 49-922. Hazardous Waste does not include solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under 402 of the Federal Water Pollution Control Act (P.L. 92-500; 86 STAT. 816) as amended, or source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954 (68 STAT. 919), as amended.

**Highest Adjacent Finished Grade:** The highest finished ground elevation after construction next to the walls of a Structure.

**Highest Adjacent Natural Grade:** The highest natural elevation of the ground surface prior to construction next to the proposed walls of a Structure.

**Historic Structure (44 CFR 59.1):** Any Structure that is:

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

Certified or preliminarily determined by the Secretary 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;

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

Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by A.) an approved state program as determined by the Secretary; or B) directly by the Secretary in states without approved programs.

**Inactive Alluvial Fan:** An Alluvial Fan where flood water typically is within incised channels and adjacent stable land.

**Landfill:** See "Solid Waste Landfill"

**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 that consists of a levee, or levees, and associated Structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

**Lowest Floor:** The Lowest Floor of the lowest enclosed area (including 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 these Regulations.

**Market Value:** Market Value is determined by estimating the cost to replace the Structure in new condition and adjusting that cost figure by the amount of depreciation that has accrued since the Structure was constructed. 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. 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.

**Mean Sea Level:** For purposes of the NFIP, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's FIRM are referenced.

**Mobile/Manufactured Home:** A Structure transportable in one or more sections that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For Floodplain management purposes, the term "Mobile/Manufactured Home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days. For flood insurance purposes the term "Mobile/Manufactured Home" does not include park trailers, travel trailers, and other similar vehicles.

**Natural and Beneficial Functions of Floodplains:** Includes, but is not limited to the following: natural flood and sediment storage and conveyance, water quality maintenance, groundwater recharge, biological productivity, fish and wildlife habitat, harvest of natural and agricultural products, recreation opportunities, and areas for scientific study and outdoor education.

**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 FIRM 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.

**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.

**Nonconforming Use:** The use of any land, Building or permanent Structure lawfully existing either on the effective date of the adopted Floodplain delineation in which the land, Building or permanent Structure is located, or August 3, 1984, the effective date of A.R.S. 48-3601 et. seq., whichever is the earlier date.

**One-Hundred Year Flood:** The flood having a one percent chance of being equaled or exceeded in any given year. (See Base Flood definition)

**Obstruction:** Anything in, along, across or projecting into any watercourse that 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, 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.

**Person:** An individual or his agent, firm, partnership, association, corporation, municipality, or agent of the aforementioned groups, or this State or its agencies or political subdivisions.

**Piedmont Assessment Manual:** The document developed by the District to aid in the identification and delineation of Active and Inactive Alluvial Fan flood hazard areas.

**Policies and Standards:** The document developed by the District (Drainage Policies and Standards for Maricopa County) to provide technical guidance for application of the Floodplain Regulation and Drainage Regulations for Maricopa County.

**Recreation Vehicle:** Any vehicle or portable unit designed for living, sleeping, housekeeping or office purposes that is: A) not more than forty (40) feet in length or eight (8) feet in width; B) transportable on its own chassis; and c) maintained in a readily transportable condition at all times. This definition includes motorized and non-motorized vehicles, travel trailers and camping trailers, but does not include Mobile/Manufactured Homes or Buildings as defined by these Regulations.

**Regulatory Flood Elevation:** The elevation which is one (1) foot above the base flood elevation for a watercourse and one (1) foot above the height of the effective outfall or the height of the backwater feature for ponding areas, whichever is greater. Where a Floodway has been delineated, the base flood elevation is the higher of either the natural or encroached water surface elevation of the 100-year flow.

**Sand and Gravel Permitting Guideline:** The document developed by the District to aid in preparing permit applications for sand and gravel operations.

**Shallow Flooding:** Area of flooding with average depths of one (1) to three (3) feet.

**Solid Waste:** Any garbage, trash, rubbish, refuse, sludge from a waste treatment plant, water supply treatment plant or pollution control facility and other discarded material, including solid, liquid, semisolid or contained gaseous material but not including domestic sewage or Hazardous Waste.

**Solid Waste Landfill:** Either a public or private facility at which Solid Waste is placed on or in land for the purpose of long-range storage or disposal. Solid Waste Landfill does not include a land application unit, surface impoundment, injection well, compost pile or agricultural on-site disposal areas covered under A.R.S 49-766.

**Special Flood Hazard Area:** Land in a Floodplain subject to a one-percent or greater chance of flood in any given year. These areas are designated as Zone A, AO, AE or AH on the FIRM or Floodplain Management Maps and other areas determined by the criteria adopted by the Director of the Arizona Department of Water Resources.

**Start of Construction:** Includes substantial improvement, 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 of the permit date. 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.

**State Standards:** Documents defining standards for Floodplain management as adopted by the Director of the Arizona Department of Water Resources pursuant to A.R.S. 48-3605(A).

**Structure:** Anything affixed to the ground or attached to something located on the ground, including but not limited to fences, walls, berms, levees, Fill, gas or liquid storage tanks, Buildings and Mobile/Manufactured Homes as defined by these Regulations, or other features that have the potential to obstruct, divert or retard flood flows.

**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 fifty percent (50%) of the market value of the Structure before the damage occurred, as determined by a duly licensed appraiser.

**Substantial Improvement:** Any repair, rehabilitation, addition or other improvement of a Structure, the estimated cost of which as determined by a licensed contractor equals or exceeds fifty percent (50%) of

the fair market value or the appraised value, whichever may be higher, of the Building or Structure either: 1) before the improvement or rehabilitation is started, or 2) if the Building or Structure has been damaged by any origin and is being restored, before the damage occurred. In the case of Structures that have been damaged, the value of the rehabilitation or restoration must include the fair market cost of all material and labor required to return the Structure to its pre-damaged condition, regardless of the actual work performed. "Substantial Improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the Building or Structure commences, whether or not that alteration affects the external dimensions of the Building or Structure. The term does not include any project for improvement of a Building or Structure which has been identified by the local Building official to correct violations of existing state and local health, sanitary or safety code requirements; nor does it include any alteration of a Building or Structure listed on the National Register of Historic Places or State Inventory of Historical Places.

**Variance:** A grant of relief from the requirements of these Regulations that permits construction or other uses of property in a manner that would otherwise be prohibited or restricted by these Regulations.

**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.

**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.

**Watercourse Master Plan (WCMP):** A hydraulic plan for a Watercourse that examines the cumulative impacts of existing Development and future encroachment in the Floodplain and future Development in the watershed on potential flood damages and/or erosion hazards, and establishes technical criteria for subsequent Development so as to minimize potential flood damages for all flood events up to and including the one hundred year flood.

**Zone A:** An area with an approximate delineation of a Floodplain. Floodway boundaries and Base Flood Elevations have not been determined.

**Zone AE:** An area with a detailed delineation of a Floodplain and in which Base Flood Elevations have been determined.

**Zone AH:** An area with Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations have been determined.

**Zone AO:** An area with Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average flood depths have been determined. For areas of Alluvial Fan flooding, velocities may have also been determined.

**Zone D:** Areas in which flood hazards are undetermined, but possible.

**Zone X (shaded):** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from the 100-year flood.

**Zone X (unshaded):** Areas to be determined outside the 500-year Floodplain.

## ARTICLE III. FLOOD HAZARD BOUNDARIES

### Section 301. Minimum Area for Floodplain Jurisdiction

All zones designated A, AH, AO, or AE on the current flood insurance study, the flood insurance rate maps and Flood Management maps for Maricopa County, Arizona, shall constitute the minimum area for management under these regulations.

### **Section 302. Other Delineations**

In areas without delineated Flood Hazard Zones A, AH, AO, or AE, where Development is imminent or ongoing, the District may require developers of land to delineate Floodplains to be administered under these Regulations.

