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ORDINANCE NO. 2005-FC 2

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE PIMA COUNTY FLOOD CONTROL DISTRICT RELATING TO FLOODPLAIN MANAGEMENT CODIFYING THE PIMA COUNTY FLOODPLAIN AND EROSION HAZARD MANAGEMENT ORDINANCE AS TITLE 16 OF THE PIMA COUNTY CODE

WHEREAS, on December 16, 1974, the Pima County Board of Supervisors adopted Ordinance No. 1974-86, called the Pima County Floodplain and Erosion Hazard Management Ordinance (the "Floodplain Ordinance"), and

WHEREAS, on July 12, 1983, and on July 24, 1984, the Pima County Board of Supervisors adopted Ordinance Nos. 1983-FC1 and 1984-FC1 replacing Ordinance No. 1974-86, and

WHEREAS, the Arizona Legislature authorized the boards of directors of county flood control districts to adopt floodplain management regulations designed to promote the public health, safety and general welfare pursuant to Arizona Revised Statutes, Title 48, Section 48-3603, and

WHEREAS, on May 7, 1985, the Board of Supervisors, acting as the Board of Directors of the Pima County Flood Control District, adopted Ordinance No. 1985-FC1 replacing Ordinance No. 1983-FC1, as amended by Ordinance No. 1984-FC1, and

WHEREAS, on April 12, 1988, the Board of Supervisors, acting as the Board of Directors of the Pima County Flood Control District, adopted Ordinance No. 1988-FC1 replacing Ordinance No. 1984-FC1, and

WHEREAS, on December 6, 1988, the Board of Supervisors, acting as the Board of Directors of the Pima County Flood Control District, adopted Ordinance No. 1988-FC2, replacing Ordinance No. 1988-FC1, and

WHEREAS, Ordinance No. 1988-FC2 was amended by Ordinance Nos. 1994-FC2 as adopted on July 19, 1994, 1995-FC1 as adopted August 1, 1995, and 1998-FC1 as adopted July 14, 1998, and

WHEREAS, the Pima County Board of Supervisors, acting as the Board of Directors of the Flood Control District, officially codified the Floodplain Ordinance and its various amendments as Title 16 of the Pima County Code on June 1, 1999 by Ordinance No. 1999-FC1, and

WHEREAS, the Pima County Flood Control District Board of Directors has determined

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it to be in the best interests of the residents of Pima County that the current Floodplain Ordinance, as codified in Title 16 of the Pima County Code, be amended to establish and reflect the most current floodplain erosion and riparian habitat regulations,

NOW, THEREFORE, IT IS ORDAINED BY THE BOARD OF DIRECTORS OF THE FLOOD CONTROL DISTRICT OF PIMA COUNTY THAT:

SECTION 1. Title 16 of the Pima County Code, Ordinance No. 1999-FC1, is hereby stricken in its entirety.

SECTION 2. Title 16 of the Pima County Code shall hereby read as follows:

TITLE 16

FLOODPLAIN AND EROSION HAZARD MANAGEMENT

Chapters:

- 16.04 General Provisions
- 16.08 Definitions
- 16.12 Exemptions and Nonconforming Uses
- 16.16 Floodplain Maps and Boundaries
- 16.20 Use Permits - General Provisions
- 16.24 Floodway Requirements
- 16.26 Floodway Fringe Area and Floodplain Requirements
- 16.28 Erosion Hazard Areas and Building Setbacks
- 16.30 Watercourse and Riparian Habitat Protection and Mitigation Requirements
- 16.34 Manufactured Homes and Manufactured Home Parks and Subdivisions
- 16.36 Subdivisions and Development
- 16.38 Maintenance of Private Drainage Improvements
- 16.42 Sediment, and Erosion Control
- 16.44 Vehicular Access
- 16.48 Runoff Detention Systems
- 16.52 Sand, Gravel, and Other Excavation Operations
- 16.54 Administration, Compliance and Enforcement
- 16.56 Appeals and Variances
- 16.60 Amendments
- 16.64 Violations--Penalty

Chapter 16.04

GENERAL PROVISIONS

Sections:

- 16.04.010 Short title.
- 16.04.020 Authority.
- 16.04.030 Contents and purpose of provisions.
- 16.04.040 Application and enforcement.
- 16.04.050 Performance standards.

16.04.060 Interpretation of provisions--conflict resolution.

16.04.070 Cooperative agreements and consultants.

16.04.080 Units of measure.

16.04.090 Warning and disclaimer of liability.

16.04.010

Short title.

The ordinance codified in this title may be referred to as the "Floodplain and Erosion Hazard Management Ordinance." (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 1, 1988)

16.04.020

Authority

The State of Arizona has delegated the responsibility to each county flood control district to adopt floodplain regulations designed to promote the public health, safety and general welfare of its citizenry as provided under the Arizona Revised Statutes, Title 48, Chapter 21, Article 1, Sections 48-3601 through 3627. More specifically, A.R.S. 3609 directs county flood control districts to adopt floodplain regulations that:

- A. Regulate all development of land, construction of residential, commercial or industrial structures or uses of any kind which may divert, retard or obstruct flood water and threaten public health or safety or the general welfare; and
- B. Establish minimum flood protection elevations and flood damage prevention requirements for uses, structures and facilities which are vulnerable to flood damage; and
- C. Comply with state and local land use plans and ordinances, if any.

In conformance with A.R.S. 3609, this ordinance provides for protection of the public health safety and welfare by regulation of flood and erosion hazard areas to control flood hazards and prevent repetitive loss from flood damage.

- A. The flood hazard areas of Pima County are subject to periodic inundation which may result in loss of life and property, create health and safety hazards, disrupt commerce and governmental services, require extraordinary public expenditures for flood protection and relief, and impair the tax base, all of which adversely affect the public health, safety, and general welfare.
- B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights, flow velocities, and cause flood and erosion damage. Uses that are inadequately flood-proofed, elevated, or otherwise protected from flood damage, also contribute to the flood loss. (Ord. 2005-FC 2)

16.04.030

Contents and purpose of provisions.

- A. This title is one aspect of land and resource management planning in Pima County for watercourses, flood waters, drainage, and floodplains as well as those associated floodplain features relating to erosion, sedimentation, and riparian habitat. Floodplain management must be seen in perspective, not only as flood hazard minimization but also as one element of an integrated program of natural resource management and flood and erosion hazard reduction.
- B. The Pima County Flood Control District recognizes that it is both necessary and desirable to maintain

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a balanced and cooperative relationship between human communities and the land and resources that sustain them. Maintaining the stability of the environment is essential.

- C. It is the intent of the Pima County Flood Control District that:
1. The highest and best use of regulatory floodplains within the County is for maintenance of natural hydrologic and hydraulic stream flow processes, with consideration for groundwater recharge, aesthetics, natural open space, recreation areas, and flora, fauna, and other wildlife habitat resources;
 2. Any human habitation or structural developments, which limit natural processes within floodprone or erosion hazard areas, be discouraged, and shall be limited to the extent allowable by law;
 3. Lands within the regulatory floodplain including riparian habitat and erosion hazard areas are managed by the Pima County Flood Control District to preserve or enhance natural values and expressed resource management goals;
 4. Regulatory controls for floodplain management emphasize overall watershed management, and prevention of unwise human occupation or encroachment into regulatory floodplain and erosion hazard areas; and
 5. Natural floodplain areas, streams, washes, arroyos, rivers, and drainage courses should be preserved in their natural riverine condition, whenever possible, and any land-use proposal, that utilizes this approach, will be considered superior to all others.
4. The purpose of this title is to protect the public health, safety, and general welfare of the citizens of Pima County, and protect the natural character of our watercourses, water resources, and environment by adopting regulations designed to:
1. Minimize flood and erosion damages;
 2. Meet or exceed state and federal requirements relating to floodplain management, thereby enabling Pima County residents to purchase low-cost flood insurance; receive disaster relief, should the need arise, and seek residential and commercial real-estate loans;
 3. Establish minimum flood protection elevations and damage prevention requirements for structures and other types of development that may be vulnerable to flood and erosion damage;
 4. Regulate encroachment and building development located within areas subject to flooding, or erosion, or located within riparian habitat areas, and assure that the flood-carrying capacity within the altered and/or relocated portion of any watercourse is maintained;
 5. Encourage the most effective expenditures of public money for flood control projects;
 6. Minimize the need for rescue and relief efforts associated with flooding and erosion, which are generally undertaken at the expense of the general public;
 7. Minimize damage to public facilities and utilities, such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in regulatory floodplain and erosion hazard areas;
 8. Help maintain a stable tax base by providing for the protection of regulatory floodplain and erosion hazard areas;
 9. Inform the public where property lies within a regulatory floodplain, riparian habitat area or erosion hazard area;
 10. Ensure that those who occupy areas within regulatory floodplain and erosion hazard areas assume the responsibility for their actions within those areas;
 11. Protect, preserve and enhance groundwater recharge; and
 12. Encourage the preservation of natural washes, riparian habitat, as well as preserve the riverine environment.

- E. In order to accomplish protection of public health and safety and reduction of flood losses, this ordinance includes methods and provisions for:
1. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 3. Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel flood waters;
 4. Controlling filling, grading, dredging and other development which may increase flood damage; and
 5. Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters may increase flood hazards in other areas. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 2 (B), (C), 1988)

16.04.040

Application and enforcement.

- A. The ordinance codified in Title 16 of the Pima County Code shall apply to those floodplains, erosion hazard areas, and riparian habitat areas defined and regulated herein.
- B. This title shall be applicable and enforceable in the incorporated, as well as the unincorporated areas of Pima County, including public lands, but excluding Indian and military reservations and those incorporated areas of cities or towns which have elected to assume separate floodplain management powers and duties pursuant to Section 48-3610 of the Arizona Revised Statutes. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 2 (A), (E), 1988)

16.04.050

Performance standards.

The performance requirements as specified in this title are minimum standards and address general floodplain management requirements. Specific projects may warrant additional requirements that may be imposed by the Pima County Flood Control District. The Pima County Flood Control District has the authority to establish standards and/or policies, as necessary, to carry out the provisions of this title. All drainage design standards, river and basin management plans, riparian preservation and mitigation standards, environmental protection, or other land-use plans approved by Pima County and the Flood Control District are hereby incorporated into this title. All applicable floodplain management, flood hazard and flood control regulations, rules and standards promulgated by the state of Arizona and the federal government are hereby incorporated into this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 2 (F), 1988)

16.04.060

Interpretation of provisions--Conflict resolution

- A. 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 to neither limit nor repeal any other powers granted to Pima County under any state statute.

B. Where this title conflicts with or overlaps with any other ordinance or regulation, whichever imposes the more stringent restrictions for the health, safety, and welfare of the public, or protection of natural resources, shall prevail. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 2 (D), 1988)

16.04.070

Cooperative agreements and consultants.

Pima County may retain consultants and experts, and may enter into cooperative agreements for the delineation of regulatory floodplains, floodways, riparian habitat, and erosion hazard areas, or for other assistance and guidance considered appropriate and necessary. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 20 (A), 1988)

16.04.080

Units of measure.

All units of measure contained in this title, whether expressed or implied, are intended to be in the English system of units. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 20 (C), 1988)

16.04.090

Warning and disclaimer of liability.

The degree of flood protection required by this title is considered reasonable for regulatory purposes, and is based on engineering and scientific methods of study. Larger floods may occur on occasion or the flood height may be increased by manmade or natural causes, such as bridge openings restricted by debris. This title does not imply that areas located outside of the regulatory floodway, floodway fringe area, floodplain, riparian habitat, or erosion hazard areas, or land-uses permitted within such areas, will be free from flooding or flood damage. This title shall not create liability on the part of Pima County, the Pima County Flood Control District or any officer or employee thereof for any flood damages that may result from reliance on this title or any administrative decision based upon this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 3, 1988)

Chapter 16.08

DEFINITIONS

Sections:

- 16.08.010 Appeal.**
- 16.08.020 Application of definitions and general usage.**
- 16.08.030 Arizona Department of Water Resources.**
- 16.08.040 Balanced drainage basin.**
- 16.08.050 Base flood.**
- 16.08.060 Base flood elevation.**
- 16.08.070 Basement.**
- 16.08.080 Board.**
- 16.08.090 Board of Supervisors.**
- 16.08.100 Chief Engineer.**
- 16.08.110 County Engineer.**

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16.08.120 Critical drainage basin.
16.08.130 Critical or balanced drainage basin management plan.
16.08.140 Cumulative substantial damage.
16.08.150 Cumulative substantial improvement.
16.08.160 Detention system.
16.08.170 Development.
16.08.180 District.
16.08.190 Drainage area.
16.08.200 Dry well.
16.08.210 Dwelling unit.
16.08.220 Encroachment, equal degree of.
16.08.230 Erosion.
16.08.240 Erosion hazard area.
16.08.250 Exemption.
16.08.260 Federal Flood Insurance Program.
16.08.270 Flood Control District Advisory Committee.
16.08.280 Flood Insurance Study.
16.08.290 Flood or flood waters.
16.08.300 Floodplain.
16.08.310 Floodplain Administrator.
16.08.320 Floodplain management.
16.08.330 Floodplain management regulations.
16.08.340 Floodplain use permit.
16.08.350 Flood proofing.
16.08.360 Floodway area.
16.08.370 Floodway fringe area.
16.08.380 Geologic floodplain.
16.08.390 Habitat mitigation.
16.08.400 Hardship.
16.08.410 Highest adjacent grade.
16.08.420 Historic structure.
16.08.430 Hydroriparian.
16.08.440 Important Riparian Area.
16.08.450 Levee.
16.08.460 Lowest floor.
16.08.470 Manufactured home.
16.08.480 Manufactured home park or subdivision.
16.08.490 Market value.
16.08.500 Mean sea level.
16.08.510 Mesoriparian.
16.08.520 Mining reclamation plan.
16.08.530 New construction.
16.08.540 Obstruction.

- 16.08.550 Person.
- 16.08.560 Pima County.
- 16.08.570 Reach.
- 16.08.580 Reasonable repair.
- 16.08.590 Regulatory flood elevation.
- 16.08.600 Regulatory floodplain or floodprone area.
- 16.08.610 Retention system.
- 16.08.620 Riparian habitat.
- 16.08.630 Setback.
- 16.08.640 Sheet flooding.
- 16.08.650 Special Flood Hazard Area.
- 16.08.660 Start of construction.
- 16.08.670 Structure.
- 16.08.680 Substantial damage.
- 16.08.690 Substantial improvement.
- 16.08.700 Technical Review Committee.
- 16.08.710 Variance.
- 16.08.720 Violation.
- 16.08.730 Waiver by the Chief Engineer.
- 16.08.740 Watercourse.
- 16.08.750 Watercourse master plan.
- 16.08.760 Watershed.
- 16.08.770 Xeroriparian.

16.08.010

Appeal

“Appeal” means a request for a review of the Floodplain Administrator's or Chief Engineer’s interpretation or decision of any provision of this title.

16.08.020

Application of definitions and general usage.

The following definitions and general usage shall apply to words and phrases used in Title 16 of this code. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

- A. When parts of the Arizona Revised Statutes are adopted by reference or referred to in this title, the abbreviation A.R.S. will be used.
- B. When parts of the Arizona Administrative Code are adopted by reference or referred to in this title, the abbreviation A.A.C. will be used.
- C. References to the U.S. Code of Federal Regulations refer sequentially to the title of the Code of Federal Regulations (CFR), part, section and paragraph (e.g., 44 CFR 62.01(a) means Title 44, Code of Federal Regulations, Part 62 Section .01, Paragraph (a)).
- D. When parts of the National Federal Flood Insurance Program are adopted or referenced, the following terms shall be used:
 - 1. “NFIP” means National Flood Insurance Program.