1. For any Development, the developer shall delineate the 100-year Floodplains and Erosion Setbacks per Arizona State Standards or other Guidelines, Policies and Standards developed by the District for this purpose. Such delineations shall be consistent with criteria established by the Director, State Department of Water Resources and may be forwarded to the Federal Emergency Management Agency for adoption.
2. Per 44 CFR ch.1 et seq., if the State of Arizona has not adopted floodplain regulations, any Development on state land shall comply with local regulations.
3. The District may forward to the Federal Emergency Management Agency other delineations obtained from other sources, provided they are determined to be consistent with criteria established by the Director of the Arizona Department of Water Resources.
4. Other sources include but are not limited to (1) a developer of Floodplain property, (2) State or County agency, (3) any agency which must delineate a Floodplain as a result of completion of a Flood Control Structure, or (4) the Federal Emergency Management Agency.
5. Such delineations shall be submitted to the Floodplain Administrator to be reviewed for technical adequacy. The Floodplain Administrator may forward such delineations to the Arizona Department of Water Resources and to the Federal Emergency Management Agency with a recommendation for approval or denial.
6. All delineations approved by the Federal Emergency Management Agency are hereby adopted as referenced and shall be included on the Flood Management Maps for Maricopa County.

### **Section 303. Basis for Establishing the Areas of Special Flood Hazard**

The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in scientific and engineering report entitled "The Flood Insurance Study for Maricopa County, dated July 2, 1979" with accompanying Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway maps (FBFM), dated July 2, 1979 and all subsequent amendments and/or revisions, including Digital Flood Insurance Rate Maps (DIRMs), are hereby adopted by reference and declared to be a part of these Regulations. This Flood Insurance Study (FIS) and attendant mapping is the minimum area of applicability of these Regulations and may be supplemented by studies for other areas that allow implementation of these Regulations and are recommended to the Board of Directors by the Floodplain Administrator. The Board, within its Area of Jurisdiction shall delineate or may require developers of land to delineate, as authorized by A.R.S. 48-3609, 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 (FEMA) and the Director of the Arizona Department of Water Resources. The FIS, FIRMs and FBFMs are on file at the Flood Control District of Maricopa County, 2801 W. Durango St., Phoenix, Arizona, 85009.

See Addendum for the communities for which the Flood Control District performs Floodplain Management.

### **Section 304. Other Flood Hazard Boundaries**

Whenever the District determines through a flood hazard study, Watercourse Master Plan or other flood related study authorized by the Board that a flood related hazard exists due to such factors as high velocity flows, erosion, sediment transport, deposition, unstable soil conditions or land subsidence, the

Floodplain Administrator shall designate such hazard areas on the Flood Management Maps for Maricopa County. The Floodplain Administrator shall establish technical criteria and enforce rules and regulations for subsequent Development that meet or exceed criteria adopted by the Director of Arizona Department of Water Resources and when appropriate such studies may be forwarded to the Federal Emergency Management Agency.

### **Section 305. Publication of Flood Hazard Boundaries**

All flood hazard designations as authorized by these Regulations including but not limited to Erosion Control Zones, Watercourse Master Plans, moveable bed Watercourses and other special flood related designations and, including all zones A, AH, AO, and AE on the Flood Insurance Rate Maps for Maricopa County, Arizona, shall be shown on the official Flood Management Maps for Maricopa County.

For Floodplain Management purposes, areas that are under current flood hazard study shall be designated by the Floodplain Administrator as preliminary delineations on the Flood Management Maps for Maricopa County as the best technical data available pending final approval of the study by the Federal Emergency Management Agency.

### **Section 306. Public Notice**

Whenever a flood hazard identification study has been authorized by the Board, the District shall publish a notice concerning the intent and scope of the study and notify affected adjacent political jurisdictions. The District shall also mail information concerning the study or hold a public meeting for the affected property owners.

### **Section 307. Determination in Case of Dispute**

If the boundary of any floodplain with a Zone A Delineation, Floodway, Floodway Fringe, Area of Shallow Flooding including Ponding Areas, Alluvial Fans or other flood hazard boundaries is in dispute, the Floodplain Administrator shall determine the boundary using the best technical data available. In cases where a revision of the Floodway becomes necessary, the required public notice and public hearing process shall be followed and the necessary information shall be submitted to the Federal Emergency Management Agency.

## **ARTICLE IV. ALLOWABLE USES**

### **Section 401. Allowable Uses within Zone AE Floodway**

Uses for which a Floodplain Use Permit may be granted include:

1. Drive-in theaters, roadside stands, signs and billboards.
2. Operations for extraction of sand, gravel and other materials.
3. Marinas, boat rentals, docks, piers and wharves.
4. Railroads, privately owned and maintained streets, bridges, utility transmission lines and pipelines.
5. Privately owned and maintained dikes and culverts.
6. Stockyards, corrals and shade Structures.
7. Private and public recreational uses including, but not limited to, golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, parks, wildlife and nature preserves, game farms, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding trails.

8. Agricultural uses including, but not limited to, general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, sod farming, and wild crop harvesting.
9. Industrial-commercial uses including, but not limited to, loading areas, airport landing strips, and parking areas.
10. Accessory residential uses including, but not limited to, lawns, gardens, parking areas and play areas.

### **Section 402. Allowable Uses within Zone AE Floodway Fringe**

All new uses and substantial improvements to existing Structures within a Floodway Fringe (AE Zones) specified in Sections 800 through 810 below require a Floodplain Use Permit issued by the Floodplain Administrator subject to the provisions of Section 501.

Uses for which a Floodplain Use Permit may be granted:

1. Any use permitted in Section 401.
2. Structures and Buildings, including dwellings and mobile/manufactured homes, recreational vehicles and other residential uses.
3. New and replacement water supply systems, water treatment and sewage collection and disposal systems provided that they are designed to prevent or minimize floodwater contamination during the base flood.
4. New and replacement sanitary sewage systems, provided that they are designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, unless otherwise allowed by a permit in conformance with the Federal Water Pollution Control Act.
5. Septic systems and Solid Waste Landfills, whether public or privately owned, provided that they are located in such a way as to avoid impairment to them or contamination from them during flooding and provided that no part of a Solid Waste Landfill is within one-half mile of a one-hundred year Floodplain that has one-hundred year flows in excess of twenty-five thousand cubic feet per second as determined by the Federal Emergency Management Agency.
6. Any other uses which will not be subject to substantial flood damage and will not cause a hazard to life or property or to the public. These may include uses that can be readily removed from Delineated Floodplain areas during times of flooding.

### **Section 403. Allowable Uses within Zone A**

Any use permitted in Section 401 and Section 402 that will not increase the threat of flooding to surrounding property.

Any other use not specifically named in Sections 401 or 402 provided the applicant submits an analysis of the Zone A Floodplain consistent with Article VIII. Such analysis shall be subject to review and approval by the Floodplain Administrator prior to issuance of a Floodplain Use Permit and may be forwarded to the State Department of Water Resources and the Federal Emergency Management Agency in the manner described in Article III, Section 303.

### **Section 404. Allowable Uses within Zone AH Ponding**

Any use permitted in Section 401 and Section 402 that will not increase the threat of flooding to surrounding property. Additional criteria include:

1. Any other use not specifically named in Sections 401 or 402 provided the applicant submits an analysis of the Zone AH Floodplain consistent with Article VIII. Such analysis shall be subject to review and approval by the Floodplain Administrator prior to issuance of a Floodplain Use Permit

and may be forwarded to the State Department of Water Resources and the Federal Emergency Management Agency in the manner described in Article III, Section 303.

2. Require adequate drainage paths around Structures on slopes to guide floodwaters around and away from proposed Structures.

### **Section 405. Allowable Uses within Zone AO**

Any use permitted in Section 401 and Section 402 that will not increase the threat of flooding to surrounding property. Additional criteria include:

1. Require adequate drainage paths around Structures on slopes to guide floodwaters around and away from proposed Structures.

### **Section 406. Allowable Uses in Other Flood Hazard Zones**

This article regulates uses located in Flood Hazard Zones designated by the Floodplain Administrator not specifically regulated elsewhere in these Regulations including but not limited to erosion control zones, Watercourse Master Plans, Area Master Drainage Plans, moveable bed watercourses and other special flood related designations determined based upon authorized studies. Additional criteria include:

1. New uses and substantial improvement to existing uses shall require a Floodplain Use Permit and are subject to the provisions of Article IV. Issuance of a Floodplain Use Permit does not exempt the holder of the Floodplain Use Permit from any additional requirements necessary to obtain flood insurance.
2. Uses for which a Floodplain Use Permit may be granted are: Uses permitted elsewhere in these Regulations provided the applicant submits technical information which demonstrates that neither the use nor the specific flood hazard will be adversely affected by such use.

## **ARTICLE V. FLOODPLAIN USE PERMITS**

### **Section 501. Floodplain Use Permit Required**

A Floodplain Use Permit shall be obtained prior to commencing any new or proposed addition, alteration or change of any Building, Structure, land or other use within a Delineated Floodplain, except as exempted by applicable law.

A Floodplain Use Permit shall be obtained in all delineated floodplains prior to commencing Development in the unincorporated county and in a watercourse or contributing watershed that has flow greater than 50 cfs during a 100-year event unless a Drainage Clearance has been issued.

Floodplain Use Permits shall be obtained for improvements, modifications, reconstruction, repair or additions to existing Buildings. When the improvements, modifications, additions, reconstruction or repairs reach the 50% Substantial Improvement threshold, then the entire structure must be brought into compliance. The value of the improvements, modifications, reconstruction, repair or additions is counted cumulatively for at least five (5) years to determine whether the Substantial Improvement threshold has been met.

### **Section 502. Application Requirements**

The applicant shall submit any information that the Floodplain Administrator considers necessary in making determinations required by these Regulations. The applicant may also be required to provide certification that all requirements of the Floodplain Use Permit have been met.

The applicant must submit all items pertinent to the review and approval of the Floodplain Use Permit within 90 calendar days of the original application date. Submittal of information beyond the 90-day

period may be treated as a new application and will be subject to all submittal/payment procedures. If the applicant is unable to meet the 90-day deadline for submittal of required items, and would like the District to continue processing the request, he/she must request an extension of the deadline. This request must be submitted in writing and must provide (1) the reason why the data cannot be submitted within the requested timeframe, and (2) a new date for the submittal of the data. If the District requests additional data, the data must be submitted by the applicant within 90 calendar days from the date the data was requested. Fees will be forfeited for any request for which either the requested data or a written extension request is not received within 90 calendar days.

### **Section 503. Permit Conditions**

The Floodplain Administrator may place a time limit and any other conditions or restrictions designed to reduce or eliminate potential hazards to life or property on the permit.

As a condition of issuance of this permit:

1. The Floodplain Administrator shall review proposed Development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law and the permit is valid upon receipt of copies of required permits.
2. The applicant may be required to execute deed restrictions running with the land or to post performance bonds, assurances or other security to guarantee the performance of the conditions and restrictions imposed.
3. The Floodplain Use Permit is subject to review, suspension and revocation for any substantial deviation from the approved plan or for any violation of the Floodplain Regulation or any stipulation or other terms and agreements made a part of the Floodplain Use Permit.
4. The Floodplain Use Permit will automatically expire if construction has not commenced within one (1) year of permit issuance unless an extension has been requested in writing and acknowledged by the District.
5. The rights and responsibilities under a Floodplain Use Permit are non-delegable and cannot be transferred without the written authorization of the District. A Floodplain Use Permit cannot be obtained without the express, written consent and agreement of the owner of the land for which the use permit is sought.

### **Section 504. Elevation/Floodproofing Certificate**

An Elevation Certificate Form prepared by an Arizona Registered Professional Engineer, or Land Surveyor shall be submitted in a form acceptable to the Floodplain Administrator prior to occupancy or use of any Building within a Flood Hazard Zone designated on the Flood Management Maps, except those uses exempted by applicable law.

1. A Floodproofing Certificate Form prepared by an Arizona Registered Civil Engineer shall be submitted for any Development that has not been elevated up to the Regulatory Flood Elevation as approved by the Floodplain Administrator.
2. The required elevation certificate within a Zone AO may be completed by District staff as approved by the Floodplain Administrator.
3. The Floodplain Administrator shall maintain a record of all Elevation and Floodproofing Certificates and may record such certification with the office of the Maricopa County Recorder in a manner so that it appears in the chain of title of the affected parcel of land.

### **Section 505. Exemptions**

In accordance with A.R.S 48-3609, nothing in these Regulations shall affect:

1. Existing legal uses of property or the right to continuation of such legal uses. However, if a legal nonconforming use of land, or a Building or Structure is discontinued for twelve consecutive months or destroyed to the extent of fifty percent (50%) of its market value, as determined by a competent appraiser, any further use shall comply with these Regulations.
2. Reasonable repair or alteration of property for the purposes for which the property was legally used on August 3, 1984 or on the date any regulations affecting such property take effect, except that any alteration, addition, rehabilitation or repair to a legal nonconforming Building or Structure regardless of the cost of the work performed as determined by a licensed contractor which would result in increasing its flood damage potential by fifty percent (50%) or more of the value of such Building or Structure prior to alteration, addition, rehabilitation or repair as determined by a competent appraiser shall be either floodproofed or elevated to or above the Regulatory Flood Elevation. On February 25, 1974, the Maricopa County Board of Directors and the Board of Supervisors adopted the 1974 Floodplain Regulations for unincorporated areas of Maricopa County with certain amendments recommended by the Planning and Zoning Director and the sand and gravel industry's suggested revisions to be effective on that day. This is the date used for purposes of establishing existing legal nonconforming use on all properties. The Floodplain Regulations have been subsequently revised and amended in response to changes in the State Statutes and Code of Federal Regulations pertaining to the National Flood Insurance Program.
3. Reasonable repair of Structures constructed with the written authorization required by A.R.S 48-3613.
4. Facilities constructed or installed pursuant to a certificate of environmental compatibility issued pursuant to Title 40, Chapter 2, Article 6.2 of the Arizona Revised Statutes.

In accordance with A.R.S 48-3613, written authorization shall not be required, nor shall the Board prohibit the following except that before any construction authorized by this subsection may begin, the person shall submit plans for the construction to the Floodplain Administrator for review and comment.

1. Construction of bridges, culverts, dikes and other Structures necessary to the construction of public highways, roads and streets intersecting or crossing a watercourse.
2. Construction of dams for the conservation of flood waters as permitted by Title 45, Chapter 6 of the Arizona Revised Statutes and construction of storage dams for watering livestock or wildlife and Structures on the 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.
3. Construction of tailing dams and waste disposal areas used in connection with mining and metallurgical operations. This paragraph does not exempt those sand and gravel operations that may divert, retard or obstruct the flow of waters in a watercourse from complying with and acquiring authorization pursuant to these Regulations.
4. Any political subdivision from exercising powers granted to it under A.R.S Title 48, Chapter 18, Article 10.
5. 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.
6. 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 the statutory exemptions, any other use or Development within the jurisdiction of these Regulations as may be determined by the Floodplain Administrator to be exempt if the applicant for the exemption satisfies the Floodplain Administrator that such use is not prohibited by any other regulation, code or ordinance, and has a low flood damage potential, will not cause a change in watercourse

mechanics including but not limited to obstruction, diversion or other changes detrimental to the natural flow of water and will not cause a hazard to life or property.

Exemptions to these rules are as set out in A.R.S. 48-3609(H) and A.R.S. 48-3613(B) & (C).