2. "FEMA" means the Federal Emergency Management Agency under the U.S. Department of Homeland Security.
 3. "FIRM" means Flood Insurance Rate Map as adopted by FEMA that delineates special flood hazards and risk premium zones.
 4. "FBFM" means Flood Boundary and Floodway Map as adopted by FEMA to delineate areas of special flood hazards including floodways.
 5. "FHBM" means Flood Hazard Boundary Map as adopted by FEMA for areas of flood hazards.
 6. "Community" is the term used by FEMA for all political bodies that administer floodplain regulations whether those are towns, cities, counties, districts, parishes, etc.
 7. "Jurisdiction" is a term used by FEMA and ADWR that includes communities, states, tribal nations and other federal land owners like the Bureau of Land Management and the National Forest Service.
 8. "Reasonably safe from flooding" is a term used to indicate that conditions of the National Flood Insurance Program are met for the 100-year flood.
- E. "State Standard" means a document defining standards for floodplain management as adopted by the Arizona Department of Water Resources pursuant to A.R.S. Section 48-3605(A). An abbreviation for a specific standard of SS3-96 refers to State Standard Number 3 as adopted in 1996.
- F. All units of measure contained in this title, whether expressed or implied, are intended to be in the English system of units. The following units of measures and abbreviations will be used:
1. When referring to the volume of flow, "cubic feet per second" will be abbreviated as cfs.
 2. When referring to the velocity of the flow, "feet per second" will be abbreviated as fps.

16.08.030

Arizona Department of Water Resources.

"Arizona Department of Water Resources," known from this point forward as ADWR, is the state agency assigned with oversight of flood control as provided in Title 48 Chapter 21 of the A.R.S. (Ord. 2005 FC-2).

16.08.040

Balanced drainage basin.

"Balanced drainage basin" means a drainage basin or watershed which contains flood water channels, natural or manmade, and/or flood control structures that are adequate to contain existing runoff from the base flood produced by the basin or watershed, but in which additional runoff may not be safely contained by said channels or structures. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.050

Base flood.

"Base flood" means a flood with the peak discharge of a one hundred-year flood. The base flood has a one-percent probability of being equaled or exceeded in any given year. Said flood shall be determined from an analysis of floods on a particular watercourse and other watercourses in the same general region in accordance with the criteria established by the director of the ADWR, or the Flood Control District Board, which criterion is hereby incorporated by reference and made a part of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

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16.08.060

Base flood elevation.

"Base flood elevation" means the calculated water-surface elevation of the base flood. (Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1988-FC2 Art. 4 (part), 1988)

16.08.070

Basement.

"Basement" means any area of a building having its floor sub-grade (below ground level) on all sides.

16.08.080

Board.

"Board" means the Board of Supervisors of Pima County sitting as the Board of Directors for the Flood Control District, known from this point forward as the Board, as the governing body for codes, ordinances and other regulations relating to floodplain management within Pima County, but excluding Indian and military reservations and incorporated communities that elected to assume separate floodplain management duties and powers, as set forth in the A.R.S., Title 48, Chapter 21 Districts. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.090

Board of Supervisors.

"Board of Supervisors," means the governing body of Pima County as defined in Title 11, Chapter 2, of the A.R.S. (Ord. 2005 FC-2)

16.08.100

Chief Engineer.

"Chief Engineer" means an official of Pima County or authorized representative of the Flood Control District whose duties are as set forth in A.R.S. Section 48-3603, and who is an Arizona registered civil engineer in the state of Arizona. For the Flood Control District, the Chief Engineer is also the director of the Pima County Regional Flood Control District. The Chief Engineer, or an authorized designee, is in charge of enforcement of this title, and is responsible for administrating appeals and waivers to engineering standards specified in this title. (Ord. 2005 FC-2)

16.08.110

County Engineer.

"County Engineer" means an official of Pima County whose duties are set forth in A.R.S. Section 11-562 and 48-3603. The County Engineer is also the director of the Pima County Department of Transportation. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.120

Critical drainage basin.

"Critical drainage basin" means a drainage basin or watershed that contains flood water channels, natural or manmade, and/or flood control structures that cannot convey existing runoff during a base flood produced

by the basin or watershed, and which has a documented history of severe hazards. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.130

Critical or balanced drainage basin management plan.

"Critical or balanced drainage basin management plan" means a site-specific plan for a balanced or critical basin or watershed which has been prepared for and approved by Pima County, and provides a conceptual plan for orderly development of flood control, floodplain management, and associated erosion hazard-control measures that may be necessary as a result of urbanization within the basin or watershed. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.140

Cumulative substantial damage.

"Cumulative substantial damage" means the total cost of all repairs to a repetitive loss structure shall not cumulatively increase the market value of the structure more than 49 percent of the market value during the life of the structure. This term does not, however, include either:

- A. 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
- B. Any repair of flood damage to an "historic structure," provided the repair will not preclude the structure's continued designation as an "historic structure."

16.08.150

Cumulative substantial improvement.

"Cumulative Substantial Improvement" means improvements, modifications, or additions to existing buildings are counted cumulatively for at least 5 years and reconstruction and repairs to damaged buildings are counted cumulatively for at least 5 years. When the improvements, modifications, additions, reconstruction or repairs equals or exceeds the 50% substantial improvement threshold, the structure must be brought into compliance.

16.08.160

Detention system.

"Detention system" means a type of flood control system that delays the downstream progress of flood waters in a controlled manner, generally through the combined use of a temporary storage area and a metered outlet device, which causes a lengthening of the duration of flow and thereby reduces downstream flood peaks. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.170

Development.

"Development" means any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, fencing, excavating or drilling or storage of equipment or materials. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

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16.08.180

District.

"District" means the County Flood Control District, as established by Title 48, Chapter 21 of the A.R.S., which is named in Pima County as the Pima County Regional Flood Control District and known from this point forward as the District. (Ord. 2005 FC-2)

16.08.190

Drainage area.

"Drainage area" means the upstream contributing watershed area measured at a single point of drainage concentration, and is expressed in units of area. Also, called catchment area, watershed, and river basin. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.200

Dry well.

"Dry Well" means a deep hole covered and designed in such a manner so as to hold storm water runoff until it infiltrates into the ground. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.210

Dwelling unit.

"Dwelling unit" means a place of residence that may be located in a single or multiple dwelling building or a manufactured home. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.220

Encroachment, equal degree of.

"Encroachment" means the advancement or infringement of uses, fill, or structures into any regulatory floodplain in a manner that impedes the flow conveyance capacity of the channel and/or regulatory floodplain of a watercourse. An "equal degree of encroachment" is a standard applied to the evaluation of the effects of encroachment within the regulatory floodplain to increase in flood water heights or flow velocities in the primary channel.

- A. An "equal degree of encroachment" assumes that an encroachment, if permitted, may confer on all property owners on both sides of the watercourse an equal right to encroach to the same degree within that reach of the watercourse and modify the flow capacity within the floodplain including increasing the flood height or flow velocity within the primary channel.
- B. Since the factors affecting hydraulic efficiency are usually not uniform within a reach, this standard may not result in equally measured distances between floodway limit lines and the regulatory floodplain boundaries of a watercourse.
- C. In order to preserve the floodway and floodplain flow conveyance capacity, for all property owners, the degree of allowed encroachment is limited to a rise of no more than 0.1 feet or velocity increase of no more than 10% as measured at property lines.
- D. As approved by the Chief Engineer on a case-by-case basis based on an engineering analysis and a determination of no adverse impacts to adjacent properties. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.360

Floodway area.

"Floodway area" means the area of a river or watercourse and the adjacent land areas that are necessary in order to convey the regulatory flood, without cumulatively increasing the water-surface elevation more than 1 foot above the regulatory flood elevation under normal flow conditions. Floodways regulated by this title include:

- A. Federal floodway areas as delineated by FEMA.
- B. Administrative floodways for major watercourses with a 100-year discharge of 2,000 cfs or more as determined by the Chief Engineer through engineering analyses using ADWR standards or other applicable engineering methods.
- C. For regulatory minor watercourses with a 100-year discharge of less than 2,000 cfs, the floodway shall be at a minimum the primary channel.
- D. For floodplain widths greater than 200 feet or for bifurcated watercourses, the floodway will be determined by using the standards established by ADWR. (See Exhibit 16.08.310 at the end of this chapter.) (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1998 FC-1 Section 1, 1998; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.370

Floodway fringe area.

"Floodway fringe area" is a term used by FEMA to designate the floodplain area lying outside the floodway, but within the regulatory floodplain and below the base flood elevation. For the purposes of this title, the floodway fringe area shall also include the regulatory floodplain whenever a floodway has not been defined for a regulatory watercourse. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.380

Geologic floodplain.

"Geologic floodplain" means those lands adjacent to a watercourse that have been subject to fluvial processes during the Holocene epoch (i.e., the past 10,000 years). The geologic floodplain may differ from the regulatory floodplain. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.390

Habitat mitigation.

"Habitat mitigation" for purposes of Chapter 16.30 of the Pima County Code, means providing a new riparian habitat of similar quality to that which was removed as a result of physical improvements or development to a piece of property located within floodplain, an erosion hazard area, or riparian habitat regulated by this ordinance. (Ord. 2005 FC-2)

16.08.400

Hardship.

Hardship means, for the purposes of approving variances of regulation under the NFIP, the exceptional

16.08.450

Levee.

"Levee" means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices for the purpose of controlling, or diverting the flow of water so as to provide protection from temporary flooding. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.460

Lowest floor.

"Lowest floor" means the floor of the lowest enclosed area of any structure utilized for human habitation, whether on a full or part-time basis. This includes any part of the structure having a basement, a floor sub-grade below ground level and crawl spaces under manufactured housing, which are considered to be the lowest finished floor if they are not vented. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.470

Manufactured home.

"Manufactured home" means a structure transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. Manufactured home construction, installment standards, and placement within floodplains are regulated under A.R.S. in Title 41, Chapter 21, Article 2, Office of Manufactured Housing. For floodplain management purposes, the term manufactured home also includes park trailers, travel trailers, and other similar vehicles placed on a site for more than 180 consecutive days. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.480

Manufactured home park or subdivision.

"Manufactured home park or subdivision" means a parcel or contiguous parcels of land divided into four or more manufactured home lots for sale or rent. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.490

Market value.

"Market value" means the determination of the estimated 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.

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agent of the aforementioned groups, this state or its political subdivision thereof. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.560

Pima County.

“Pima County” means the political subdivision established by Title 11, Chapter 1 of the A.R.S. and from this point forward is referred to as the County. (Ord. 2005 FC-2)

16.08.570

Reach.

"Reach" is a hydraulic engineering term used to describe longitudinal segments of a stream or watercourse. In an urban area, an example of a reach would be the segment of a watercourse located between two consecutive bridge crossings. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.580

Reasonable repair.

“Reasonable repair” means those activities necessary in order to facilitate continuation or improvement of an existing legal use. Reasonable repair is considered to occur when the first alteration commences for any wall, ceiling, floor or other structural part of the building whether or not that alteration affects the exterior dimensions of the structure. (Ord. 2005 FC-2)

16.08.590

Regulatory flood elevation.

"Regulatory flood elevation" means the elevation that is 1 foot above the calculated water-surface elevation of the base flood. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.600

Regulatory floodplain or floodprone area.

"Regulatory floodplain or floodprone area" means that portion of the geologic floodplain associated with a watercourse, including its channel, or any other floodplain or floodprone area that would be inundated by the base flood, including all base floods where the 100-year peak discharge of is 100 cfs or greater, or those areas, that are subject to sheet flooding. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.610

Retention system.

"Retention system" means a type of flood control system that stops the downstream progress of flood waters by employing methods of total containment. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC2 Art. 4 (part), 1988)

16.08.620

Riparian habitat.

“Riparian habitat,” for purposes of this title, means riparian habitat designated as riparian on maps adopted

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by the Board. These habitats are generally characterized by vegetation that is different in plant species composition or an increase in the size and/or density of vegetation as compared to upland areas occurring in association with any regulatory floodplain and stream channel where waters flow at least periodically in a channel or as dispersed flow, or other features associated with a floodplain such as a spring, cienega, lake, watercourse, river, stream, creek, wash, arroyo, or other surface body of water. (Ord. 2005 FC-2)

16.08.630

Setback.

"Setback" means the minimum horizontal distance between a structure and a watercourse. On each side of a watercourse, the setback is measured from the top edge of the highest channel bank or the edge of the regulatory floodplain, based upon the water-surface elevation of the base flood, whichever is closer to the channel centerline. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.640

Sheet flooding.

"Sheet flooding" is an area which may be subject to flooding with depths of one-half foot or greater during the regulatory flood, even though a clearly defined channel does not exist and the path of the flooding is often unpredictable and indeterminate. Sheet flooding includes:

- A. FEMA designated Shaded Zone X, if subject to a depth of flow of equal to or more than 6 inches during the regulatory flow; and
- B. Areas that the Chief Engineer, using the best available data, has determined may be subject to sheet flooding during the regulatory flood. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.650

Special Flood Hazard Area.

"Special Flood Hazard Area" means an area designated by FEMA as having a special flood hazard, and is land subject to a 1 percent or greater chance of flooding in any given year, and from this point forward abbreviated as SFHA. An SFHA may be designated as a Zone A, AO, AH, AE, A 1-30, A99 or Shaded Zone X for the base flood, as well as for areas that the Chief Engineer, using the best available data, has determined may be subject to a flood hazard during the regulatory flood.

- A. Zone A, no base flood elevation has been determined;
- B. Zone AE, the base flood elevation has been determined;
- C. Zone AH, flood depths of 1 to 3 feet in areas that are usually areas of ponding with the base flood elevations determined;
- D. Zone AO, flood depths of 1 to 3 feet in areas usually subject to sheet flow with the average depths determined; and
- E. Shaded Zone X which includes areas of 0.2% annual chance of flooding, or areas of a 1% annual chance of flooding with an average depth of flooding of one foot or less, or with a drainage area of less than 1 square mile; or areas protected by levees from a 1% annual chance flood. (Ord. 2005 FC-2).

16.08.660

Start of construction.

"Start of construction" means the date the building permit was issued, for purposes of determining exemptions to Title 16 under Section 16.12.010, provided the actual commence of physical construction

activities occurs within 180 days of the permit date. This applies to building permits for a new building or the substantial improvement of an existing building, including the actual commencement of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement. The actual start means 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 including those improvements intended for the placement of a manufactured home. 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. (Ord. 2005 FC-2).

16.08.670

Structure.

"Structure" means anything constructed or erected, the use of which requires location on the ground or attachment to some foundation having a location on the ground. Structures include walled and roofed buildings, gas or liquid storage tanks that are principally above ground, and manufactured homes. Habitable structures are those structures intended for human occupation, whether utilized on a full or part-time basis, as defined under County Code, Title 15, Building Codes. For purposes of this title, a private drainage improvement is considered a structure. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.680

Substantial Damage.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. This term includes structures which have incurred "repetitive loss" or "substantial damage" regardless of the actual repair work performed. (Ord. 2005 FC-2)

16.08.690

Substantial Improvement.

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

- A. 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,
- B. Any alteration of a "historic structure," provided that the alteration would not preclude the structure's continued designation as a "historic structure." (Ord. 2005 FC-2).

16.08.700

Technical Review Committee.

"Technical Review Committee" means the Flood Control District Advisory Committee that, when requested by the Board, provides review of technical matters concerning interpretation and enforcement of this title.

(Ord. 2005 FC-2)

16.08.710

Variance.

"Variance" means to have the Board grant relief from the requirements of this title that would allow construction in a manner that would otherwise be prohibited by this title including:

- A. Variances of adopted Special Flood Hazard Areas as designated by FEMA. Such variances shall conform to the variance requirements of the Federal Flood Insurance Program as provided within 44 CFR 66 and A.R.S. 48-3609 and as provided in Chapter 16.56 of this title.
- B. Variances to adopted District regulations as provided by this title. Such variances shall conform to the variance requirements provided in Chapter 16.56 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.720

Violation.

"Violation" means the failure of a structure or other development to be fully compliant with the District'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. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.730

Waiver by the Chief Engineer.

"Waiver by the Chief Engineer" means to modify or substitute one technical requirements or standard for another where provisions in this title allow the Chief Engineer to exercise technical judgement in establishing permit requirements, for example, waiving erosion setback requirements based on geotechnical evidence.

16.08.740

Watercourse.

"Watercourse" means any lake, river, stream, creek, wash, arroyo, or other body of water or channel having banks and bed through which waters flow at least periodically. The watercourse includes the streambed, channel banks, floodway and floodway fringe areas. (Ord. 2005 FC-2); Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.750

Watercourse master plan.

"Watercourse master plan" means a master plan adopted by the District Board that provides uniform, but separate, rules for watercourses where a higher level of protection is warranted for public safety or to preserve the integrity of the watercourse, as provided for in A. R. S. Section 48-3609-01. (Ord. 2005 FC-2)

16.08.760

Watershed.

"Watershed" means the contributing drainage area located upstream of a specific point along a watercourse.