### **Section 506. Floodplain Clearance**

Before any construction authorized under Section 505 may begin, plans for construction shall be submitted to the Floodplain Administrator for review and comment and to determine whether a Floodplain Clearance or any of the exemptions set forth in this Section are applicable. A Floodplain Clearance may be issued for Structures located outside the Floodplain and the Erosion Control Zone; or for other incidental uses not requiring a Floodplain Use Permit.

### **Section 507. Personal Liability**

The exemptions contained in Section 505 do not relieve any person from liability if that person's actions cause flood damage to any other person or property.

## **ARTICLE VI. FLOODPLAIN REVIEW BOARD, APPEALS AND VARIANCES**

### **Section 601. Floodplain Review Board**

Pursuant to the authority granted in A.R.S 48-3612, the Board of Directors hereby appoints the Flood Control Advisory Board as the Floodplain Review Board to sit in review and make decisions in accordance with A.R.S 48-3612. The members of the Floodplain Review Board shall serve without compensation except that their reasonable and necessary expenses incurred on Board business may be reimbursed.

The Floodplain Review Board shall elect a chairperson and a vice chairperson from among its own members who shall have power to administer oaths and to take evidence.

The Floodplain Review Board shall by resolution fix the time and place of its meetings. The meetings shall be open to the public. Minutes of its proceedings and records of its interpretations, Variances and other official actions shall be kept and filed in the office of the Flood Control District as a public record.

The Board of Directors shall adopt rules of procedure consistent with the provisions of these Regulations for the conduct of Floodplain Review Board business including establishment of a fee schedule to cover administrative costs incurred in the processing of Appeals, Floodplain Use Permits, Floodplain Clearances, Floodplain Variances, plan reviews and performance bonds.

Property shall be posted pursuant to procedures adopted by the Floodplain Review Board.

The Floodplain Review Board may prescribe, in connection with the grant of any Variance or appealed use permit, conditions determined necessary to fully carry out the provisions and intent of the Regulations.

If the Floodplain Review Board has cause to believe, after approval of a Variance, that any stipulations or conditions may have been violated, it may set a hearing for the purpose of determining possible revocation of the Variance for such violation. The Floodplain Review Board may revoke the Variance for finding a violation of the stipulations or conditions, or it may grant a limited time within which to correct the violation in order to avoid revocation of the Variance.

### **Section 602. Appeals**

Appeals of any decision of the Floodplain Administrator to the Floodplain Review Board shall be filed with the Floodplain Administrator within 30 days of the receipt of notice of the decision to be appealed,

or 60 days from the date of the decision whichever is earlier. The notice of appeal shall be in writing on a form provided by the Floodplain Administrator and specify the grounds for appeal.

During the pendency of an appeal all existing Floodplain delineations shall remain in effect. All other matters regarding the proceeding shall be stayed during its pendency unless the Administrator certifies to the Floodplain Review Board that by reason of facts surrounding the application the stay would, in his or her opinion, cause imminent peril to life or property.

The Floodplain Review Board shall fix a time for hearing the appeal and give notice to the parties in interest and to the public as set forth herein. The Floodplain Review Board shall hear and decide the appeal within a reasonable time.

Any person aggrieved by a decision of the Floodplain Review Board may, within 30 days of such decision, appeal to the Board of Directors by filing a written notice of appeal with the Clerk of the Board on a form provided by the Floodplain Administrator. Said notice shall specify the grounds of the appeal. The Board of Directors shall conduct the appeal under such rules of procedure, as they shall adopt.

Any person aggrieved by a decision of the Board of Directors may file a special action in Superior Court of the State of Arizona to determine if an abuse of discretion by the Board of Directors, the Floodplain Review Board or the Floodplain Administrator may have occurred.

### **Section 603. Floodplain Variance**

Conditions for the issuance of a Variance:

1. A Variance may be issued by the Floodplain Administrator, Floodplain Review Board, or affirmed by the Board of Directors when all of the following criteria are met:
  - a. That no increase in the Base Flood Elevation would result;
  - b. That special circumstances, such as size, shape, topography, location or surroundings of the property, would cause the strict application of the Regulations to deprive the property of privileges enjoyed by similar property in the jurisdictional Floodplain;
  - c. That the Variance does not constitute a grant of special privileges inconsistent with the limitations on similar property in the jurisdictional Floodplain;
  - d. That the Variance requested is the minimum necessary, considering the flood hazard, to afford relief;
  - e. That there is a showing of good and sufficient cause;
  - f. That a determination that failure to grant the Variance would result in exceptional hardship to the applicant;
  - g. That granting the Variance will not result in additional threats to public safety, extraordinary public expense, create a nuisance, cause the victimization of or fraud on the public; and
  - h. That the Variance does not conflict with existing local laws or ordinances.
2. In addition to the above requirements, the Floodplain Administrator, Board of Directors or the Floodplain Review Board, may attach such conditions or restrictions to the granting of a Variance as it determines necessary to eliminate potential threats to public safety or to public or private property resulting from the granting of the Variance. The applicant, among other things, may be required to post performance bonds, assurances or other security to guarantee compliance with the conditions and restrictions imposed.
3. The burden of proof of compliance with the above conditions shall be on the applicant.

## **ARTICLE VII. RECORDATION/NOTIFICATION**

### **Section 701. Recordation/Notification of Variance**

Upon the granting of a Variance for the construction of a dwelling unit or commercial or industrial Structure, where the construction of such unit or Structure is otherwise contrary to these Regulations, the Board shall notify the grantee in writing that:

1. The issuance of the Variance may result in increased premium rates for flood insurance;
2. Construction below the Regulatory Flood Elevation will increase risks to life and property and flooding may occur by channel meander or by a more frequent flood or a larger flood than the 100-year flood event;
3. If the Structure is a dwelling unit or business, as defined by A.R.S. 26-321, the land upon which the Structure is located is ineligible for exchange of land pursuant to the flood relocation and land exchange program provided for by Title 26, Chapter 2, Article 2 of the Arizona Revised Statutes.
4. The original of the above written notice shall be recorded with the Maricopa County Recorder in a manner so that it appears in the chain of title of the affected parcel of land. Proof of such recordation shall be maintained on file with the District and be available to any agency requiring any subsequent permits.
5. The Floodplain Administrator shall maintain a record of all Variance actions. This record shall be included in the biennial report to the Federal Emergency Management Agency.

### **Section 702. Recordation of Flood Hazard Determination**

Upon approval of a Floodplain Use Permit, or when through the course of performing other authorized duties it is determined that any portion of a parcel of land is within a delineated Flood Hazard Zone, or a previously noticed parcel has been removed from the delineated Flood Hazard Zone, a notice of such determination may be recorded with the office of the Maricopa County Recorder in a manner so that it appears in the chain of title of the affected parcel of land. The District may also record the Floodplain Use Permit.

### **Section 703. Recordation of Floodplain Violations**

The District may cause to have recorded any notice of violation or non-compliance issued pursuant to Section 1102.

## **ARTICLE VIII. DEVELOPMENT STANDARDS**

### **Section 800. General Development Standards**

Section 800. See additional requirements for specific Flood Hazard Zones under that zone (Zone A, Zone AH or Zone AO).

General Development Standards (Applicable to all 100-year Floodplains except AE Floodway):

1. New construction or substantial improvement to any existing Structure shall be constructed with methods that minimize flood damage with materials and utilities resistant to flood damage.
2. Dwellings other than mobile/manufactured homes shall have the lowest floor elevated and all utilities, including ductwork, floodproofed up to or above the Regulatory Flood Elevation. The applicant shall provide an Elevation/Floodproofing Certificate prepared by an Arizona Registered Professional Engineer or Land Surveyor certifying that the elevation or floodproofing requirement has been met.