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(Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 4 (part), 1988)

16.08.770

Xeroriparian.

“Xeroriparian” for purposes of this title, means riparian habitat designated as xeroriparian on maps adopted by the Board. These riparian habitats are generally associated with an ephemeral water supply. These communities typically contain plant species also found in upland habitats; however, these plants are typically larger and/or occur at higher densities than adjacent uplands. (Ord. 2005 FC-2)

Chapter 16.12

EXEMPTIONS AND NONCONFORMING USES

Sections:

16.12.010 Exemptions from Title 16 regulations.

16.12.020 Review of plans--Uses authorized without permit.

16.12.030 Use permit required when.

16.12.040 Liability for increasing flood hazards.

16.12.050 Nonconforming uses permitted when.

16.12.060 Discontinuance of nonconforming use.

16.12.010

Exemptions from Title 16 regulations.

As specified in A.R.S. Section 48-3609, the provisions of this title shall not affect or prohibit:

- A. Existing legal uses of property or the right to continuation of such legal uses. However, if nonconforming use of land, building or structure is discontinued for 12 consecutive months; or is destroyed to the extent of 50 percent of its value, as determined by a competent appraiser, any further use shall comply with this title;
- B. Reasonable repair or alteration of property for the purposes for which the property was legally used on December 16, 1974, except that any alteration, addition, or repair to a nonconforming building or structure which would result in increasing its flood damage potential by 50 percent or more shall be either flood-proofed or elevated to, at, or above the regulatory flood elevation;
- C. Reasonable repair of structures constructed with the written authorization required by A.R.S. Section 48-3613 and Section 16.12.020 of this chapter; and
- D. Facilities constructed or installed pursuant to a certificate of environmental compatibility issued pursuant to Title 40, Chapter 2, Article 6.2, of A.R.S. Section 40-360, et seq. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 5 (A), 1988)

16.12.020

Review of plans--Uses authorized without permit.

As specified in A.R.S. Section 48-3613, before construction of the following, plans are to be presented to the Board for review and comment; however, the following shall not be prohibited and shall not require a floodplain use permit or other written authorization from the Board. Prior to construction, the following may be subject to conditions under the NFIP and the Federal Clean Water Act, sections 401 and 404:

- A. The construction of bridges, culverts, dikes and other structures necessary for the construction of public

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highways, roads, and streets intersecting or crossing a watercourse;

- B. The construction of storage dams for watering livestock or wildlife; structures on banks of a watercourse to prevent erosion of, or damage to, adjoining land, provided that the structure will not divert, retard, or obstruct the natural channel of the watercourse; or dams for the conservation of flood waters as permitted by Title 45, Chapter 6, of A.R.S. Section 45-1201, et seq.;
- C. Construction of tailing dams and waste-disposal areas used in connection with mining and metallurgical operations. This subsection does not exempt those sand and gravel operations that will divert, retard or obstruct the flow of waters in a watercourse from complying with and acquiring authorization from the Board pursuant to the regulations adopted by the Board under this title;
- D. Other construction, if the Board determines that written authorization is unnecessary;
- E. Construction by any District, County, city, town, or other political subdivision exercising powers granted to it under Title 48, Chapter 21, Article 1 of A.R.S. Section 48-3601, et seq.;
- F. The construction by a public agency or political subdivision of streams, waterways, lakes, and other auxiliary facilities in conjunction with development of public parks and recreation facilities;
- G. The construction and erection of poles, towers, foundations, support structures, guy wires, and other facilities related to power transmission, constructed by any utility, whether a public service corporation or a political subdivision. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 5 (B), 1988)

16.12.030

Use permit required when.

This chapter shall not exempt any person from obtaining a floodplain use permit as set forth in this title for any use that diverts, retards or obstructs the flow of water and creates a danger or hazard to life or property in the affected area. (Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1988-FC2 Art. 5 (C), 1988)

16.12.040

Liability for increasing flood hazards.

These exemptions do not preclude any person from liability if that person's actions increase flood hazards to any other person or property. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 5 (D), 1988)

16.12.050

Nonconforming uses may be permitted when.

Repairs, reconstruction, or substantial improvements that are made to existing nonconforming uses may be permitted when:

- A. Improvements, repairs, reconstruction, or improvements to any structure that is an existing nonconforming use shall conform to the provisions of this title;
- B. Improvements, repair, reconstruction, or improvements to existing nonconforming uses are permitted when the cost is less than 50 percent of the value of the structure as:
 - 1. Shown on the latest assessment rolls of the County assessor before the improvement or repair is started, or
 - 2. By market value as 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

16.16.020

Studies and maps adopted by reference.

- A. The federal government through the NFIP has identified certain flood hazard areas in an engineering report entitled, "The Flood Insurance Study for the Unincorporated Areas of Pima County, Arizona," dated February 15, 1983, with accompanying FIRMs and flood boundary and floodway maps. This flood insurance study includes its accompanying maps along with all subsequent amendments and revisions by the federal government to the flood insurance study, including all new flood insurance studies, FIRMs, and flood hazard boundary maps adopted under the NFIP for the unincorporated areas and incorporated cities within the County, all of which are hereby incorporated by reference and declared to be a part of this title.
- B. The delineations of the regulatory floodplains and the floodways shown on these maps shall be the regulatory floodplains and floodways governed by this title for those watercourses studied. The flood insurance study and the accompanying maps are on file in the offices of the District. Amendments and revisions to the flood insurance study and its accompanying maps shall be incorporated in the floodplain maps maintained by the Chief Engineer. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (1), 1988)

16.16.030

Areas subject to revision.

Due to the episodic nature of natural flood events and the resulting changes to hydrologic and hydraulic conditions along the watercourses within the County, base flood peak discharges, flow volumes, and associated regulatory floodplain and erosion hazard areas are subject to continuous revision. At a minimum, base flood values and base flood elevations will meet or exceed the current values established by the NFIP and reflect historic flood information and general, current, watershed conditions. When flood events occur that alter floodplain and erosion hazard conditions, the Chief Engineer may recommend modifications of floodplain management regulations for adoption by the Board and by FEMA.

The Chief Engineer will maintain current regulatory floodplain and erosion hazard area maps for the Santa Cruz River, Rillito Creek, and other major watercourses as necessary.

- A. The regulatory floodplains and floodway for the Santa Cruz River, Canada del Oro Wash, Tanque Verde Creek, Agua Caliente Wash, Pantano Wash, San Pedro River, Rincon Creek, Cienega Creek, Lee Moore Wash, Brawley Wash, Black Wash, Rillito Creek, and all other major watercourses, shall be based upon flood insurance study flood hazard boundary maps or, where such maps are not available, the best available technical data and floodplain maps, as prepared by the County. As flood repair and flood control improvements are constructed, the Chief Engineer will prepare revised floodplain maps for the purpose of regulation.
- B. All watersheds that generate flood peak discharges exceeding 5,000 cfs for the base flood discharge shall have their flood peak discharges listed by the Chief Engineer. These discharges will be amended, if necessary, as revised base flood discharge estimates become available. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (2), 1988)

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16.16.040

Engineering studies and map preparation.

Engineering studies showing the regulatory floodplain and erosion hazard areas may be prepared under the direction of the Chief Engineer. Upon approval by the Chief Engineer, these maps shall represent the regulatory floodplain and erosion hazard areas governed by this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (6), 1988)

16.16.050

Undelineated areas--Landowner responsibility.

In those areas where the regulatory floodplain and erosion hazard areas are not delineated pursuant to sections 16.16.020 and 16.16.030 of this chapter, and upon request for a County permit, the property owner is responsible for:

- A. Obtaining and providing accurate information on site conditions including but not limited to topography, drainage features and floodplain conditions as part of the permit process.
- B. As part of the permit process, additional information and engineering data may be required of the property owner.
- C. The Chief Engineer may require the land owner to establish the regulatory floodplain and floodway limits through a hydrologic and hydraulic study prepared and sealed by an Arizona registered professional civil engineer.
- D. For the regulatory flood in approximate A Zones, as designated on FIRMs, delineation and certification by an Arizona registered professional civil engineer of the base flood elevation may be required for all new subdivisions and other proposed developments greater in size than 50 lots or 5 acres, whichever is less, as required under Title 44 of the Code of Federal Regulations (44CFR 60.3(b)). (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (3), 1988)

16.16.060

Floodplains--Basic delineation of areas.

In those areas where a hydrologic and hydraulic study has been prepared by an Arizona registered professional civil engineer that delineates the regulatory floodplains, floodway, and erosion hazard areas, and has been approved by the Chief Engineer, then the delineation of those boundaries shown within the study shall be the regulatory floodplain, floodway, and erosion hazard areas governed by this title. The new delineations and reports shall be prepared in conformance with the requirements of FEMA, the Director of Water Resources, and this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (4), 1988)

16.16.070

Floodplains--New delineations required when.

- A. Any person or agency responsible for construction of any improvement, public or private, which changes the configuration of the delineated floodplain, flow conditions, or base flood elevations, shall provide to the District, and all governing jurisdictions affected by the project, new delineations of floodplain conditions within 120 days after completion of construction.
- B. Where FEMA has adopted floodplain delineations, base flood elevations, floodways and other regulatory data as contained in the NFIP flood insurance study, the property owner, or agency, responsible for the

construction of improvements that may modify the floodplain information or flow conditions, shall provide to the District for review and approval:

1. A Conditional Letter of Map Revision (CLOMR) is generally required prior to construction unless waived by the Chief Engineer. The proposed floodplain delineations, or modifications to existing delineations, shall be in accordance with the criteria adopted by FEMA, the Director of ADWR and this title. The CLOMR shall contain all reports and documentation as required by the NFIP including:
 - a. A hydraulic analysis and proposed delineation of all regulatory floodplains and water surface elevations for the proposed improvement.
 - b. Improvement plans and specifications as necessary for construction.
 - c. For subdivision, the CLOMR must be submitted to the District prior to recording of the final plat, or in the case of development plans, prior to approval.
2. A Letter of Map Revision (LOMR) including all required documents and associated new technical data within 120 days after construction is complete. The LOMR information shall contain all reports and documentation as required by the NFIP including:
 - a. A new delineation of all regulatory floodplains affected by the improvements.
 - b. As-built plans.
 - c. All documents, plans, and reports shall be prepared in conformance with the requirements of FEMA, the Director of ADWR, and this title.
 - d. For privately constructed improvements for subdivisions or development plans, the property owner shall provide to the District the LOMR documents, with as-built plans of the drainage improvements, prior to the release of assurances for subdivisions or the release of the certificate of occupancy for development plans.
3. All technical data, floodplain delineations, reports, maps, and documents shall be prepared in accordance with criteria establish by the Director of ADWR and in conformance with the requirements of the NFIP. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (5), 1988)

16.16.080

Boundary determination questions.

- A. Where a question arises as to the location of any regulatory floodplain, floodway or erosion hazard area, the question shall be decided by the Chief Engineer, whose decision shall be final, except as provided for in Chapter 16.54 of this title. Any person contesting the location of any boundary shall be given a reasonable opportunity to present technical evidence prepared by an Arizona registered civil engineer, if so desired.
- B. Where presently platted or mapped regulatory floodplain and erosion hazard areas differ from previously approved regulatory floodplain and erosion hazard areas, the most recent information shall be used. However, at no time shall the base floodplain limits and elevations be less than those adopted by NFIP. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 6 (A) (7), (8), 1988)

Chapter 16.20

USE PERMITS - GENERAL PROVISIONS

Sections:

16.20.010 Floodplain use permit--Required when.

- 16.20.020 Permit--Information requirements.**
- 16.20.030 Permit--Issuance conditions--Notices of development.**
- 16.20.040 Permit--Specific conditions authorized.**
- 16.20.050 Permit--Denial conditions.**
- 16.20.060 Permit--Revocation.**
- 16.20.070 Certification of elevation.**

16.20.010

Floodplain use permit--Required when.

From the effective date of the title, a floodplain use permit must be obtained from the District for any new structures, new manufactured homes, substantial improvements to structures and manufactured homes, or any other development upon any lands lying within FEMA designated Special Flood Hazard Areas, Flood Hazard Boundary Maps, or Flood Insurance Rate Maps; all other regulatory floodplains as described in chapters 16.08, 16.24 and 16.26; riparian habitat as described in Chapter 16.30 or within erosion hazard areas as described in Chapter 16.28 of this title. It shall be unlawful for such activities to take place without first applying for and obtaining a Floodplain Use Permit from the Chief Engineer, and thereafter complying with each and every written term of the permit.

However, no such floodplain use permit shall be required for any repairs or alterations for which the value of the materials and labor thereon does not exceed \$7,500, except for those improvements which obstruct, divert, or retard the flow of flood water or disturb or remove riparian habitat, as regulated under this title. For the purpose of determining the value of any such repairs or alterations, the normal retail value of materials and the reasonable value of the labor performed shall be used. Although no floodplain use permit is required, all other provisions of this title shall be observed in the performance of said repairs or alterations. Repairs or alterations shall not be done in a piecemeal fashion for the purpose of avoiding applying for a permit when the total cost of said work is in excess of \$7,500. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (A) (1), 1988)

16.20.020

Permit--Information requirements.

- A. Upon receiving an application for a floodplain use permit, the Chief Engineer may require, where applicable, the applicant to submit plans in triplicate, drawn to scale, showing the nature, location, dimensions, and elevation of the lot, existing or proposed structure, fill, storage of materials, flood proofing measures and the relationship of the above to the location of the channel, regulatory floodplain, floodway, riparian habitat, and erosion hazard area boundaries and the regulatory flood elevation. All elevations must reference an established datum or base elevation.
- B. For a floodplain use permit associated with a subdivision plat or development plan, the following must be provided with the permit application:
 - 1. A copy of the approved grading plan, or
 - 2. Lot and building sketch including:
 - a. The existing and finished grade of the area to be graded based on spot elevations or 2-foot contour interval maps. It is also a requirement that the finished pad grade be surveyed and sealed by a registered land surveyor;
 - b. The extent of graded areas, shaded and labeled "graded area," and, where structures are to be constructed;
 - c. The existing grade at the primary building corners, and the proposed finished floor elevations;
 - d. The location of proposed erosion or drainage mitigation measures, such as rock armoring a

- building pad or retaining walls to support steep-sloping soils;
 - e. The exterior boundaries of the site; and
 - f. Where applicable, any structural measures for flood protection, bank stabilization, erosion and drainage control measures.
- C. Where special circumstances necessitate more detailed information, the applicant must furnish any or all of the following, as is deemed necessary by the Chief Engineer, for the evaluation of the effects of the proposed use upon flood flows, riparian habitat, erosion, and other factors necessary in order to render a decision on the suitability of the proposed use:
1. One or more cross-sections showing the existing channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information (if available);
 2. Plan (surface view) showing elevations or contours of the ground; pertinent structures, fill, or storage elevations; size, location and spatial arrangement of all proposed and existing structures and channel banks on the site; location and elevation of streets, water supply, sanitary facilities; photographs showing existing land-uses and vegetation upstream and downstream types, and other pertinent information;
 3. Profile showing the elevation and slope of the bottom of the channel or flow line of the stream or watercourse;
 4. Specifications for building construction and materials, flood proofing, filling, excavating, channel improvements, storage of materials, water supply, and sanitary and waste facilities;
 5. An engineering study prepared by an Arizona registered professional civil engineer outlining the effects the development will have on the flow of water through the area being developed and the surrounding areas. This study will be for the purpose of evaluating possible flood hazards and shall, where necessary, include consideration of the effects of the development on flood heights, water velocities, direction of flow, sedimentation and/or erosion, volume of flows, channel shape and size, type of channel banks and other items that may be pertinent, and the resultant effects on structures, land, banks, etc., for the adjacent regulatory floodplain and the surrounding area; and
 6. Riparian habitat information as required under Chapter 16.30 of this title.
- D. The Chief Engineer shall review the proposed development to assure that all necessary permits have been requested from those governmental agencies from which approval is required by federal or state law including Section 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1134. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (C), 1988)

16.20.030

Permit--Issuance conditions--Notices of development.

- A. It shall be the duty of the Chief Engineer, through the Floodplain Administrator in the Floodplain Management Section of the District, to issue the floodplain use permits required by this chapter. The Chief Engineer may request and shall receive, so far as may be necessary in the discharge of his duties, the assistance and cooperation of all departments, agencies, officials, and public employees of the County in the enforcement of this title. No license, permit or other similar approval for any development that would be in conflict with the provisions of this title shall be issued by any department, official, or employee of the County; and any such license, permit, or approval, if issued in conflict with the provisions of this title, shall be null and void.
- B. In accordance with A.R.S. Section 48-3610, the District shall advise any city or town that has assumed, in writing, jurisdiction over the District's regulatory floodplains, and provide a copy of any development plan or any application that has been filed with the County for a floodplain use permit or variance to develop land in a regulatory floodplain, floodway, or erosion hazard area within one mile of the

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boundary between the District's area of jurisdiction and the jurisdiction of that city or town. The District shall also advise any city or town in writing and provide a copy of any development plan of any major development proposed within a regulatory floodplain, floodway, or erosion hazard area within the County that could affect regulatory floodplains, floodway, erosion hazard areas or watercourses within that city's or town's area of jurisdiction. Written notice and a copy of the plan of development shall be sent to any adjacent jurisdiction no later than 3 working days after having been received by the District. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (B), 1988)

- C. Whenever a watercourse, which is regulated by FEMA and ADWR, is to be altered or relocated:
1. Notify adjacent communities and ADWR prior to such alteration or relocation of a watercourse, and submit evidence of such notification to FEMA through appropriate notification means; and
 2. Require that the flood carrying capacity of the altered or relocated portion of said watercourse be maintained.

16.20.040

Permit--Specific conditions authorized.

- A. Any floodplain use permit may be subject to conditions or restrictions designed to reduce or mitigate the potential danger or hazard to life or property resulting from development within the regulatory floodplain, floodway, or erosion hazard areas. The applicant may be required to execute deed restrictions, running with the land; or be required to post performance bonds, assurances or such other security as may be appropriate and necessary in order to assure the performance of the conditions or restrictions that may be imposed and to assure that the requirements of this ordinance and the federal flood insurance program have been satisfied including the following:
1. All other required state and federal permits have been, or will be, obtained;
 2. The site is reasonably safe from flooding; and
 3. The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this ordinance, "adversely effects" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will increase the water surface elevation of the base flood more than one foot at any point.
- B. Examples of conditions that may be imposed include, but are not limited to, the following:
1. Modification of waste disposal and water supply-facilities;
 2. Limitations on periods of use and hours of operation;
 3. Institution of operation controls;
 4. Requirements for construction of channel modifications, dikes, levees, and other protective measures;
 5. Indemnification agreements whereby the applicant agrees to hold the County, the District and the Board, as well as their officers, employees, and agents, harmless; and defend them from any and all claims for damages now and in the future relating to the use of the property sought to be developed by reason of flooding, flowage, erosion, or damage caused by water, whether surface flow, flood, or rainfall;
 6. Flood proofing measures for nonresidential structures, such as the following, which shall be designed to be consistent with the regulatory flood elevation for the particular area, flood velocities, durations, rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with the base flood. The Chief Engineer may require that the applicant submit a plan or document, sealed by an Arizona registered professional civil engineer, structural engineer, or architect, that the flood

proofing measures are consistent with the regulatory flood elevation and associated flood factors for the particular area. Examples of flood proofing measures that may be required include, but are not limited to:

- a. Anchorage to resist flotation and lateral movement;
 - b. Installation of watertight doors, bulkheads, and shutters;
 - c. Reinforcement of walls to resist water pressures;
 - d. Use of paints, membranes or mortars to reduce seepage of water through walls;
 - e. Addition of mass or weight to structures to resist flotation;
 - f. Installation of pumps to lower water levels in structures;
 - g. Construction of water supply and waste treatment systems so as to prevent the entrance of flood waters;
 - h. Pumping facilities to relieve subsurface external foundation wall and basement floor pressures;
 - i. Construction designed to resist rupture or collapse caused by water pressure or floating debris;
 - j. Cutoff valves on sewer lines, or the elimination of gravity flow basement drains;
 - k. Elevation of structures or uses
 - l. Bank protection or armor plating on any proposed fill; and
 - m. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry or accumulation.
- C. A property owner appealing any written decision concerning the interpretation or administration of this title, or requesting a waiver to specific permit conditions or to engineering standards, shall first appeal in writing to the Chief Engineer not later than 30 days after receipt of the written decision. The Chief Engineer will respond within 15 days after the filing by an applicant with a final response not more than 45 days following the initial response. Should the applicant dispute the findings of the Chief Engineer, then they may file for a hearing as provided in Chapter 16.56 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (E), 1988)

16.20.050

Permit--Denial conditions.

- A. No permit shall be issued for any development that is not in conformance with this title, or any other provision of law relating to such development. A floodplain use permit may be denied if the proposed development constitutes a danger or hazard to life or property.
- B. In making such a determination, the Chief Engineer shall consider the following factors:
 1. The danger to life, person, or property due to flood heights, velocities, or redirection of flow caused by the development;
 2. The danger that materials may be swept onto other lands;
 3. The proposed water supply and sanitation systems of any development and the ability of these systems to prevent disease, contamination, and unsanitary conditions, if they should become flooded or eroded;
 4. The susceptibility of the proposed development or its contents to flood or erosion damage, and the effect of such damage on the individual owners;
 5. The availability of alternative locations for the proposed use on the same property, which are in areas not subject to flooding or erosion;

6. The compatibility of the proposed use with existing regulatory floodplain uses and with floodplain management programs anticipated in the foreseeable future;
 7. The relationship of the proposed use to any comprehensive plan and floodplain management program for the area;
 8. The ability of conventional and emergency vehicles to access the property in times of flooding;
 9. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site under both existing and proposed conditions;
 10. Where disturbance to riparian habitat can be avoided, by the availability of alternative locations for the proposed use on the same property, as required under Chapter 16.30 of this title; and
 11. Such other factors that may be relevant to the purposes of this title.
- C. Any property owner aggrieved by the decision of the Chief Engineer may appeal that decision pursuant to Chapter 16.56 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (D), 1988)

16.20.060

Permit--Revocation.

For failure to comply with the terms of the floodplain use permit, or, if the permit is found to not conform to the requirements of this title or another title, state or federal regulation, the County and the District shall be entitled to revoke the floodplain use permit. The Chief Engineer shall provisionally revoke the permit pending a hearing by giving written notice by registered mail or personal delivery to the applicant citing the reasons for revocation. The person holding the floodplain use permit may request a hearing before the Chief Engineer, where the merits of and reasons for revoking the permit are heard within 10 working days from the receipt of notice or personal delivery. After considering the issues and facts presented during the hearing, the Chief Engineer may revoke a previously issued floodplain use permit. If no request for a hearing is made within 15 working days from the receipt of notice or personal delivery, the permit shall be considered revoked. The applicant or any affected party may appeal the decision of the Chief Engineer by requesting a hearing before the Board in accordance with Chapter 16.56 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (G), 1988)

16.20.070

Certification of elevation.

Prior to either the pouring of the first slab or the finished floor inspection, the applicant shall submit to the Chief Engineer certification of elevation, or in the case of manufactured housing, certification of the lowest structural member, in compliance with the provisions of the floodplain use permit prepared and sealed by an Arizona registered land surveyor. Such Certification of elevations shall be maintained by the Floodplain Administrator, as required by the Arizona Secretary of State, in the floodplain management section of the District. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (J), 1988)

Chapter 16.24

FLOODWAY REQUIREMENTS

Sections:

16.24.010 Uses allowed in the floodway.

16.24.020 Limited and unallowable uses.

- 16.24.030 Flood control structures.**
- 16.24.040 Public right-of-way**
- 16.24.050 Floodway appeals and variances.**

16.24.010

Uses allowed in the floodway.

Except as provided for in this chapter, no other use shall be allowed in any floodway. The following open space uses shall be permitted within a floodway to the extent that they are not prohibited by any provision of this title or any other title, law, or regulation; and provided they do not require fill, excavation, structures, or the storage of materials or equipment:

- A. Agricultural uses including general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, sod farming, and wild crop harvesting;
- B. Industrial-commercial uses such as loading areas, airport landing strips, parking areas;
- C. Private and public recreational uses including 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; and
- D. Accessory residential uses, including lawns, gardens, parking areas and play areas. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 8 (A) 1988)

16.24.020

Limited and prohibited uses in a floodway.

No use shall be allowed which:

- A. Acting alone or in combination with existing or future uses creates a danger or hazard to life or property. In determining whether a use creates a danger or hazard to life or property, the Chief Engineer may require a certification, sealed by an Arizona registered professional civil engineer that the proposed use will not result in any increase in the floodway elevations during the occurrence of the base flood, nor will the proposed use divert, retard, or obstruct the flow of flood waters;
- B. Increases the floodway elevations;
- C. Increases erosion potential upstream and/or downstream; and
- D. Places a waste disposal-system wholly or partially in a floodway. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 8 (C), 1988)

16.24.030

Flood control structures.

Flood control structures designed to protect life or property from the dangers or hazards of flood waters are permitted provided all other provisions of this title are met. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 8 (D), 1988)

16.24.040

Public right-of-way.

Any proposed development, disturbance, or grading within public right-of-way that is located in the floodway shall require a floodplain use permit pursuant to this title, except as exempted under Chapter 16.12. All provisions of this title shall apply to such activities. No uses shall be permitted that the Chief Engineer

determines would adversely affect the function of the public right-of-way, floodplain, or riparian habitat. (Ord. 2005 FC-2)

16.24.050

Floodway appeals and variances.

- A. Appeals. Any property owner requesting an appeal of a written decision or technical interpretation by the Chief Engineer may appeal to the Board as provided in Chapter 16.56 of this title.
- B. Variances. The Chief Engineer shall schedule a hearing before the Board on the request for a variance as provided in Chapter 16.56 of this title.
 - 1. Variances within federally mapped floodways will be in accordance with NFIP and Title 44, Part 60, Section 60.0 of the Code of Federal Regulations.
 - 2. In accordance with A.R.S. Section 48-3610, whenever a development plan or application has been filed with the District that requires a variance to this title and is within 1 mile of the boundary between the District's area of jurisdiction and the jurisdiction of a city or town, then the District shall advise the jurisdiction in writing, (Ord. 2005 FC-2)

Chapter 16.26

FLOODWAY FRINGE AREA REQUIREMENTS

Sections:

- 16.26.010 Uses allowed.**
- 16.26.020 Conditions applicable to all uses.**
- 16.26.030 Elevations and flood proofing**
- 16.26.040 Fill and fill materials.**
- 16.26.050 Structures--Construction restrictions.**
- 16.26.060 Storage of materials and equipment.**
- 16.26.070 Utilities and sanitary facilities.**
- 16.26.080 Public right-of-way.**
- 16.26.090 Floodway fringe appeals and variances.**

16.26.010

Uses allowed.

Any use, to the extent not prohibited by this title or any other title or law, is allowed within the floodway fringe area, (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 9 (A), 1988)

16.26.020

Conditions applicable to all uses.

- A. The following general conditions, as set out in Sections 16.26.030 through 16.26.070, shall apply to all uses within the floodway fringe area and, for purposes of this chapter, other regulatory floodplain areas where a floodway has not been defined or delineated including but not limited to A, AO, AE, AH, A1-30 and Shaded X Zones as provided on adopted FIRMs, or those regulatory floodplain areas defined by this title.
- B. No development, storage of materials or equipment, or other uses shall be permitted which, acting alone or in combination with existing or future uses, create a danger or hazard to life or property.

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- C. Until a regulatory floodway is designated, no encroachment may increase the base flood level more than 1 foot.
- D. Consideration of the effects of a proposed use or development shall be based on the assumption that there will be an equal degree of encroachment extending for a significant reach on both sides of the watercourse. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 9 (B) (part), 1988)

16.26.030

Elevation and flood proofing.

- A. New construction and substantial improvement of any habitable structure, either residential or nonresidential, shall have the lowest floor, including basement, elevated at or above the regulatory flood elevation, which is one foot above the base flood elevation. Upon the completion of the structure the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.
- B. New construction and substantial improvement of any habitable structure, either residential or nonresidential, in Zone AO shall have the lowest floor, including basement, higher than the highest adjacent grade at least one foot higher than the depth number on the FIRM, or at least two feet if no depth number is specified. Upon completion of the structure a registered professional engineer shall certify to the Floodplain Administrator that the elevation of the structure meets this standard.
- C. In Zones AO and AH, require drainage paths around structures on slopes to guide water away from structures.
- D. Non-residential, non-habitable structures shall either be elevated in conformance with 16.26.025 A. and B., or together with attendant utility and sanitary facilities:
 - 1. Be flood proofed so that below the regulatory flood level the structure is watertight with walls substantially impermeable to the passage of water;
 - 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
 - 3. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the floodplain administrator.
- E. All new construction and substantial improvements with fully enclosed areas below the lowest floor that are useable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect to meet or exceed the following minimum criteria:
 - 1. A minimum of two openings on different sides of each enclosed area that have a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - 2. The bottom of all openings shall be no higher than one foot above grade; and
 - 3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of flood waters.
- F. Manufactured homes shall meet the above standards and also the standards in 16.34. (Ord. 2005 FC-2)

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16.26.040

Fill and fill materials.

- A. Any fill proposed to be deposited in the floodway fringe area must be shown to have some beneficial purpose, and the amount thereof shall not be greater than is needed to achieve that purpose, as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions of the proposed fill or other materials.
- B. Such fill or other materials shall be protected against erosion by riprap, vegetative cover, bulk-heading, or other approved methods. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 9 (B) (1), 1988)

16.26.050

Structures-Construction restrictions.

- A. Structures, residential and nonresidential, shall be constructed so as to offer the minimum obstruction to the flow of flood waters. Wherever possible, structures shall be constructed with the same alignment as the direction of flood flow; and so far as practicable, shall be placed approximately on the same alignment as those of adjoining structures.
- B. All structures, residential and nonresidential, shall be firmly anchored to prevent flotation, which might otherwise result in damage to other structures or restriction of bridge openings and other narrow sections of the watercourse. Anchoring for manufactured housing will be in conformance with state standards as established by the Office of Manufactured Housing under A. R. S. Title 41, Chapter 16, Article 2.
- C. Service facilities such as electrical and heating equipment, shall be constructed at or above the regulatory flood elevation for the particular area, or, in the case of nonresidential structures, be adequately flood proofed.
- D. Any structure designed or utilized for human habitation, whether residential or nonresidential, that is used on a full-time or part-time basis shall have the lowest floor elevated at or above the regulatory flood elevation. Prior to the pouring of the first slab or the finished floor inspection, the applicant shall submit to the Chief Engineer certification, sealed by an Arizona registered land surveyor that the elevation of the Lowest Floor is in compliance with the floodplain use permit.
- E. Non-habitable, enclosed areas within the regulatory floodplain and below the regulatory flood elevation shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the free entry and exit of flood waters.
- F. If fill is used to elevate any structure, the minimum elevation of the fill shall be at or above the base flood elevation and shall extend at such elevation for a distance of at least 25 feet beyond the outside limit of the structure unless a study or analysis prepared by an Arizona registered professional civil engineer demonstrates that a lesser distance is acceptable.
- G. Structures, residential or nonresidential, designed or utilized for human habitation, whether on a full-time or part-time basis, shall only be permitted where:
 - 1. The product of the flow depth (d), in feet, times the square of the flow velocity (v), in feet per second, of the surrounding flood waters of the base flood does not exceed the numerical value of 18 for a period in excess of 30 minutes, and
 - 2. The surrounding flood waters of the base flood do not exceed 3 feet in depth. (Ord. 2005 FC-2; 1998 FC-1 Section 2, 1998; Ord. 1988 FC-2 Art. 9 (B) (2), 1988)

16.26.060

Storage of materials and equipment.

- A. The storage and/or processing of materials that are buoyant, flammable, explosive, hazardous, or that could be injurious to human, animal, or plant life in time of flooding is prohibited.
- B. Storage of other material or equipment may be allowed if it is not subject to major damage by floods and is firmly anchored to prevent flotation or is readily removable from the area within the limited time available after flood warning. (Ord. 2005 FC-2; Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1988-FC2 Art. 9 (B) (3), 1988)

16.26.070

Utilities and sanitary facilities.