3. Mobile/manufactured homes including permanently placed Recreation Vehicles shall be elevated so that the bottom of the structural frame is at or above the Regulatory Flood Elevation and is anchored to prevent floatation, collapse or movement. Methods of anchoring may include, but not be limited to, use of over the top or frame ties to ground or foundation anchors. Specific requirements shall be as follows:
  - a. Over the top or frame ties shall be provided at each of the four corners of the mobile/manufactured home, with additional ties on each side at intermediate locations;
  - b. Mobile/manufactured homes more than 50 feet long require one additional tie per side;
  - c. All components of the anchoring system shall be capable of carrying a force of 4,800 pounds;
  - d. Adequate surface drainage and access for a hauler are provided;
  - e. If the mobile/manufactured home is elevated on piers, setbacks shall be sufficient to permit steps; pier foundations shall be placed in stable soil no more than ten feet apart, and reinforcement is provided for piers more than six feet above ground level. A scour analysis may be required when elevating on piers;
  - f. Any additions to the mobile/manufactured home shall be similarly anchored; and
  - g. Attached appliances and all utilities, including ductwork, shall be either elevated or floodproofed up to the Regulatory Flood Elevation.

The above requirements do not apply to units in storage, and may be waived by the Floodplain Administrator on a case by case basis for units placed for less than 180 consecutive days that are properly licensed and ready for highway use, or are on jacks or wheels with quick disconnect of utilities and have no permanently attached additions.

4. For all mobile/manufactured home parks and mobile/manufactured home subdivisions, an evacuation plan indicating alternate vehicular access and escape routes shall be filed with the Maricopa County Department of Emergency Management.
5. Buildings, other than dwellings or any type of residence may have the lowest floor below the Regulatory Flood Elevation provided that they shall be watertight with walls substantially impermeable to the passage of water and structural components and utilities, including ductwork, having the capacity of resisting the effects associated with a base flood. Designs for meeting this criteria shall be certified on a Flood Proofing Certificate by an Arizona Registered Professional Engineer or the design must meet or exceed the following minimum criteria: A minimum of two openings, on at least two sides, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. 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 they allow the automatic entry and exit of floodwaters.
6. All new construction and substantial improvements that fully enclose areas below the lowest floor that are solely for parking of vehicles, Building access or storage in an area other than a basement, and are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. The applicant shall provide a Flood Proofing Certificate by an Arizona Registered Professional Engineer certifying that the Flood Proofing requirements have been met, or the design shall meet the provisions of Section 504.
7. The applicant shall provide an Elevation/Flood Proofing Certificate by an Arizona Registered Professional Engineer or Land Surveyor to the Floodplain Administrator stating that the elevation or Flood Proofing requirement has been met. Whenever an Elevation or Flood Proofing Certificate is required, a separate certificate shall be furnished for each Building.
8. Recreation Vehicles (44 CFR 60.3(C)(14)): All recreation vehicles placed on site will either:

- a. Be on-site for fewer than 180 consecutive days, and be fully licensed and ready for highway use. A recreation vehicle is ready for highway use if it is on 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
  - b. Meet the permit requirements of Article V, Section 503 of these Regulations and the elevation and anchoring requirements for manufactured homes in Article VIII, Section 800.
9. Fill Material, if used to elevate Structures, shall meet all of the following standards:
  - a. The top of such Fill Material shall be at no point lower than the Base Flood Elevation.
  - b. Such Fill Material shall extend at least 5 feet beyond the walls or supporting frame of the Structure, or as approved by the Floodplain Administrator.
  - c. Fill Material shall be placed and compacted in accordance with the applicable Building code.
  - d. Fill Material shall not interfere with local drainage or tributary flow of the channel of any watercourse.
10. Fill Material proposed in excess of the amount and extent required herein shall be shown by the applicant to have no detrimental effect on the purposes of these regulations and the amount of Fill Material shall not be greater than is necessary to achieve the purpose for which it is intended as demonstrated by a plan submitted by the applicant indicating the uses to which the filled land will be put and the final dimensions and extent of the proposed Fill Material.
11. Adequate erosion protection shall be provided for Fill slopes exposed to moving floodwaters (slopes exposed to flows with velocities of up to five (5) feet per second (fps) during the base flood must, at a minimum, be protected by a permanent cover of grass, vines, weeds, or similar vegetation; slopes exposed to flows with velocities greater than five (5) fps during the base flood must, at a minimum, be protected by appropriately designed stone, rock, concrete, or other durable materials).
12. Fill Material for purposes other than Solid Waste Landfills shall not include solid waste, wood or other buoyant materials nor hazardous, toxic or deleterious material and shall be protected as needed against scour and erosion by riprap or other protective measures as approved by the Floodplain Administrator.
13. Permitted Landfills shall be protected against scour, erosion and contamination by and contamination of the 100-year flood event.
14. All subdivision proposals and other proposed new Developments greater than fifty (50) lots or five (5) acres, whichever is the lesser, shall include within such proposals Base Flood Elevation data.
15. In order to control erosion and preserve the natural and beneficial functions of the Floodplain, removal of vegetation shall be the minimum necessary for the Development.
16. Issuance of a Floodplain Use Permit does not exempt the holder of the Floodplain Use Permit from any additional requirements necessary to obtain flood insurance.
17. For Buildings elevated greater than five (5) feet, enclosures, including breakaway walls, below the Base Flood Elevation are prohibited. Screening and open latticework is not considered an enclosure. Applicant must sign a non-conversion agreement, agreeing not to enclose the area for habitable use.
18. Residential homes with a basement are not permitted within the 100-year Floodplain.
19. Sand & Gravel Development shall meet the requirements of this Article.
20. The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive or could be injurious to human, animal or plant life is prohibited.

21. Storage of other material or equipment may be allowed if not subject to major damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.
22. All preliminary subdivision proposals shall identify the Special Flood Hazard Area and the elevation of the base flood.
23. All final subdivision plans will provide the elevation(s) of proposed Structure(s) and pads. If the site is filled above the base flood, the final lowest floor and pad elevation shall be certified by a Registered Professional Engineer or Surveyor and provided to the Floodplain Administrator.
24. All subdivision proposals shall be consistent with the need to minimize flood damage.
25. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
26. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards.

### **Section 801. Development Standards within AE Floodway**

- A. No Structure, excavation or Fill Material (including Fill Material for roads, dikes, and levees), deposit, obstruction, storage of material or equipment or other uses shall be permitted which alone or in combination with existing or future uses, in the opinion of the Floodplain Administrator, would cause an increase in the Base Flood Elevations or flood damage potential. Additional Standards in AE Floodway are:
  1. Regulatory Flood Elevation is one (1) foot above the Floodway elevation or one (1) foot above the Base Flood Elevation, whichever is higher.
  2. Septic systems, whether public or privately owned, shall not be located wholly or partially within a Floodway.
  3. In accordance with A.R.S 49-772(A)(2) Solid Waste Landfills or any part of such facility, whether public or privately owned, shall not be located wholly or partially within a Floodway or within one-half mile of a one-hundred year Floodplain that has one hundred year flows in excess of twenty-five thousand cubic feet per second, as determined by the Federal Emergency Management Agency. In addition, A.R.S 49-772(C) applies to non-FEMA Floodplains.
  4. Any Fill Material proposed in the Floodway must be shown by the applicant to have no detrimental effect on the purposes of these Regulations. The amount of Fill Material shall not be greater than is necessary to achieve the purpose for which it is intended as demonstrated by a plan submitted by the applicant indicating the uses to which the Filled land will be put, the final dimensions, and the extent of the proposed Fill Material. Such Fill Material shall not include junk, trash, tires, garbage, wood or other buoyant materials, or hazardous, toxic or deleterious materials, and shall be protected against scour and erosion.
  5. Structures and uses permitted within the Floodway shall not include Buildings and shall have a low flood damage potential, shall be located so as to minimize obstruction to flood flows with any utilities floodproofed, and shall not be designed or utilized for human habitation.
  6. The processing or the outside storage of materials and equipment may be permitted if flooding would cause minimal damage to the material or equipment and such material or equipment is either non-buoyant or firmly anchored or located so as to prevent flotation or is maintained in a readily transportable condition so as to be readily removed from the area within the time available after flood warning.
  7. In order to control erosion and preserve the natural and beneficial functions of the Floodplain, removal of vegetation shall be the minimum necessary for Development.