- A. Water supply, water treatment, and sewage collection and disposal systems built in a regulatory floodplain shall be designed to prevent or minimize infiltration of flood waters into these systems and to prevent the discharge of materials from these systems into flood waters.
- B. On-site sanitary waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 9 (B) (4), 1988)

16.26.080

Public right-of-way

Any proposed development, disturbance, or grading within public right-of-way that is located in a floodway shall require a floodplain use permit pursuant to this title. All provisions of this title shall apply to such activities. No uses shall be permitted which the Chief Engineer determines would adversely affect the function of the public right-of-way, floodplain, or riparian habitat. (Ord. 2005 FC-2)

16.26.090

Floodway fringe appeals and variances.

- A. Appeals. Any property owner requesting an appeal of a written decision or technical interpretation of the Chief Engineer may appeal to the Board as provided in Chapter 16.56 of this title.
- B. Variance. Any property owner requesting a variance shall request a variance of the Board through the Chief Engineer as provided in Chapter 16.56 of this title. (Ord. 2005 FC-2)

Chapter 16.28

EROSION HAZARD AREAS AND BUILDING SETBACKS

Sections:

16.28.010 Building setback requirements.

16.28.020 Setbacks near major watercourses.

16.28.030 Setbacks from minor washes.

16.28.040 Appeals and variances.

PLANNING DEPARTMENT

16.28.010

Building setback requirements.

In erosion hazard areas where watercourses are subject to flow-related erosion hazards, building setbacks are required from the primary channel or channels as set forth in Sections 16.28.020 and 16.28.030. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 12 (part), 1988)

16.28.020

Setbacks near major watercourses.

For major watercourses, with base flood peak discharges of 2,000 cfs or greater, the following building setbacks shall be required where approved bank protection is not provided:

- A. Along the following major natural watercourses, where no unusual conditions exist, a minimum (default) building setback, as indicated below, shall be provided at the time of the development, unless an alternative setback is determined by an engineering analysis, based on the adopted ADWR standards or other applicable engineering methods, which establishes safe limits, is prepared and sealed by an Arizona registered professional civil engineer and is approved by the Chief Engineer. Unusual conditions include, but are not limited to, historical meandering of the watercourse, large excavation pits, poorly defined or poorly consolidated banks, natural channel armoring, proximity to stabilized structures such as bridges or rock outcrops, and changes in the direction, amount and velocity of the flow of waters within the watercourse.
- B. Along natural channels where no unusual conditions exist (such as a pronounced channel curvature), the default building setback for erosion hazard protection shall be:
 - 1. A distance of 500 feet along the Santa Cruz River, Rillito Creek, Pantano Wash, Tanque Verde Creek, San Pedro River, and the Canada del Oro Wash;
 - 2. A distance of 250 feet along major watercourses with base flood peak discharges greater than 10,000 cfs;
 - 3. A distance of 100 feet along all major watercourses with base flood peak discharges of 10,000 cfs or less, but more than 5,000 cfs; and
 - 4. A distance of 75 feet along all other major watercourses with base flood peak discharges of 5,000 cfs or less, but more than 2,000 cfs.
- C. Along major watercourses where unusual conditions do exist that may increase or decrease the required erosion hazard setback, building setbacks shall be established on a case-by-case basis by the Chief Engineer, using the standard adopted by the ADWR or other applicable engineering methods, unless an engineering study, which establishes safe limits, is prepared and sealed by an Arizona registered professional civil engineer and is approved by the Chief Engineer. When determining building setback requirements, the Chief Engineer shall consider the danger to life and property due to existing flood heights or velocities and historical channel meandering. Unusual conditions include, but are not limited to, historical meandering of the watercourse, large excavation pits, poorly defined or poorly consolidated banks, natural channel armoring, proximity to stabilized structures such as bridges or rock outcrops, and changes in the direction, amount, and velocity of the flow of waters within the watercourse.
- D. For constructed channels, structural bank protection to prevent erosion is required along major watercourses with base flood peak discharges of more than 2,000 cfs, unless a written waiver of the requirement is granted by the Chief Engineer based on an engineering study, prepared and sealed by an

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Arizona registered professional civil engineer, demonstrating an appropriate building setback for an earthen channel, based on soil and natural flow conditions. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 12 (A), 1988).

16.28.030

Setbacks from minor washes.

- A. For minor natural washes with a base flood peak discharge of 2,000cfs or less, the following building setbacks shall be required:
1. A distance of 50 feet for watercourses with base flood peak discharges of less than 2,000 cfs, but more than 500 cfs;
 2. A distance of 25 feet for watercourses with base flood peak discharges of less than 500 cfs;
 3. Alternative safe limits for erosion setback may be approved in writing by the Chief Engineer where an engineering analysis is provided that establishes safe limits and is prepared and sealed by an Arizona registered professional civil engineer and is approved by the Chief Engineer. Unusual conditions include, but are not limited to, historical meandering of the watercourse, large excavation pits, poorly defined or poorly consolidated banks, natural channel armoring, proximity to stabilized structures such as bridges or rock outcrops, and changes in the direction, amount, and velocity of flow of the waters in the watercourse. However, at no time shall a setback of less than 25 feet from the top of channel bank be permitted in order to provide for reasonable access and stability of nearby structure foundations.
- B. Along minor washes where unusual conditions do exist, building setbacks shall be established on a case-by-case basis by the Chief Engineer, using the adopted ADWR standards or other applicable engineering methods, unless an engineering study, which establishes safe limits, is prepared and sealed by an Arizona registered professional civil engineer and is approved by the Chief Engineer. When determining building setback requirements, the Chief Engineer shall consider danger to life and property due to existing flood heights or velocities and historical channel meandering.
- C. For constructed channels, channel banks are required to be stabilized to prevent erosion along minor watercourses with base flood peak discharges of less than 2,000 cfs, but greater than 500 cfs. Stabilization is required unless a variance to the requirement is granted by the Chief Engineer based on an engineering study, prepared and sealed by an Arizona registered professional civil engineer, demonstrating an appropriate building setback for an earthen channel, based on soil and natural flow conditions. For constructed channels with a base flood peak discharge of less than 500 cfs, channel stabilization may be required based on engineering analysis and assessment of soil conditions and flow velocities. (Ord. 2005 FC-2; Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1988-FC2 Art. 12 (B), 1988)

16.28.040

Appeals and variances.

- A. Appeals. Any property owner requesting an appeal of a written decision or technical interpretation by the Chief Engineer may appeal to the Board as provided in Chapter 16.56 of this title.
- B. Variances. Any property owner requesting a variance shall request a variance of the Board through the Chief Engineer as provided in Chapter 16.56 of this title. (Ord. 2005 FC-2)

Chapter 16.30

WATERCOURSE AND RIPARIAN HABITAT PROTECTION AND MITIGATION REQUIREMENTS

Sections:

16.30.010 Purpose.

16.30.020 Description.

16.30.030 Applicability.

16.30.040 Permits.

16.30.050 Mitigation.

16.30.060 Review process.

16.30.070 Appeals and variances.

16.30.080 Riparian habitat maps.

16.30.010

Purpose.

The purpose of this chapter is to promote stable flow and sediment transport conditions, preserve natural floodplain functions, and provide watercourse management by preserving and/or enhancing riparian vegetation and habitat along watercourses and floodplains and to:

- A. Promote benefits provided by riparian habitat resources, including but not limited to, groundwater recharge, natural erosion control and protection of surface-water quality.
- B. Ensure the long-term stability of natural floodplains and survival of the full spectrum of plants and animals that are indigenous to the County by:
 - 1. Assuring riparian habitat acreage and existing or natural functional values are not diminishing during development;
 - 2. Promoting continuity of riparian habitat along watercourses;
 - 3. Providing land-use guidance for avoiding, minimizing and mitigating damage to important riparian areas; and
 - 4. Providing ecological sound transmission between riparian habitat and developed areas.
- C. Promote an economic benefit to the County by providing aesthetic, recreation and wildlife values of riparian habitat for the enjoyment of residents and visitors. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1994 FC-2 (part), 1994; Ord. 1988 FC-2 Art. 10 (A), 1988)

16.30.020

Description.

For purposes of this chapter, "a regulated riparian habitat" is defined by the riparian classification maps adopted by the Board. These habitats are generally characterized by vegetation that is different in plant species composition or an increase in the size and/or density of vegetation as compared to upland areas and occur in association with regulatory floodplains through which waters flow at least periodically, as well as any spring, cienega, lake, watercourse, river, stream, creek, wash, arroyo, or other body of water. These communities represent a continuum of plant species' response to available moisture, and can be subdivided into hydroriparian, mesoriparian, and xeroriparian classifications as well as identification as Important Riparian Areas providing ecological connectivity and biological corridors.

- A. Hydroriparian. Riparian habitats generally associated with perennial watercourses and/or springs. Plant communities are dominated by obligate or preferential wetland plant species such as willow and cottonwood.
- B. Mesoriparian. Riparian habitats generally associated with perennial or intermittent watercourses or shallow groundwater. Plant communities may be dominated by species that are also found in drier habitats (e.g., mesquite); but contain some preferential riparian plant species such as ash or netleaf hackberry.
- C. Xeroriparian. Riparian habitats generally associated with an ephemeral water supply. These communities typically contain plant species also found in upland habitats; however, these plants are typically larger and/or occur at higher densities than adjacent uplands. Xeroriparian habitat is further divided into four subclasses for Class A, B, C, and D habitat as defined in the mitigation standards approved by the Board as maintained by the Floodplain Administrator. Mitigation in xeroriparian habitat is to be determined based at least on total vegetative volume (TVV) as provided within the mitigation standards as adopted by the Board as well as replacement of other lost riparian habitat functions necessary to sustain riparian habitat.
- D. Important Riparian Areas. Important Riparian Areas occur along the major river systems and provide critical watershed and water resources management functions as well as providing a framework for landscape linkages and biological corridors. Important Riparian Areas are valued for their higher water availability, vegetation density, and biological productivity, compared to adjacent uplands. Important Riparian Areas are essential for floodplain management and every effort should be made to protect, restore, and enhance the structure and functions of these areas including hydrological, geomorphological, and biological functions. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1994 FC-2 (part), 1994: Ord. 1988 FC-2 Art. 10 (B), 1988)

16.30.030

Applicability.

This chapter shall apply to all properties within unincorporated Pima County that contain riparian habitat, as delineated on riparian habitat maps adopted by the Board. This chapter shall apply to the County, the District, and to all parties acting on behalf of the District and County. This chapter shall apply to individual building permits, including grading permits issued by the County, and land development permits associated with subdivisions and development plans. All requirements of this chapter shall apply to regulated hydroriparian, mesoriparian, Important Riparian Areas, and, xeroriparian Classes A, B, C, and D habitat. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1998 FC-1 Section 3, 1998; Ord. 1994 FC-2 (part), 1994: Ord. 1988 FC-2 Art. 10 (C), 1988)

16.30.040

Permits.

- A. As part of the floodplain use permit process for property subject to provisions of this chapter, the proposed development will be reviewed for impacts to mapped riparian habitat whenever more than 1/3 of an acre of a property's regulated riparian habitat is disturbed. In order to avoid such alteration of the riparian habitat or to mitigate disturbance on the subject property, an applicant may apply to the County for a modification of the development standards under Section 18.07.080 of the County Zoning Code.

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Such modifications may include reduction in building setbacks or approval to provide onsite mitigation and enhancement in natural areas.

- A. Submittals. Permit applications shall include:
1. Evidence that no reasonably practicable alternative exists to the proposed impact on mapped habitat and evidence that the impact has been minimized to the maximum extent practicable.
 2. A map delineating riparian habitat boundaries and clearly delineating areas of proposed disturbance to mapped riparian habitat;
 3. A description of the vegetation that will be disturbed;
 4. A habitat mitigation plan for disturbance to mapped riparian habitat areas as provided in 16.30.050 when required by the District; and
 5. Such additional supporting information as the District determines to be necessary to carry out review under this chapter.
- B. Permit Conditions. Conditions may be placed on the permit that, to the extent reasonably practicable, require preservation of, or mitigate the impact on, riparian habitat. If mitigation is required, compliance with an approved habitat mitigation plan shall be made a condition of the permit. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1998 FC-1, Section 3, 1998; Ord. 1994 FC-2 (part), 1994; Ord. 1988 FC-2 Art. 10 (D), 1988)

16.30.050

Mitigation.

- A. Mitigation Plan. If an applicant demonstrates to the satisfaction of the District that alteration of regulated riparian habitat areas cannot reasonably be avoided, a mitigation plan shall be submitted to the District for approval when more than 1/3 of an acre of regulated riparian habitat is disturbed.
- B. Mitigation plans shall be approved by the Board for disturbance of hydroriparian, mesoriparian and/or Important Riparian Areas whenever more than 5% of a property's regulated riparian habitat is disturbed, except for those disturbances that are less than 1/3 acre.
- C. Mitigation Plan Requirement. The mitigation plan shall delineate all mitigation measures to be taken by the owner and shall include a schedule of completion. The mitigation plan shall be consistent with any riparian habitat mitigation standards adopted by the Board, and shall be prepared in accordance with best available scientific or management practices. Mitigation may be incorporated into measures taken to satisfy other requirements of the District and County. Where appropriate, the mitigation plan shall at a minimum provide for:
1. Construction methods that identify and protect riparian habitat that is to be left unaltered;
 2. Selective clearing or other habitat manipulation;
 3. Replacement of affected vegetation with appropriate plant species in ratios that will result in simulation of the pre-alteration vegetation within 5 years;
 4. Irrigation with passive water harvesting, where possible, or installation and maintenance of irrigation methods until plantings are established;
 5. Periodic monitoring of mitigation features;
 6. Maintenance and replacement of damaged plantings; and
 7. Posting a performance bond or financial assurances.
- D. Mitigation Banking, or other alternative mitigation measures as approved by the Board. At the request of the property owner, and with Board approval, the mitigation plan requirement under this chapter may

be waived by contributing funds to an account established and administered by the District for the purpose of offsetting damage to riparian habitat.

16.30.060

Review process.

The application and any proposed mitigation plan shall be evaluated by their effectiveness in:

- A. Avoiding the impact;
- B. Minimizing the impact;
- C. Rectifying the impact;
- D. Reducing or eliminating the impact over time; and
- E. Compensating for the impact. (Ord. 2005 FC-2; Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1994 FC-2 (part), 1994: Ord. 1988 FC-2 Art. 10 (F), 1988)

16.30.070

Appeals and variances.

- A. Appeals: Any property owner appealing any written decision concerning the interpretation of adopted riparian maps, or administration of this chapter, or requesting a waiver to mitigation standards, shall first appeal in writing to the Chief Engineer within 30 days from receipt of the written decision.
 1. The Chief Engineer will respond within 15 days after the filing by an applicant with a final response not more than 45 days following the initial response.
 2. Within 10 working days of receipt of the written appeal, the Chief Engineer may meet with the property owner and request such additional information as is deemed necessary in order to render his written decision.
 3. Any property owner aggrieved by the written decision of the Chief Engineer may file a petition with the Clerk of the Board within 30 days from receipt of the decision of the Chief Engineer to appeal the Chief Engineer's decision to the Board. The appeal shall contain a detailed explanation of all matters in dispute, and the Board, through the Chief Engineer, may require the submission of such additional information, as it deems necessary.
- B. Variance. Any property owner requesting relief from provisions of this title or from this chapter and/or a change to the adopted riparian maps shall request a variance through the Chief Engineer. The Chief Engineer shall schedule a hearing before the Board on the request for a variance. For hydro/mesoriparian and Important Riparian Areas requiring Board approval, the Board may hold the request for a variance concurrently with the presentation of a proposed mitigation plan for approval. See Chapters 16.56 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1994 FC-2 (part), 1994: Ord. 1988 FC-2 Art. 10 (G), 1988)

16.30.080

Riparian classification maps.

- A. Riparian classification maps shall be adopted by resolution of the Board and shall detail on a parcel level, the general location of riparian habitat and Important Riparian Areas subject to the requirements of this chapter.
- B. Where a question arises as to the location of any regulated riparian habitat or Important Riparian Area, the question shall be decided by the Chief Engineer in consultation with the Zoning Administrator. The

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Chief Engineer's decision shall be final, except as provided for in Chapter 16.54 of this title. Any person contesting the location of any boundary shall be given a reasonable opportunity to present technical evidence, if so desired.

- C. The riparian classification maps shall be kept on file and made available to the public in the offices of the District. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1995 FC-1 §§§§ 1, 2, 1995)

Chapter 16.34

MANUFACTURED HOMES AND MANUFACTURED HOME PARKS AND SUBDIVISIONS

Sections:

16.34.010 Permit requirements and exemptions.

16.34.020 Anchoring requirements.

16.34.030 Location and placement conditions.

16.34.040 Certification requirements.

16.34.010

Permit requirements and exemptions.

- A. From the effective date of this ordinance codified in this title, it shall be unlawful to place a manufactured home, install utility improvements to place a manufactured home, or make substantial improvements to existing manufactured homes within a regulatory floodplain, as described in chapters 16.08, 16.24 and 16.26 of this title, or within erosion hazard areas, as described in Chapter 16. 28 of this title, for more than 180 consecutive days without first applying for and obtaining a floodplain use permit from the Chief Engineer, and thereafter complying with each and every written term of the permit, as well as with state regulations for manufactured homes as established by the Office of Manufactured Housing under A. R. S. Title 41, Chapter 16, Article 2.
- B. Exemptions:
1. No such floodplain use permit shall be required for any repairs or alterations for which the value of the materials and labor thereon does not exceed \$7,500, except for those improvements that obstruct the flow of flood waters. For the purpose of determining the value of any such repairs or alterations, the normal retail value of materials and the reasonable value of labor performed shall be used. Although no floodplain use permit is required, all other provisions of this title shall be observed in the performance of said repairs or alterations. Repairs or alterations shall not be done in a piecemeal fashion for the purpose of avoiding applying for a permit when the total cost of said work is in excess of \$7,500 .
 2. Temporary placement without a utility hook up for fewer than 180 consecutive days.
 3. Recreational vehicles that are on site for fewer than 180 consecutive days, and fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 10 (A), 1988)

16.34.020

Anchoring requirements.

Anchoring for manufactured housing will be in conformance with state standards as established by the Office

of Manufactured Housing under A. R. S. Title 41, Chapter 16, Article 2. All manufactured homes and additions to manufactured homes located within a regulatory floodplain or SFHA shall be anchored to resist flotation, collapse, or lateral movement by one of the following methods:

- A. By providing an anchoring system designed to withstand horizontal forces of 25 pounds per square foot and uplift forces of 15 pounds per square foot; or
- B. By providing over-the-top and frame ties to ground anchors. Specifically:
 - 1. Over-the-top ties shall be provided at each of the four corners of the manufactured home with 2 additional ties per side at intermediate locations, except that manufactured homes less than 50 feet long require only one additional tie per side; and
 - 2. Frame ties be provided at each corner of the home with 5 additional ties per side at intermediate points, except that manufactured homes less than 50 feet long require only four additional ties per side, and
 - 3. All components of the anchoring system be capable of carrying a force of 4,800 pounds. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 10 (B), 1988)

16.34.030

Location and placement conditions.

Where any of the following:

- A. Manufactured homes not placed in manufactured home parks or subdivisions;
- B. New manufactured home parks or subdivisions;
- C. Expansions to existing manufactured home parks or subdivisions; and
- D. Repairs, reconstruction, or improvements to existing manufactured home parks or subdivisions that equal or exceed 50 percent of the value of the streets, utilities, and pads before the repairs, reconstruction or improvements commenced; are located within a regulatory floodplain or erosion hazard area, the following standards shall apply:
 - 1. An adequate surface for the pad or lot to meet the minimum drainage standards under the uniform building code and access for a hauler shall be provided;
 - 2. All manufactured homes shall be placed on pads or lots elevated on compacted fill which shall be, at a minimum, at or above the base flood elevation; or shall be elevated on a stem wall or on pilings so that the bottom of the structural frame or the lowest point of any attached appliances(s), whichever is lower, is at or above the regulatory flood elevation. If elevated on pilings:
 - a. The lots shall be large enough to permit steps;
 - b. The pilings shall be placed in stable soil no more than ten feet apart; and
 - c. Structures designed or utilized for human habitation, whether on a full-time or part-time basis, shall only be permitted where the product of the flow depth d , in feet, times the square of the flow velocity v , in feet per second, of the surrounding flood waters of the base flood does not exceed the numerical value of 18 for a period in excess of 30 minutes, or the surrounding flood waters of the base flood do not exceed 3 feet in depth. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1998 FC-1 Sec. 2, 1998; Ord. 1988)

16.34.040

Certification requirements.

- A. Certification that the installation of a manufactured home meets all of the requirements of this

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certification that the installation of a manufactured home meets all of the requirements of this chapter is required. Such certification shall be provided by the person installing the manufactured home, the owner, the developer of the manufactured home park or subdivision, or any agency regulating manufactured home placement, whichever is deemed appropriate by the Chief Engineer.

- B. Certification of elevations listed on the floodplain use permit shall be prepared and sealed by an Arizona registered land surveyor, and provided to the Chief Engineer prior to habitation of the structure. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 10 (D), 1988)

Chapter 16.36

SUBDIVISIONS AND DEVELOPMENT

Sections:

16.36.010 Application.

16.36.020 Plan information.

16.36.030 Grading and drainage improvement.

16.36.040 Floodplain and floodway boundaries--Drainage areas.

16.36.050 Development plan--Advisories to other jurisdictions.

16.36.060 Street elevation requirements.

16.36.070 Building site location restrictions.

16.36.080 Setbacks from channels.

16.36.090 Rights-of-way for drainage.

16.36.100 Detention systems.

16.36.110 Cost recovery for drainage or flood control improvements.

16.36.120 Drainage channels.

16.36.130 Maintenance of drainage improvements.

16.36.140 Appeals and waivers of subdivisions and development floodplain requirements.

16.36.010

Application.

- A. Land may not be parceled or subdivided in such a manner as to create lots unsuitable for development because of flood or erosion hazards.
- B. All subdivision plats, development plans and associated building plans and improvement plans are subject to the design requirements for regulatory floodplains as specified under A. R. S. Section 48-3609 and this chapter. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (A), 1988)

16.36.020

Plan information.

All tentative plats and development plans submitted to the County shall show location, by survey or photographic methods, of streams, watercourses, canals, irrigation laterals, private ditches, culverts, lakes and other water features, including those areas subject to flooding or erosion, or that contain riparian habitat. The plats/plans shall also include the direction of any flow and drainage area, as well as water-surface elevations and the limits of inundation for the base flood, if such a flood has a peak flow rate equal to or greater than 100 cfs, or is a FEMA regulatory discharge with applicable FEMA information depicted on the

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adopted NFIP maps. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (B) (1), 1988)

16.36.030

Grading and drainage improvement.

- A. All tentative plats and development plans shall show proposed grading and improvements for areas that are subject to flooding or which have drainage problems, and shall also show a description and location of all facilities proposed to alleviate flooding or drainage problems within or outside the boundaries of the subdivision or development.
- B. All development plans and tentative plats must be accompanied by conceptual grading plans and conceptual drainage improvement plans, as needed, to demonstrate:
 - 1. The methods for flood proofing and/or drainage control for the development, including sufficient lot grading information to demonstrate adequate finished pad elevations and/or drainage slopes and paths to guide water away from structures and protect building foundations including all structures within Zones, A, AO, AH and shades X;
 - 2. That improvements are compatible with the existing upstream and downstream drainage conditions and that any proposed grading and/or grade change will not have an adverse impact on surrounding properties;
 - 3. The methods of erosion and sediment control; and
 - 4. The methods of mitigating increased urban peak and volumetric flood water runoff or discharge on downstream properties created as a result of the development.
- C. A floodplain use permit is required prior to commencement of any site improvements or grading associated with a subdivision development as a whole or for individual lot(s) within the subdivision. A grading plan must be submitted to the District for review and approval. Detailed improvement plans for storm drains or channel improvements must also be submitted to the same department for review and approval. Where a grading plan or detailed drainage improvement plans are not provided, the Chief Engineer may require additional information and engineering plans prior to issuing a floodplain use permit. (Ord. 2005 FC-2, Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (B) (2), (3), (4), 1988)

16.36.040

Floodplain and floodway boundaries—Drainage Areas.

- A. All final plats and development plans shall indicate the limits of the regulatory floodplains, erosion hazard boundaries, and the limits of the federally established regulatory floodplains and floodway (if applicable), and be delineated in a surveyable manner and sealed by an Arizona registered land surveyor.
- B. All final plats shall indicate both drainage areas and their respective base flood peak discharges, with a note contained on the final plat that the drainage areas and base flood peak discharges are provided by the owner for information purposes only.
- C. Where subdivision improvements modify or remove the SFHA that is designated on the federal FIRM, a hydraulic analysis of the impact and the engineering plans for the modifications must be approved by the District and a CLOMR submitted to FEMA prior to the recording of the final plat. Floodplain use permits for structures may be issued as long as the finished floor elevation is at least equal to 1 foot above the existing base flood elevation as shown on the current FIRM.

- D. Where modification of a federally defined floodway is proposed, approval of a LOMR by FEMA amending the floodway boundary is required prior to issuance of building permits in the floodway area.
- E. For subdivisions or for development plans for any improvement which changes the configuration of the regulatory floodplain, as delineated on the FIRM, the owner shall provide to the District a new delineation of all regulatory floodplains affected by the improvement and as-built plans of the drainage improvements. The new delineations and reports shall be prepared in conformance with the requirements of FEMA for a LOMR, the state director of Water Resources, and this title.
- F. Prior to the release of assurances for subdivisions or certificate of occupancy for development plans, the LOMR must be approved by the District and submitted to FEMA for review and approval. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (B) (5), (6) 1988).

16.36.050

Development plan--Advisories to other jurisdictions.

- A. In accordance with A.R.S. Section 48-3610, the District shall advise, in writing, any city or town that has assumed jurisdiction over its regulatory floodplains, and provide a copy of any development plan or any application that has been filed with the County for a floodplain use permit or variance to develop land in a regulatory floodplain or floodway, whenever development within the County will occur within one mile of the boundary between the District's area of jurisdiction and the jurisdiction of that city or town.
- B. The District shall also advise any city or town in writing and provide a copy of any development plan of any major development proposed within a regulatory floodplain or floodway whenever development within the County could affect floodprone areas or watercourses within that city's or town's area of jurisdiction.
- C. Written notice of a copy of the plan of development shall be sent to any adjacent jurisdiction no later than 3 working days after having been received by the District. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (B) (7), 1988)

16.36.060

Street elevation requirements.

Streets required for paved permanent access shall be designed and constructed so that the flow depths over them do not exceed 1 foot in depth during the base flood. At least one paved permanent access shall be provided to each lot over terrain that can be traversed by conventional motor vehicles in times of flooding. In specific instances at drainage crossings where it can be demonstrated that this requirement is either impractical, based upon low hazard to life and property, or where construction of a drainage crossing may create problems that override the corresponding benefits, this requirement may be waived by the Chief Engineer. Fill may be used for streets in areas subject to flooding, provided such fill does not unduly increase flood heights. The developers may be required to provide profiles and elevations of streets for areas subject to flooding. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (C), 1988)

16.36.070

Building site location restrictions.

- A. Land which contains areas within a regulatory floodplain or erosion hazard area shall not be platted for

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residential occupancy or building sites unless each lot contains a building site, either natural or manmade, which is not subject to flooding or erosion by the base flood.

- B. It is preferred that building sites be located outside of the regulatory floodplain.
- C. In regulatory floodplain areas where fill is to be used to raise the elevation of the building site, the building shall be located not less than 25 feet landward from any edge of the fill unless a study/analysis prepared and sealed by an Arizona registered professional civil engineer demonstrates a lesser distance is acceptable. No fill shall be placed in any regulatory floodplain or floodway, nor shall any fill be placed where it diverts, retards or obstructs the flow of water to such an extent that it creates a danger or hazard to life or property.
- D. Any Dwelling Unit built within a regulatory floodplain shall be constructed so as to place the minimum finished floor elevation of the Dwelling Unit at or above the regulatory flood elevation.
- E. All building sites shall be graded and compacted to comply with FEMA regulations for fill and to comply with foundation elevation requirements under the international uniform building code, and shall be graded and compacted so that the top of any exterior foundation shall extend above the elevation of the street gutter at the point of discharge, or above the inlet of an approved drainage device, a minimum of 12 inches plus 2 percent for a minimum of 25 feet away from the foundation, but in no case should the finished floor elevation of habitable structures be below regulatory flood elevation. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (D), 1988)

16.36.080

Setbacks from channels.

Along reaches of watercourses where hazards from eroding banks or channel meandering are considered by the Chief Engineer to be severe, special engineering studies, prepared and sealed by an Arizona registered professional civil engineer shall be required of the property owner or developer; and requirements for setbacks from banks of watercourses and/or other protection measures shall be established in accordance with the approved studies. Also, see Chapter 16.28 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (E), 1988)

16.36.090

Rights-of-way for drainage.

- A. Whenever a subdivision plat or development plan contains a watercourse that is regulated by this title, all rights-of-way, easements, floodplains, associated with the watercourse shall be clearly labeled and designated as "drainageway," and/or floodplain.
- B. If the watercourse is an improved major watercourse with a base flood of 10,000 cfs or more, the drainageway right-of-way shall include the channel, the channel improvements; and for County or District use, a 50-foot wide area measured outward from the front face of the top of the bank protection on both sides of the channel.
- C. If the watercourse is an improved, minor watercourse, the drainageway shall include the channel, the channel improvements, and access easements and ingress/egress points as necessary for maintenance access to assure the flood carrying capacity of the improved watercourse be maintained.
- D. If the watercourse is to remain natural, the drainageway shall be the boundaries of the regulatory floodplain.
- E. Along any major watercourses where the peak discharge of a base flood is 10,000 cfs, or greater, the

- improved drainageway or/ or floodway shall be dedicated in fee simple, or as an easement, to the District.
- F. Along any minor watercourses where the peak discharge of a base flood is greater than 2,000 cfs, constructed drainageways, channels, and associated flood control structures, as required to flood proof and protect property, shall be dedicated in fee simple, or as an easement, to the County; or, if acceptable to the Chief Engineer a private maintenance will be allowed in accordance with Chapter 16.38.
 - G. Along other watercourses, the Chief Engineer shall determine whether it is necessary for the County or the District to have control of the drainageway. If the Chief Engineer determines that public control is necessary, the owner shall dedicate the drainageway in fee simple or grant an easement. (Ord. 2005 FC-2; Ord.1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (F), 1988)

16.36.100

Detention systems.

All development with residential densities of 3 or more units per acre that is located within a critical or balanced drainage basin, or any residential development larger than 1 acre in size that has a density of 6 units per developed acre, or greater, as well as all proposed commercial and industrial developments greater than 1 acre in size, shall provide some method of peak or volumetric runoff reduction. See Chapter 16.48 of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (G), 1988)

16.36.110

Cost recovery for drainage or flood control improvements.

The Board may establish a cost-recovery system or fee system for the improvement or installation of public flood control systems. The purpose of the fee is to provide a method for offsite improvements necessary in order to mitigate the effect of urbanization and to provide a systematic approach for the construction of public flood control improvements. Whenever such a system is adopted, it shall demonstrate that the fee will in some manner benefit the property owned by the person or entity from which the fee is collected, and that it will be applied equitably to all property in proportion to flood waters generated by urban use of the property. The fees will also be restricted to providing flood control improvements necessary for the allowed use of the properties owned by the person or entity from which the fee is collected, and the fees shall be reasonably related to the actual cost of providing flood control improvements beneficial to the site or surrounding area. The fees will be reviewed by the Flood Control District Advisory Committee, prior to action by the Board. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 11 (H), 1988)

16.36.120

Drainage channels.

Channel design standards for constructed drainage channels and other flood control structures shall be established by the Chief Engineer. The requirements as specified in this title are minimum standards and address general floodplain management requirements. Specific projects may warrant additional requirements that may be imposed by the Chief Engineer. In unusual conditions and on a case-by-case basis, permitting and construction of perimeter channels, flood walls, levees or unlined constructed channels may be allowed with approval of the engineering and construction specifications by the Chief Engineer.

- A. Drainage channels shall be designed to provide containment of the regulatory flood and to minimize erosion, but shall not be fully lined so that the improved channel bottoms shall remain natural.

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- B. Perimeter channels that route flow around the outer edge of the development should be prohibited in all areas where there is an established natural channel. Where used, perimeter channels shall be adequately armored against erosion from flow intercepted by the channel, as well as from flow within the channel.
- C. Flood walls or levees for flood proofing shall only be allowed under special circumstances within a FEMA designated floodplain, and shall be designed to FEMA's requirements including a minimum of 3 feet of freeboard above the base flood elevation. Adjacent finished floor elevations shall be 1 foot above the base flood elevation.
- D. For regulatory flows greater than 500 cfs, the construction of earthen, unlined channels shall require written approval by the Chief Engineer as well as an engineering analysis prepared and sealed by an Arizona registered civil engineer. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1998 FC-1 Section 5, 1998)

16.36.130

Maintenance access to drainage improvements.