- B. A Floodplain Use Permit for the extraction of sand and gravel or other materials within the Floodway shall be granted if the applicant shows that excavations will not have a cumulative adverse impact nor be of such depth, width, length, or location as to present a hazard to life or property or to the watercourse in which they are located, and that they will comply with any applicable Watercourse Master Plan adopted by the Board of Directors subject to the following conditions:
1. Plans of Development submitted in support of a permit application shall follow the Sand and Gravel Permitting Guidelines, when adopted, and the Erosion Hazard Zone Delineation and Development Guidelines, when adopted, in addressing the technical requirement of permitting.
  2. Excavations shall not be permitted so close to any floodway crossings, utility Structures or facilities as to cause or have the potential to cause an adverse effect on such crossings, utilities or similar facilities.
  3. No stockpiling of tailings, overburden or sand and gravel which may obstruct, divert, retard or disrupt the continuity of the natural flow of water shall be permitted, except as approved by the Floodplain Administrator in a Floodplain Use Permit.
  4. A plan of Development shall be submitted with an application for a Floodplain Use Permit to the Floodplain Administrator. The Floodplain Administrator will determine whether an engineered plan will be required and whether a sediment transport analysis is necessary, based upon the procedures outlined within the Sand and Gravel Permitting Guidelines, when adopted.
  5. The plan of Development shall be required to include a plan of reclamation to leave the land when the approved use is terminated in such a condition as to maintain stability of the floodway by backfilling, contouring, leveling, revegetation, removal of equipment and materials or other appropriate means. In addition to a plan of reclamation, a schedule of implementation of reclamation shall be included as part of the plan of Development for each site. Alternatively, the plan of reclamation shall be in accordance with the requirements of any applicable adopted Watercourse Master Plan. Failure to maintain implementation of reclamation progress in accordance with the approved plan of reclamation shall be a violation of these Regulations and the Floodplain Administrator may revoke or suspend the Floodplain Use Permit for failure to comply with this provision, as per Section 503 of these Regulations.
  6. Any significant change, as determined by the Floodplain Administrator, in a previously approved plan of Development shall require an application to amend the approved plan of Development.
  7. In order to control erosion and preserve the natural and beneficial functions of the floodplain, removal of vegetation shall be the minimum necessary for the Development, and in accordance with the approved plan of Development.
  8. The plan of Development is subject to post-flood review and possible modification if necessary due to flood related changes in river morphology.
  9. Erosion setbacks, within the 100-year floodplain shall meet Arizona state standards or as determined by the Floodplain Administrator, using the Erosion Hazard Zone Delineation and Development Guidelines, when adopted.
  10. The operator of an active sand and gravel extraction operation permitted under these regulations shall maintain a set of Development plans bearing the approval seal of the District. Failure to maintain the approved plans on site shall be a violation of these regulations, subject to revocation or suspension of the Floodplain Use Permit as detailed in Section 503 and a fine as detailed in Section 1103 of these regulations.
  11. If the Floodplain Administrator determines that no substantial mining activity has taken place within 12 months of approval of the Floodplain Use Permit for sand and gravel mining, or during any consecutive 12 month period of an active permit, the Floodplain Administrator shall cancel forthwith the remaining time of the active permit, upon discovery of this inactivity by

inspection. Any resubmittal to re-activate a permit cancelled under this section shall be treated as a new permit application, including the requirement of any fee pertaining to a new application for the intended use.

12. Sand and gravel Floodplain Use Permits shall not exceed a five (5) year duration and may be issued for a lesser duration of time as determined by the Floodplain Administrator.
13. The Floodplain Use Permit shall be issued to the owner of the land or his approved designee. The District shall require written proof of ownership and express, written consent and agreement of the owner of the land acknowledging responsibility for following the plan of Development, including the reclamation of the site.
14. The rights and responsibilities under a Floodplain Use Permit for an aggregate mining operation are non-delegable and cannot be transferred without the written authorization of the District.

### **Section 802. Development Standards within Zone AE Floodway Fringe**

Uses shall meet Section 800 General Development Standards. Additional Standards in AE Floodway Fringe are:

1. The Regulatory Flood Elevation is two (2) feet above the Base Flood Elevation if no floodway has been delineated.
2. For Elevation Certificate purposes, the adjacent grade in an AE Zone is finished grade.
3. A Floodplain Use Permit for the extraction of sand and gravel or other materials within AE Floodway Fringe shall be granted under the same conditions as Section 801. The following additional conditions are:
  - a. Dikes or levees are permitted provided it can be shown by the applicant that such dikes or levees will not adversely affect structures, road or utility crossings, easements, or right-of-way or other public or private property, and will not cause erosion or diversion of flood flows onto property outside the Delineated Floodplain, and will not create a danger to life or property.

### **Section 803. Development Standards within Zone A**

Uses shall meet Section 800 General Development Standards. Additional Standards for Zone A are:

1. The Regulatory Flood Elevation is two (2) feet above the community determined Base Flood Elevation.
2. For Elevation Certificates, the adjacent grade is natural grade, unless a datum Base Flood Elevation is determined, then the adjacent grade is finished grade.
3. Sand and Gravel Development shall meet the Development Standards of Section 801 or Section 2, whichever is applicable. The applicant for a sand and gravel permit in Zone A shall delineate the Floodway portion of the Floodplain in order to meet the Development Standards of Section 801.

### **Section 804. Development Standards within Zone A Ponding**

Uses shall meet Section 800 General Development Standards. Additional requirements for Zone A Ponding Area are:

1. The Regulatory Flood Elevation is one foot (1) above the height of the effective outfall or the height of the feature causing the ponding.
2. For Elevation Certificate purposes, the adjacent grade is finished grade.
3. Any volume displacement shall be equally compensated for from within the same Ponding Area.

4. The effective lateral conveyance shall be preserved.

### **Section 805. Development Standards within Zone A Shallow Flooding**

Uses shall meet Section 800 General Development Standards. Additional standards for Zone A Area of Shallow Flooding are:

1. Regulatory Flood Elevation is two (2) feet above the community determined Base Flood Elevation.
2. For Elevation Certificate purposes, adjacent grade is natural grade.

### **Section 806. Development Standards within Zone AH Ponding**

Uses shall meet Section 800 General Development Standards. Additional Development Standards for Zone AH Ponding are:

1. Regulatory Flood Elevation is one (1) foot above the Base Flood Elevation.
2. For Elevation Certificate purposes, the adjacent grade is finished grade.
3. Any volume displacement shall be equally compensated for from within the same Ponding Area.
4. The effective lateral conveyance shall be preserved.

### **Section 807. Development Standards within Zone AO Ponding Area**

Uses shall meet Section 800 General Development Standards. Additional Development Standards for Zone AO are:

1. The Regulatory Flood Elevation is one (1) foot above the flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade.
3. Any volume displacement shall be equally compensated for from within the same Ponding Area.
4. The effective lateral conveyance shall be preserved.

### **Section 808. Development Standards within Zone AO Shallow Flooding**

Uses shall meet Section 800 General Development Standards. Additional Development Standards for Zone AH are:

1. Regulatory Flood Elevation is one (1) foot above the flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade.

### **Section 809. Development Standards within Zone AO Alluvial Fan**

Uses shall meet Section 800 General Development Standards. Additional Development Standards for Zone AO are:

1. Regulatory Flood Elevation is one (1) foot above the flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade.

### **Section 810. Development Standards within Other Flood Hazard Areas**

1. Standards adopted for Development contained in a Watercourse Master Plan, Area Drainage Master Plan or other hydrologically or hydraulically oriented master plan shall be consistent with sound floodplain management practices and these regulations.
2. The applicant for any proposed use may be required to provide against encroachment into or protection from the delineated flood hazard.