Any and all drainage improvements shall be designed with adequate access to the drainage improvements to allow for maintenance of the intended design conveyance and/or storage capacity, maintenance of erosion control, and maintenance of flood control function. Such drainage improvements may include, but are not limited to, channels, culverts, storm water detention/retention basins, storm drains, streets, or other permanent conveyances or storage facilities designed to meet the requirements of this title. (Ord. 2005 FC-2)

16.36.140

Appeals of subdivisions and development floodplain requirements.

- A. Any property owner appealing any written decision concerning the interpretation or administration of this chapter, requesting an appeal to the development standards and requirements for floodplain management, erosion control or riparian habitat mitigation, shall first appeal in writing to the Chief Engineer within 30 days from receipt of the written decision.
 - 1. The Chief Engineer will respond within 15 days after the filing by an applicant with a final response not more than 45 days following the initial response.
 - 2. Within 10 working days of receipt of the written appeal, the Chief Engineer may meet with the property owner and request such additional information as is deemed necessary in order to render his written decision.
 - 3. Any property owner aggrieved by the written decision of the Chief Engineer may file a petition with the Clerk of the Board within 30 days from receipt of the decision of the Chief Engineer to appeal the Chief Engineer's decision to the Board. The appeal shall contain a detailed explanation of all matters in dispute, and the Board, through the Chief Engineer, may require the submission of such additional information, as it deems necessary.
- B. Any property owner requesting a variance to this chapter shall request a variance through the Chief Engineer. The Chief Engineer shall schedule a hearing before the Board on the request for a variance pursuant to Chapter 16.56 of this title. (Ord. 2005 FC-2)

Chapter 16.38

MAINTENANCE OF PRIVATE DRAINAGE IMPROVEMENTS

- A. When drainage improvements are associated with an approved development plan, subdivision plat or

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approved engineering report, and are constructed to provide flood protection to remove or reduce, flood hazards identified by FEMA and where those improvements are privately owned, then it shall be the responsibility of the property owner(s) to perform maintenance as necessary to ensure the integrity of said drainage improvements and maintenance of the flood carrying capacity to the designed discharge.

1. Covenants and restrictions shall be required for private drainage improvements, prior to the construction of the improvements. The covenants and restrictions must outline maintenance responsibilities of the property owners and must be reviewed and approved by the Chief Engineer, prior to the construction of the drainage improvements.
2. The failure to maintain private drainage improvements shall be considered a violation of this title.
3. For purposes of this title, a private drainage improvement is considered a structure. (Ord. 2005 FC-2)

Chapter 16.42

SEDIMENT AND EROSION CONTROL

Sections:

16.42.010 Application of chapter provisions.

16.42.020 Soil investigations.

16.42.030 Grading or alteration of watercourses.

16.42.040 Grading or alteration of sheet flow areas.

16.42.010

Application of chapter provisions.

- A. Within a regulatory floodplain or sheet flood zone, any activity that may have an effect on the flow of storm water runoff or flood water, or that may effect the erosion or the sediment carrying capacity of a watercourse, is subject to this title and to the provisions of this chapter.
- B. Prior to receiving a floodplain use permit, both temporary and permanent measures for sediment and erosion control must be clearly delineated on plans or other written documents. The Grading Design Manual, prepared pursuant to Chapter 18.81 of the zoning code, and other design standards, as approved by the Chief Engineer, shall be used to prepare these plans or documents. (Ord. 2005 FC-2)

16.42.020

Soil investigations.

The Chief Engineer may require appropriate soil investigation reports for the purpose of determining the erosive properties of areas or lands to be graded or disturbed, and which may create sediment deposition or erosion in any floodplain or floodprone area regulated by this title. (Ord.2005 FC-1)

16.42.030

Grading or alteration of watercourses.

- A. Any grading or the alteration of any watercourse regulated by this title shall be performed in a controlled manner in order to minimize the loss of soil through erosion from rainfall or storm water flow. Prior to granting a floodplain use permit for work in any floodplain, methods to control erosion and sedimentation must be demonstrated to be appropriate to the satisfaction of the Chief Engineer.

- B. Due to the rapidly changing hydraulic characteristics of watercourses within the County, and the effects that sand and gravel mining and other excavations have on these hydraulic characteristics, floodplain use permits for grading and construction shall only be issued for a limited time period, not to exceed one year, subject to annual renewal and upon review by the Chief Engineer.
- C. In addition to those conditions provided for elsewhere, floodplain use permits for excavations may impose conditions regarding the area and location in which excavations are allowed, the maximum amount of material to be excavated, mining mitigation plans and other reasonable restraints on the methods of operating including time restraints.
- D. The Chief Engineer may require hydrologic, hydraulic, geomorphic, and riparian habitat analyses that address both existing and future conditions, as well as the impacts that could potentially occur during grading and construction. (Ord. 2005 FC-2)

16.42.040

Grading or alterations in sheet flooding areas.

- A. Grading or any alteration that diverts, obstructs, or retards the flow of flood waters is subject to the provision of this title and shall require permits as specified within this title.
- B. Slope protection and terracing to control surface drainage, erosion, and debris on cut or fill slopes may be required in accordance with the floodplain use permit and the adopted Grading Design Manual.
- C. In accordance with the Grading Design Manual, erosion control shall be implemented and maintained in order to prevent erosion of slopes and cleared, brushed, grubbed, or graded areas. (Ord. 2005 FC-2)

Chapter 16.44

VEHICULAR ACCESS

Sections:

16.44.010 Purpose of provisions--Allocation of responsibility.

16.44.020 Areas of applicability.

16.44.030 Access requirements--Property owner duties.

16.44.040 Permit requirements.

16.44.010

Purpose of provisions--Allocation of responsibility.

It is recognized that private vehicular access may become impassable to ordinary and emergency vehicles during times of flooding. It is the intent of this chapter to allocate the responsibility for private vehicular access, whenever said access crosses a FEMA regulatory floodplain. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 13 (A), 1988)

16.44.020

Areas of applicability.

This chapter shall apply in all situations where private vehicular access crosses any FEMA regulatory floodplain located between the points where the private access leaves a paved, publicly maintained roadway and the end of the private access. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 13 (B), 1988)

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16.44.030

Access requirements--Property owner duties.

In all situations where private vehicular access crosses a FEMA regulatory floodplain located between the points where the private access leaves a paved, publicly maintained roadway and the end of the private access, the owner of the property requiring the private vehicular access shall:

- A. Construct the private vehicular access in such a manner that it is permanent and is over terrain that can be traversed by conventional motor vehicles during a base flood; or
- B. Execute and record a covenant, running with the land and enforceable by the County and the District, which contains the following:
 - 1. An acknowledgment that the private vehicular access may be impassable to conventional motor vehicles and emergency vehicles in times of flooding,
 - 2. A hold-harmless provision, holding the County and the District harmless from and against all injuries and damages resulting from traversing or attempting to traverse the private vehicular access during times of flooding, and
 - 3. A provision which either:
 - a. Requires the covenantor successors and assigns to erect and maintain a sign(s) in a location(s) and size(s) acceptable to the County the District stating "DO NOT ENTER WHEN FLOODED," or
 - b. Causes the covenantor or successors and assigns to assume responsibility to notify users of the private vehicular access that it may be impassable in times of flooding, and agree to indemnify and defend the County, the District, their officers, employees, servants and agents, against all claims for injuries to persons or damages to property due to the construction, installation, location, operation, safeguarding, maintenance, repair, and condition of the private vehicular access. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 13 (C), 1988)

16.44.040

Permit requirements.

When the construction of a vehicular access road is within a FEMA regulatory floodplain or sheet flow area and disturbs more than 14,000 square feet, then a floodplain use permit and grading plan are required to assure that flood waters are not diverted, retarded, or obstructed. (Ord. 2005 FC-2)

Chapter 16.48

RUNOFF DETENTION SYSTEMS

Sections:

16.48.010 Runoff reduction required when--Specifications adopted.

16.48.020 Balanced and critical basins--Development conditions.

16.48.030 Structural flood control measures.

16.48.040 Fee in lieu of detention requirements.

16.48.050 Maps of balanced and critical basins.

16.48.010

Runoff reduction required when--Specifications adopted.

Any development with residential densities of 3 or more units per acre, or any residential development larger

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improvements that will mitigate the potential damage of flood waters originating from the property contributing the fees. In balanced and critical drainage basins, and where development is less than 3 units to the acre, use of a fee system will be encouraged in lieu of a detention system in order to preserve the natural drainage patterns. The fee shall be equivalent to the cost of a detention system that would otherwise be constructed for the development to mitigate increased storm water runoff created by the proposed development. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 14 (C), 1988)

16.48.050

Maps of balanced and critical basins.

The Chief Engineer shall prepare, and retain for public inspection and use, an official map designating balanced and critical drainage basins within the County. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 14 (D), 1988)

Chapter 16.52

SAND, GRAVEL AND OTHER EXCAVATION OPERATIONS

Sand and gravel excavations in a regulatory floodway, floodway fringe area, floodplains and erosion hazard areas including proposed operations and existing operations subject to permit renewal are subject to A.R.S. § 11-830 and A.R.S. §27-1201, et. seq., and are subject to the following provisions to the extent not inconsistent therewith A.R.S. § 11-830 and A.R.S. §27-1201, et. seq.:

- A. Extraction of sand, gravel and other materials is allowed provided that excavations are not located nor of such depth, or width, or length, or combination of depth-width-length as to present a hazard to structures including, but not limited to, roads, bridges, culverts, and utilities, the banks of watercourses, other property, or adversely affect groundwater recharge.
- B. Within a floodway area, there shall be no stockpiling of materials or tailings that may obstruct, divert, or retard the flow of flood waters except as reviewed and approved by the Chief Engineer on an individual floodplain use permit basis.
- C. Excavations within a floodway area may be allowed only in those reaches of watercourses which have, at a minimum, a balanced sediment system, i.e., the sediment coming into the reach is equal to or greater than the sediment leaving the reach and the long-term sediment balance for the entire river system indicates that the stream channel will aggrade; or unless a reclamation plan is prepared and sealed by an Arizona registered civil engineer, approved by the Chief Engineer, and adopted by the Board.
- D. Due to the rapidly changing hydraulic characteristics of watercourses within the County, and the effects excavations have on these characteristics, floodplain use permits for excavations shall only be issued for a limited time period, not to exceed one year, subject to annual renewal and review by the Chief Engineer. Renewals will only be granted after receipt of a written statement, by the property owner or owner's representative, confirming that the sand and gravel excavations remain in compliance with the conditions of the previous floodplain use permit, current floodplain conditions and all current related floodplain management regulations.
- E. In addition to those conditions provided for elsewhere, floodplain use permits for excavations may impose sites specific conditions based on a technical analysis of a flood hydraulic and sediment transport regarding the area and location in which excavations are allowed, the maximum amount of material to be excavated, and other reasonable restraints on the methods of operating in relationship to Floodplain

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conditions.

- F. Any extraction of sand and gravel, or related materials within a floodway area, floodway fringe area, floodplain, and associated flood erosion hazard area shall be allowed after the effective date of the ordinance codified in this title only if a mining reclamation plan is also provided for the extraction operation. The mining reclamation plan shall show in sufficient detail the actions that are proposed for the excavated areas so that all adverse effects of extraction are mitigated. The plan shall also contain a timetable for accomplishing reclamation as appropriate to the overall lateral extent and depth of the excavation, floodplain and channel conditions, adjacent land-uses, and associated flooding and erosion hazards.
- G. The County may charge permit and inspection fees, as appropriate, to recover costs associated with monitoring the sand and gravel extraction operation, plus a reasonable estimate of administrative costs and expenses that would be incurred by the County in doing so. Fees shall be adopted by resolution of the Board as provided within A.R.S. 48-3603. E. The Chief Engineer may require a hydrologic, hydraulic, and geomorphic analyses that address the existing conditions, as well as the impacts that would occur under the proposed method of operation.
- H. The Board may grant appeals and variances as provided by Chapter 16.56 of this title. (Ord. 2005 FC-2)

16.54

ADMINISTRATION, COMPLIANCE AND ENFORCEMENT

Sections:

16.54.010 Purpose and scope.

16.54.020 Administration.

16.54.030 Compliance.

16.54.040 Enforcement.

16.54.010

Purpose and scope.

- A. Purpose: This chapter provides for:
 - 1. The orderly administration of regulations and provisions of this title;
 - 2. The process for applying the provisions of this title to individual floodplain development or uses prior to the initiation of such development or uses. The evaluation of any proposed development or uses shall be provided by County staff for conformance with this title;
 - 3. The administrative appeal process to the Chief Engineer to request a technical interpretation or waiver from technical standards and guidance manuals;
 - 4. A variance process to request relief from provisions of this title from the Board; and
 - 5. The enforcement of this title, subsequent to the development or use of property, if voluntary correction of a violation is not successful. (Ord. 2005 FC-2)
- B. Scope:
 - 1. The Administration Section describes the method by which permits, appeals, variances and enforcement are processed to meet the provisions of this title.
 - 2. The Compliance Section describes the methods by which the provisions of this title are met when a particular use of a property is intended.

3. The Enforcement Section describes the actions taken by the County if users of property do not follow the prescribed methods. (Ord. 2005 FC-2)

16.54.020

Administration.

- A. The Floodplain Administrator, as designated by the Chief Engineer, is responsible for:
 1. The general day-to-day operation and process by which permits are issued, and
 2. Federal and state floodplain management administrative requirements for compliance with the NFIP including record keeping and reporting. Duties of the Floodplain Administrator may include, but are not limited to:
 - a. Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
 - b. Obtain and maintain required records for public inspection and make available the following as required in Chapter 16.20:
 1. The certified regulatory flood elevation required in Chapter 16.20;
 2. The Zone AO certification required in Chapter 16.20;
 3. The flood proofing certification required in Chapter 16.20; and
 4. The certified opening elevation required in Chapter 16.20.
 - c. Whenever a federally regulated watercourse is to be altered or relocated, provide notification as required by this title.
- B. The Chief Engineer is responsible for:
 1. Interpretation of this title and associated technical flood and watercourse documents including floodplain maps and riparian habitat maps identified within this title;
 2. Establishment of engineering standards and guidance manuals, as necessary for activities regulated by this title;
 3. Administration of appeals requesting waivers or modifications to engineering standards and guidance manuals and administrative interpretation as provided within provisions of this title.
 4. Technical interpretations including base flood data and elevations consistent with federal and state floodplain management requirements.
 5. Take actions on violations of this ordinance as required in Chapter 16.64 herein.
- C. The Board is responsible for:
 1. Adoption of rules and bylaws for enforcement of regulation of floodplains, erosion hazards and riparian habitats,
 2. Hearing requests for variances from the regulations to the extent permitted by A.R.S. Section 48-3609,
 3. Hearing requests for appeals of written decisions of the Chief Engineer; and
 4. Exercising all powers and duties to carry out regulatory functions, as required by A.R.S. Section 48-3603, including establishment of a fee schedule for the review of applications for permits and variances from, or interpretations of, the provision of this title.
- D. The Technical Review Committee may be requested by the Chief Engineer, or the Board, to provide technical review and recommendations on complex technical issues for administration, compliance and enforcement of this title. (Ord. 2005 FC-2)

16.54.030

Compliance.