3. The placement of Fill Material or extraction of materials may require the Floodplain Administrator's approval of plans prepared by an Arizona Registered Professional Engineer.
4. Whenever a proposed use is located within a Delineated Floodplain regulated elsewhere in these Regulations as well as another designated Flood Hazard Zone regulated by this article, the article with the most stringent requirements shall take precedence.
5. The standards, provisions, criteria and requirements for Development in Flood Hazard Zones imposed by an authorized master plan shall meet or exceed the requirements of these Regulations.
6. In areas where floodways have not been defined using traditional equal conveyance encroachment methods, the Floodplain Administrator may require that the Regulatory Flood Elevation be two (2) feet above the Base Flood Elevation.

## **ARTICLE IX. ZONE A ALLUVIAL FAN AREAS**

Uses shall meet Section 800 General Development Standards. Additional Standards for Piedmont Assessment Manual Alluvial Fan Zones are noted below.

### **Section 901. Development Standards within Alluvial Fan Zone A Administrative Floodway**

Development within an Alluvial Fan High Hazard area (AFHH), Alluvial Fan Uncertain Flow Distribution Area (AFUFD), and Alluvial Fan Floodway (AAFF) as determined using the Piedmont Assessment Manual or other Floodway designation by other Alluvial Fan analysis methods approved by FEMA in Appendix G of the Guidelines and Specifications for Flood Hazard Mapping Partners shall be regulated in a manner similar to a Floodway as described in Article VIII, Sections 801 and 802 of these Regulations.

1. Mitigation: Only major engineering measures as outlined in 44 CFR 65.13 can be used to mitigate the Alluvial Fan flood hazard in these areas.
2. Refinement: Refinement of the Floodway limits may be allowed depending on the level of detail of the original Floodway analysis and level of detail of the proposed revision.

### **Section 902. Development Standards within an Alluvial Fan Zone A**

Development within an Alluvial Fan Zone A (AFZA) as determined using the Piedmont Assessment Manual or other Zone A Alluvial Fan analysis methods approved by FEMA in Appendix G of the Guidelines and Specifications for Flood Hazard Mapping Partners shall be regulated in a manner similar to a Zone A Riverine Floodplain. Development may require an engineered plan.

Uses shall meet Section 800 Development Standards. Additional Standards for Zone A Alluvial Fan are:

1. The Regulatory Flood Elevation is one (1) foot above flood depth.
2. For Elevation Certificate purposes, the adjacent grade is natural grade unless a datum Base Flood Elevation is determined, then the adjacent grade is finished grade.
3. Minimum Development requirements in these areas shall include:
  - a. Detailed site topography;
  - b. Identification of lowest floor elevations in relation to flood elevation/depth;
  - c. Identification of all washes through the site including ingress and egress locations; and
  - d. Adequate provisions to maintain all natural and improved drainage or flood conveyance systems with minimal disruption of the water/sediment system.

- e. When Development plans propose Structures located in the proximity of a wash or with an area of significant sheet flow depth, the applicant shall submit a plan of Development prepared by an Arizona Registered Engineer. The plan shall include engineering analysis to mitigate all hazards associated with Alluvial Fan flooding including inundation, ground erosion, scour around Structures, debris and sediment flow and accumulation in addition to aggradation and degradation of conveyance systems. The plan shall also include Building pad and lowest floor elevations. The plan shall be consistent with the following Arizona State Standards:
- 1) State Standard 7-98 – Watercourse Bank Stabilization
  - 2) State Standard 5-96 – Watercourse System Sediment Balance

### **Section 903. Development Standards within Inactive Alluvial Fan Zone AO**

Development within an Inactive Alluvial Fan Zone AO using the Piedmont Assessment Manual shall be regulated in a manner similar to a Zone AO Shallow Flooding Floodplain. Development may require an engineered plan.

1. Uses shall meet Section 800 and Section 901 Development Standards.

## **ARTICLE X. WATERCOURSE MASTER PLANS**

### **Section 1001. Authorization**

Pursuant to A.R.S. 48-3609.01, the District, whenever it has completed a Watercourse Master Plan, may submit the plan, including uniform rules for Development to the Board for adoption. If adopted by the Board, the District shall enforce the Watercourse Master Plan under these Regulations.

### **Section 1002. Public Notification**

During the preparation of a Watercourse Master Plan, the owners of record of real property within and immediately contiguous to the Watercourse or Watercourses included in the planning shall be publicly notified by the District so that the owners may have input to the planning process. In addition, the Sand and Gravel Recommendations Committees organized pursuant to A.R.S. 11-830(D), if any, shall be notified.

### **Section 1003. Recharge Techniques**

All Watercourse Master Plans shall consider recharge techniques including but not limited to: swales, dry wells, sand tanks and small dams.

### **Section 1004. Minimum Standards**

Requirements for a Watercourse Master Plan shall meet or exceed the minimum requirements under the National Flood Insurance Program or the criteria adopted by the Director of The Arizona Department of Water Resources or these Regulations. In case of conflict the most stringent requirements shall prevail.

## **ARTICLE XI. ENFORCEMENT**

### **1101. Violation**

1. It is unlawful for any person to engage in any Development or to divert, retard or obstruct the flow of waters in any watercourse without securing written authorization from the Flood Control District Board of Review or the Floodplain Administrator as required by these regulations.

2. It is a civil offense for any person to violate any regulations, ordinances or rules of the Flood Control District.

### **1102. Enforcement**

Pursuant to regulations, ordinances, rules and guidelines as adopted from time to time by the Board of the Flood Control District, the District shall:

1. Conduct inspections to determine if violations of its regulations, ordinances, rules or permit conditions exist.
  - a. The District and its agents may have reasonable access for inspection pursuant to written authorization under A.R.S. 48-3613 or the terms of a Floodplain Use Permit. If no written authorization has been issued, the District may inspect during regular business hours, or in the case of emergency, at any time.
  - b. If the District and its agents are denied reasonable access for inspection, the Chief Engineer of the District may apply for an administrative search warrant to be served by a certified peace officer.
2. If a violation of the District regulations, ordinances, rules or permit conditions is found, the District will serve upon the property owner or permit holder a notice of violation.
3. If the violation is not resolved in the time set by rules adopted pursuant to A.R.S. 48-3615.01, the District may set the matter for an administrative hearing before a Hearing Officer and serve notice of the hearing date to the property owner or permit holder.
4. Upon written request, any party to a decision rendered in the administrative hearing may request review by the Board of Hearing Review within fifteen (15) days of the decision. The final decision of the Board of Hearing Review is subject to judicial review pursuant to A.R.S. 12-901 et.seq. Any decision not appealed in a timely fashion becomes the final enforceable order of the District.

### **1103. Penalties**

1. It is a Class 2 Misdemeanor to engage in any Development or to divert, retard or obstruct the flow of waters in a watercourse without securing the written authorization of the District. A violator may be subject to jail and fines.
2. The penalty for the civil offense of violation of Flood Control District regulations, ordinances or rules is a fine not in excess of that which is chargeable for a Class 2 Misdemeanor. Each day the violation continues constitutes a separate offense.
3. All Development located or maintained in a floodplain since August 8, 1973, in violation of flood control statutes or regulations without authorization from the District is a public nuisance per se and may be abated, prevented or restrained.
4. Nothing in this section precludes any private right of action by any person damaged by another's unauthorized diversion, retardation or obstruction of a watercourse. Further, the District is not precluded by anything herein from pursuing injunctive and other remedies as provided by law.

## **ARTICLE XII. WARNING AND DISCLAIMER OF LIABILITY**

The degree of flood protection required by these Regulations is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Compliance with these Regulations does not insure complete protection from flooding and is not to be construed as a warranty. Larger floods may occur or the flood height may be increased by man-made or natural causes, such as bridge openings restricted by debris, natural erosion, streambed meander or man-made obstructions and diversions. These Regulations are not intended to imply that areas outside the Floodplain or land uses

permitted within such areas will be free from flooding or flood damage. These Regulations shall not create liability on the part of the Flood Control District of Maricopa County or any officer or employee thereof for any flood damages that may result from reliance on these Regulations or any administrative decision lawfully made there under.

### **ARTICLE XIII. SEVERABILITY**

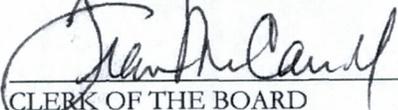
These Regulations and the various parts thereof are hereby declared to be severable. Should any section of these Regulations be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of these Regulations as a whole, or any portion thereof other than the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

### ARTICLE XIV. EFFECTIVE DATE

These Regulations as amended is adopted by the Board of Directors of the Flood Control District of

Maricopa County, Arizona, this 20<sup>th</sup> day of December 20 06

  
\_\_\_\_\_  
CHAIRMAN BOARD OF SUPERVISORS

  
\_\_\_\_\_  
CLERK OF THE BOARD

DEC 20 2006  
DATE

PROPOSED FEE SCHEDULE  
FLOODPLAIN REGULATION  
for  
MARICOPA COUNTY, ARIZONA

July 2006-June 2007

The following administrative fees shall be charged for the processing of Appeals, Floodplain Use Permits, Floodplain Variances, plans review and performance bonds with no provision for refund:

**FLOODPLAIN USE PERMITS**

**Category 1:** Permits which require a minimum of technical review.

Single Family Residence, Mobile/Manufactured Buildings, Commercial/Industrial

Non- engineered .....	\$ 145
Engineered.....	\$ 200
Site inspection (when required).....	\$ 50
Category 1 Amendment (When a site inspection is required) .....	\$ 50

**Category 2:** Permits, which require technical hydrologic or engineering review.

Residential Subdivisions, Commercial including strips and centers, Industrial

including parks .....	\$ 400
Category 2 Amendment .....	\$ 800

**Sand and Gravel Operations**

Initial Permit Application .....	\$ 4,000
Compliance Inspection (semi-annual or violation follow-up).....	\$ 100
Engineering Review .....	\$ 300
Non-compliance review .....	\$ 500
Major Amendment.....	\$ 2,300
Minor Amendment .....	\$ 1,200

**OTHER FEES**

Floodplain Clearance .....	\$ 50
Sand and Gravel Renewal (Five Year) .....	\$ 2,000

**Appeals/Variances (FCAB or Board of Directors)**

Residential/Commercial/Industrial (posting required) .....	\$ 750
Continuance of Hearing — Applicant's Request .....	\$ 50
If new posting is required .....	\$ 50

**Floodplain Delineation Review**

CLOMR/LOMR (MT 1) .....	\$ 825
CLOMR/LOMR (MT2) .....	\$ 2,800
CLOMR/LOMR Alluvial Fan .....	\$ 2,365
Regulation (per copy).....	\$ 5

Performance Bond: 100% cost of requested improvement or cost to abate violation, or 50% of value at risk, whichever is higher.

PROPOSED FEE SCHEDULE  
FLOODPLAIN REGULATION  
for  
MARICOPA COUNTY, ARIZONA

July 2007-June 2008

The following administrative fees shall be charged for the processing of Appeals, Floodplain Use Permits, Floodplain Variances, plans review and performance bonds with no provision for refund:

**FLOODPLAIN USE PERMITS**

**Category 1:** Permits which require a minimum of technical review.

Single Family Residence, Mobile/Manufactured Buildings, Commercial/Industrial	
Non- engineered.....	\$ 305
Engineered.....	\$ 420
Site inspection (when required).....	\$ 105
Category 1 Amendment (When a site inspection is required) .....	\$ 130

**Category 2:** Permits, which require technical hydrologic or engineering review.

Residential Subdivisions, Commercial including strips and centers, Industrial including parks. ....	\$ 835
Category 2 Amendment .....	\$ 825

**Sand and Gravel Operations**

Initial Permit Application .....	\$ 8,400
Compliance Inspection (semi-annual or violation follow-up).....	\$ 265
Engineering Review .....	\$ 660
Non-compliance review .....	\$ 1,050
Major Amendment.....	\$ 4,870
Minor Amendment .....	\$ 2,450

**OTHER FEES**

Floodplain Clearance .....	\$ 50
Sand and Gravel Renewal (Five Year) .....	\$ 4,200

**Appeals/Variances (FCAB or Board of Directors)**

Residential/Commercial/Industrial (posting required) .....	\$ 1,675
Continuance of Hearing — Applicant's Request .....	\$ 50
If new posting is required .....	\$ 110

**Floodplain Delineation Review**

CLOMR/LOMR (MT I) .....	\$ 850
CLOMR/LOMR (MT2) .....	\$ 2,900
CLOMR/LOMR Alluvial Fan .....	\$ 4580
Regulation (per copy).....	\$ 5

Performance Bond: 100% cost of requested improvement or cost to abate violation, or 50% of value at risk, whichever is higher.

PROPOSED FEE SCHEDULE  
 FLOODPLAIN REGULATION  
 for  
 MARICOPA COUNTY, ARIZONA  
 July 2008 - revised annually per NCPI

The following administrative fees shall be charged for the processing of Appeals, Floodplain Use Permits, Floodplain Variances, plans review and performance bonds with no provision for refund:

**FLOODPLAIN USE PERMITS**

**Category 1:** Permits which require a minimum of technical review

Single Family Residence, Mobile/Manufactured Buildings, Commercial/Industrial	
Non- engineered.....	\$ 465
Engineered.....	\$ 635
Site inspection (when required).....	\$ 160
Category 1 Amendment (When a site inspection is required) .....	\$ 215

**Category 2:** Permits, which require technical hydrologic or engineering review.

Residential Subdivisions, Commercial including strips and centers, Industrial including parks. ....	\$ 1,270
Category 2 Amendment .....	\$ 850

**Sand and Gravel Operations**

Initial Permit Application .....	\$12,800
Compliance Inspection (semi-annual or violation follow-up).....	\$ 430
Engineering Review .....	\$ 1020
Non-compliance review .....	\$ 1600
Major Amendment.....	\$ 7440
Minor Amendment .....	\$ 3,700

**OTHER FEES**

Floodplain Clearance .....	\$ 50
Sand and Gravel Renewal (Five Year) .....	\$ 6,400

**Appeals/Variances (FCAB or Board of Directors)**

Residential/Commercial/Industrial (posting required) .....	\$ 2,600
Continuance of Hearing — Applicant’s Request .....	\$ 50
If new posting is required .....	\$ 170

**Floodplain Delineation Review**

CLOMR/LOMR (MT I) .....	\$ 880
CLOMR/LOMR (MT2) .....	\$ 3,000
CLOMR/LOMR Alluvial Fan .....	\$ 6,800
Regulation (per copy).....	\$ 5

Performance Bond: 100% cost of requested improvement or cost to abate violation, or 50% of value at risk, whichever is higher.

Fees will be adjusted on a fiscal year per the National Consumer Price Index.

## ADDENDUM

Listed below are the dates of the original firms, FIRMS, FBFM and FIS studies for the communities for which the Flood Control District of Maricopa County performs floodplain management:

<b>COMMUNITY</b>	<b>ORIGINAL FIS &amp; MAP DATES</b>
Maricopa County Unincorporated Areas	July 2, 1979
Town of Buckeye	February 15, 1980
Town of Carefree	July 2, 1979
Town of Cave Creek	September 29, 1989
City of Chandler	July 16, 1980
City of El Mirage	December 1, 1978
Town of Gila Bend	December 4, 1979
Town of Guadalupe	April 15, 1988
City of Litchfield Park	September 29, 1989
City of Mesa	May 15, 1980
Town of Queen Creek	September 4, 1991
City of Surprise	January 15, 1978
City of Tolleson	January 16, 1980