- A. Compliance mechanisms: Title compliance is sought through:
 - 1. A review procedure for floodplain use permits, subdivision plats, development plans and other plans;
 - 2. A permitting system that will deny the issuance of a permit if the proposed activity conflicts with title requirements;
 - 3. An enforcement system that will provide for compliance and enforcement of the title; and
 - 4. An organizational structure that identifies specific officers and employees empowered to administer the above methods of compliance. (Ord. 2005 FC-2)
- B. It shall be the duty of the Chief Engineer, Floodplain Administrator, County Engineer, Zoning Inspector and all other departments, officials and public employees vested with the duty or authority to issue permits to determine compliance with the provisions of this title and to issue no permit in conflict with the provisions of this title.
- C. Validity of permit:
 - 1. The issuance or granting of a floodplain use permit, a building permit, or approval of plans or specifications under the authority of this title shall not be deemed or construed to be a permit for, or an approval of, any violation of any of the provisions of this title or the amendments thereto, or of any other title or law;
 - 2. No permit presuming to give authority to violate or cancel any of the provisions of this title or any existing law shall be issued, and if issued, then the permit shall not be valid and shall be revoked as provided in 16.20.060 of this title;
 - 3. Any permit issued in conflict with the provisions of this title shall be null and void; and
 - 4. A floodplain use permit shall be valid:
 - a. For one year after the date of issuance for permanent structures and flood control improvements, or
 - b. Upon completion of permanent structures and flood control improvements associated with the permit provided that all permit requirements are met including elevation certificates when required, or
 - c. For one year after the date of issuance for any excavation activity or any other activity-based permits issued under this title. Such activity-based permits shall be reviewed for compliance annually, and be re-permitted, if appropriate, based on conditions current at the time of permit renewal. (Ord. 2005 FC-2)

16.54.040

Enforcement.

- A. The Floodplain Administrator is responsible for investigating all complaints of suspected violations of this title.
 - 1. Notification. When necessary to enforce this title, the Floodplain Administrator shall provide written notification to the property owner:
 - a. Identifying the compliance required by this title.
 - b. Identifying additional information or engineering required to show compliance.
 - 2. Schedule. Provide a time schedule for corrective actions for compliance
- B. The Chief Engineer shall hear and decide complaints alleging violations of this title;

1. The form and service of complaints and the hearing procedures of the Chief Engineer shall follow the procedure identified in chapters 16.56 and 16.64 of this title.
2. The Chief Engineer will render a decision in writing, which may be appealed in accordance with chapters 16.56 of this title.
3. Mitigation Requirements:
 - a. The action of the Chief Engineer regarding a building, grading or plant removal violation may include a requirement to mitigate the damage resulting from the violation; and
 - b. The Chief Engineer may, in writing, refer a determination of all or part of the requirements for mitigation of a violation of this title to the Technical Review Committee.
- C. Any property owner party to the violation may appeal the decision of the Chief Engineer to the Board subject to the provisions in Chapter 16.56;
 1. Appeals to the decision of the Chief Engineer regarding one or more violations of the standards or regulations of this title that are of a technical nature shall be forwarded to the Technical Review Committee for review and recommendations to the Board. A recommendation from the Technical Review Committee for denial or approval of the appeal may include conditions and recommendations regarding mitigation requirements;
 2. In addition to the requirements of this section, the Board shall establish rules of procedure, submittal requirements, submittal deadlines, and review criteria to govern the public hearing process and review of an appeal of the Chief Engineer's decisions; and
 3. The Board's public hearing process shall include the following:
 - a. A mailed notification to all parties who received a notice of the violation, as well as all other parties who attended the violation hearing at which the Chief Engineer took action,
 - b. An opportunity for property owners and residents within a minimum distance of 300 feet of the boundaries of the violation to make comments on the appeal, and
 - c. Review by the Chief Engineer and the Technical Review Committee of the appeal by the appellant, the final staff report, and the circumstances and testimony presented at the hearing by the Chief Engineer and Technical Review Committee, when such hearings are held.
 4. Violators of this title are subject to civil penalties or other legal action for failure to comply with any provision of this title as provided under Chapter 16.64 of this title. (Ord. 2005 FC-2)

Chapter 16.56

APPEALS AND VARIANCES

Sections:

16.56.010 Filing of appeals.

16.56.020 Filing of variances.

16.56.030 Authority to issue variances.

16.56.040 Issuance of variances--Required findings.

16.56.050 Hearing procedures.

16.56.060 Covenants.

16.56.070 Notice to adjacent jurisdictions.

16.56.010

Filing of appeals.

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- D. A determination that the granting of the variance will not create a danger or hazard to persons or property in a regulatory floodplain or erosion hazard area in the area of jurisdiction or result in increased flood heights, additional threats to public safety, the creation of a nuisance, the victimization of or fraud on the public, or that the variance is not in conflict with other local laws or titles; and
- E. Special circumstances, such as size, shape, topography, location, or surroundings of the property, would cause strict application of the regulations to deprive the property of the privileges enjoyed by similar property in a regulatory floodplain or erosion hazard area. A variance is subject to conditions to ensure that the variance does not constitute a grant of special privileges inconsistent with the limitations on similar property in the regulatory floodplain.
- F. Variances within Special Flood Hazard Areas as designated by FEMA shall conform to the variance requirements of the Federal Flood Insurance Program as provided within Title 44, Section 60 of the Code of Federal Registry. (Ord. 2005 FC-2; Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1988-FC2 Art. 17 (B), 1988)

16.56.050

Hearing procedures.

- A. The following application and hearing procedures apply to an appeal of a written decision of the Chief Engineer, or a variance request, or combination thereof:
 - 1. The property owner shall apply in writing and file a petition request on the proper forms with the Chief Engineer and the Clerk of the Board within 60 days following receipt of the Chief Engineer's decision.
 - 2. The application shall include technical evidence, in support of the appeal or variance request.
 - a. An appeal application shall include technical evidence stating why the decision of the Chief Engineer is in error, and shall contain a concise explanation of all matters in dispute, and shall include any pertinent maps, drawings, data, or other information in support of the appeal.
 - b. A variance application shall state the code section from which the variance is sought, and shall include any pertinent maps, drawings, data, or other information as to why the variance should be granted.
 - 3. Incomplete applications shall not be accepted.
 - a. The Chief Engineer shall notify the applicant within 5 working days of receipt whether or not the application is deemed complete.
 - b. If the application is determined to be incomplete, the applicant shall submit additional materials and information as may be determined to be reasonably necessary by the Chief Engineer.
 - 4. The Chief Engineer may refer variance requests of a technical nature to the Technical Review Committee. The Technical Review Committee shall hold a hearing to make findings and recommendations to the Board within 15 days of receipt of the petition from the Chief Engineer.
 - 5. The Chief Engineer, with the assistance, advice, and counsel of the County Zoning Inspector and the County Planning Director, shall prepare a final report and present the findings to the Board through the Clerk of the Board. The Clerk of the Board will schedule a public hearing at the next available Board meeting. The staff report shall be made available to the applicant and other interested parties at least 15 days before the date of any public hearing for the respective petition.
 - 6. The Board shall render its decision within 30 days of the close of the hearing.
 - 7. The Board may meet monthly, or at such times as it deems necessary for the transaction of business,

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including the hearing of appeals and variances. (Ord. 2005-FC-1; Ord. 1999-FC-1 §§ 1 (part) 1999; Ord. 1988-FC2 Art. 16 (B), 1988).

- B. The following application and hearing procedures apply to an appeal of a written violation notice from the Chief Engineer, or a variance request, or combination thereof.
- C. In addition to the above described hearing procedure, the Board's public hearing process for violations and enforcement actions shall include the following:
 - 1. A mailed notification to all parties who received a notice of the violation, as well as all other parties who attended the violation hearing at which the Chief Engineer took action,
 - 2. An opportunity for property owners and residents within a minimum distance of 300 feet of the boundaries of the violation to make comments on the appeal, and
 - 3. Review by the Chief Engineer and the Technical Review Committee of the appeal by the appellant, the final staff report, and the circumstances and testimony presented at the hearing by the Chief Engineer and Technical Review Committee, when such hearings are held.

16.56.060

Covenants.

Upon granting of a variance, permit or waiver for the construction of a Dwelling Unit or commercial or industrial structure, where the construction of such unit or structure is otherwise contrary to the floodplain and erosion hazard requirements of this title the Board shall provide written notice to the grantees of such a variance, permit, or waiver that, if the structure is a Dwelling Unit or business as defined by A.R.S. Section 26-321, the land upon which the structure is located is ineligible for acquisition under the County Floodprone Land Acquisition Program, and notice that the structure increase risks to life and property and will result in increased flood insurance premium rates. A copy of the notice shall be recorded by the Board in the office of the County Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

16.56.070

Notice to adjacent jurisdictions.

In accordance with A.R.S. Section 48-3610, whenever a variance to federal and/or state floodplain requirements contained in this title and is within 1 mile of the boundary between the District's area of jurisdiction and the jurisdiction of a city or town, then the District shall advise, in writing, the city or town and provide a copy of any development plan or any application that has been filed with the District for a floodplain use permit or variance. The District shall also advise any city or town in writing and provide a copy of any development plan of any major development proposed within a regulatory floodplain, or floodway which could affect regulatory floodplains, floodway, erosion hazard area, or watercourses within that city's or town's area of jurisdiction. Written notice and a copy of the plan of development shall be sent to any adjacent jurisdiction no later than 3 working days after having been received by the District. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 17 (D), 1988)

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Chapter 16.60
AMENDMENTS

Sections:

16.60.010 Amendments require public hearing process.

16.60.020 Petition, study and determination procedures.

16.60.010

Amendments require public hearing process.

This title may be amended only after a public hearing at which parties-in-interest and other citizens have an opportunity to be heard. (Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 18 (A), 1988)

16.60.020

Petition, study and determination procedures.

The Chief Engineer or any affected person may petition for an amendment to this title, and shall initiate such a proceeding by filing with the Board a proper and complete petition for such change on the form or forms provided by the Board.

- A. Staff Report. Upon receipt of such petitions, the Chief Engineer, with the assistance, advice and counsel of the Flood Control District Advisory Committee, the County Zoning Inspector, and the County Planning Director, shall make a study and report the findings to the Board. The report shall be made available to the applicant and other interested parties at least 30 days before the date of any public hearing for the respective petition.
- B. Board Action. Upon receipt of the Chief Engineer report and recommendation, the Board shall hold a public hearing thereon at which the petitioner and other parties in interest have an opportunity to be heard. At least 30 days prior to the hearing, a notice of the time and place of hearing shall be published in a newspaper of general circulation within the area of jurisdiction of the Board; or, if no newspaper of general circulation is regularly published within the area of jurisdiction, a newspaper of general circulation regularly published nearest the area of jurisdiction.
- C. A notice of any hearing, accompanied by a copy of each of the proposed amendments, shall be furnished to the director of the ADWR at least 30 days prior to the date of such hearing. A copy of any amendment adopted by the Board shall, within 5 days thereafter, be filed with the director of the ADWR. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 A18 (B), 1988)

Chapter 16.64

VIOLATIONS--PENALTY

Sections:

16.64.010 Unlawful activities designated--Penalty.

16.64.020 Abatement of violations.

16-64.030 Structures deemed nuisance--Remedies.

16.64.040 Remedies for damages--Actions authorized.

16.64.050 Removal of violation authorized when.

16.64.060 Recovery of administrative and other costs.

16.64.070 Violation/Unlawful activities designated--Penalty.

16.64.010

Violation/Unlawful activities designated--Penalty.

- A. It is unlawful for any person or entity to divert, retard, or obstruct the flow of waters in a watercourse if it creates a hazard to life or property without securing the written authorization required by A.R.S. 48-3613. Where the watercourse is a delineated floodplain, it is unlawful to excavate or build any structure affecting the flow of waters without securing written authorization required by A.R.S. 48-3613. Whenever such actions create a hazard to life or property, without first securing the permit required by any provision of this title.
- B. It is unlawful for any person or entity to grade or disturb regulated hydriparian and/or mesoriparian and/or xeroriparian habitat and/or important riparian habitat, which are subject to permits under provisions of this chapter without first securing the permit
- C. It is unlawful for any person or entity to neglect maintenance responsibilities on private drainage improvements as outlined in 16.38.
- D. It is unlawful for any person to fail to obtain a permit required by this title or to fail to comply with all the terms and conditions of a permit issued pursuant to this title.
- E. Any person or entity violating the provisions of this title or any terms and conditions of a permit issued pursuant to this title and A.R.S. 3615 shall be guilty of a Class 2 misdemeanor. (Ord. 2005 FC-2; Ord. 1999 FC-1 § 1 (part) 1999; Ord. 1988 FC-2 Art. 19, 1988)

16.64.020

Abatement of violations.

Within 30 days of discovery of a violation of this title, the Chief Engineer shall submit a report to the Board, which shall include all information available to the Chief Engineer that is pertinent to said violation. Within 30 days of receipt of this report, the Board will do one of the following:

- A. Take any necessary action to effect the abatement of such violation; or
- B. Issue a variance to this title in accordance with the provisions of Chapter 16.56 herein; or
- C. Order the owner of the property upon which the violation exists to provide whatever additional information may be required for the Board's determination. Such information must be provided to the Chief Engineer within 30 days of such order, who will then submit an amended report to the Board within 20 days. All technical information submitted by the owner to the Chief Engineer shall be prepared and sealed by an Arizona registered civil engineer. At their next regularly scheduled public meeting, the Board shall order either the abatement of said violation or they shall grant a variance in accordance with the provisions herein or within Chapter 16.56.
- D. If deemed appropriate by the Board, the Chief Engineer shall submit to the Administrator of the Federal Insurance Administration a declaration for denial of insurance stating that the property is in violation of a cited state or local law, regulation, or title, pursuant to Section 1316 of National Flood Insurance Act 1968, and as amended.
- E. The County and the District shall be entitled to recover all costs including administrative, engineering, and legal costs, as well as actual costs, pursuant to 16.20.100. (Ord. 2005 FC-2).

16.64.030

Structures deemed nuisances --Remedies.

To remedy a violation means to bring the structure or other development into compliance with state or local

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floodplain management regulations or, if this is not possible, to reduce the impacts of its noncompliance. Ways in which impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

- A. Every new structure, building, fill, excavation, or development located or maintained within any regulatory floodplain, riparian habitat, or erosion hazard area in violation of this title and without written authorization from the Board is a public nuisance per se and may be abated, prevented, or restrained by action of the state or any political subdivision of the state.
- B. As a further remedy, the County and the District may withhold the issuance of building permits or floodplain use permits for any development or improvement on the same parcel, or on a contiguous parcel of land under the same ownership, where any improvement or development on the property is not in compliance with this title or any other provision of law relating to that development. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (A) (2), (4)1988)

16.64.040

Remedies for damages--Actions authorized.

- A. In addition to other penalties or remedies otherwise provided by law, the state of Arizona, any political subdivision thereof, or any person who may be damaged as a result of the diversion, retardation or obstruction of water within the regulatory floodplain, shall have the right to commence, maintain, and prosecute any appropriate action or pursue any remedy to enjoin, abate, or otherwise prevent any person from violating or continuing to violate any provision of this title.
- B. If any person is found to be in violation of any provision of this title, the court may require the violator to comply with this title or remove the obstruction and restore the floodplain to its original condition. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (A) (3), 1988)

16.64.050

Removal of violation authorized when.

Upon written notice, the Chief Engineer may cause any structure, encroachment, obstruction diversion, hazard or work constructed without a floodplain use permit, or which is in violation with the terms of a permit, to be removed immediately at the expense of the person who caused the structure, encroachment, or work; if said structure, encroachment, or work will cause an immediate danger to life and/or property. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (H), 1988)

16.64.060

Recovery of administrative and other costs.

The County and the District shall be entitled to recover all costs, administrative, engineering and legal, as well as actual costs to remove or modify the structure, encroachment, and/or any other work in violation of this title. (Ord. 2005 FC-2; Ord. 1999 FC-1 §§ 1 (part) 1999; Ord. 1988 FC-2 Art. 7 (I), 1988)

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SECTION 3. The various Pima County and Pima County Flood Control District officers and employees are hereby authorized and directed to perform all acts necessary or desirable to give effect to this ordinance.

PASSED AND ADOPTED this 6th day of September, 2005 by the Pima County Flood Control District Board of Directors of the Pima County Flood Control District, Pima County, Arizona.

ATTEST:

BOARD OF DIRECTORS OF THE PIMA COUNTY
FLOOD CONTROL DISTRICT

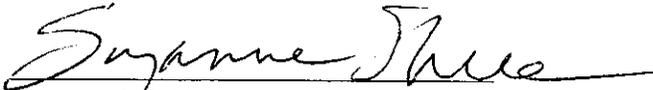


Lori Godoshian
Clerk of the Board



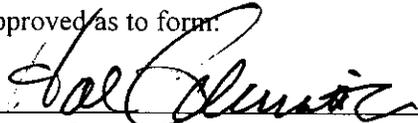
Sharon Bronson, Chair
SEP 6 - 2005

Recommended to the Board:



Suzanne Shields, Director
Pima County Flood Control District

Approved as to form:



Deputy County Attorney for the District

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