### ORDINANCE NO. (O)17-04

AN ORDINANCE OF THE TOWN OF ORO VALLEY, ARIZONA, AMENDING ORO VALLEY TOWN CODE CHAPTER 17, FLOODPLAIN AND EROSION HAZARD MANAGEMENT TO COMPLY WITH LEGISLATIVE CHANGES GOVERNING FLOODPLAIN MANAGEMENT UNDER THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) CODE OF FEDERAL REGULATION

WHEREAS, on October 5, 2005, the Town Council approved Ordinance (O) 05-35, adding Chapter 17, Floodplain and Erosion Hazard Management to the Oro Valley Town Code; and

WHEREAS, it is necessary to update Chapter 17, Floodplain and Erosion Hazard Management, to remain in compliance with mandated state and federal regulatory changes that have occurred governing floodplain management; and

WHEREAS, the Mayor and Council desire to amend the Oro Valley Town Code, Chapter 17, Floodplain and Erosion Hazard Management in order to remain in compliance with mandated state and federal regulatory changes.

**NOW, THEREFORE, BE IT ORDAINED** by the Mayor and Council of the Town of Oro Valley, Arizona that:

**SECTION 1.** The certain document known as the "Oro Valley Town Code, Chapter 17, Floodplain and Erosion Hazard Management" attached hereto as Exhibit A and incorporated herein by reference, is hereby amended.

**SECTION 2.** All Oro Valley Ordinances, Resolutions, or Motions and part of Ordinances, Resolutions or Motions of the Council in conflict with the provisions of this Ordinance are hereby repealed.

**SECTION 3.** If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

**PASSED AND ADOPTED** by Mayor and Town Council of the Town of Oro Valley, Arizona, this 5<sup>th</sup> day of April, 2017.

# TOWN OF ORO VALLEY

Dr. Satish I. Hiremath, Mayor

ATTEST:

Michael Standish, Town Clerk

Date

PUBLISH: DAILY TERRITORIAL APRIL 10, 11, 12, 13, 2017

APPROVED AS TO FORM:

R

Tobin Sidles, Legal Services Director

Date: POSTED: 4/10/17 - 5/10/17

# **EXHIBIT "A"**

# Oro Valley Town Code Chapter 17 FLOODPLAIN AND EROSION HAZARD MANAGEMENT

Articles:

- 17-1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS
- 17-2 DEFINITIONS
- 17-3 GENERAL PROVISIONS
- 17-4 ADMINISTRATION
- 17-5 PROVISIONS FOR FLOOD HAZARD REDUCTION
- 17-6 APPEAL AND VARIANCE PROCEDURES
- 17-7 ORDINANCE AMENDMENTS
- <u>17-8</u> FEES

# Article 17-1 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS

Sections:

- 17-1-1 Statutory Authorization
- 17-1-2 Findings of Fact
- 17-1-3 Statement of Purpose
- 17-1-4 Methods of Reducing Flood Losses

## 17-1-1 Statutory Authorization

The Legislature of the State of Arizona has, in ARS §48-3610, enabled the Town of Oro Valley to ASSUME THE POWERS AND DUTIES FOR FLOODPLAIN MANAGEMENT AND adopt regulations in conformance with ARS §48-36039 that are designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Town Council of Oro Valley, Arizona, does ordain as follows.

((O)05-35, Enacted, 10/05/2005)

#### 17-1-2 Findings of Fact

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

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

((O)05-35, Enacted, 10/05/2005)

#### 17-1-3 Statement of Purpose

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

A. To protect human life and health;

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

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

D. To minimize prolonged business interruptions;

E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, and streets and bridges located in the regulatory floodplain;

F. To help maintain a stable tax base by providing for the protection of regulatory floodplain and erosion hazard areas;

G. To insure ENSURE that potential buyers are notified that property is in a regulatory floodplain;

H. To insure ENSURE that those who occupy an area in a regulatory floodplain assume responsibility for their actions; and

I. To PARTICIPATE IN AND maintain eligibility for FLOOD INSURANCE AND disaster relief.

((O)05-35, Enacted, 10/05/2005)

#### 17-1-4 Methods of Reducing Flood Losses

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

A. Restricting or prohibiting uses which are dangerous to the public health, safety, and welfare as well as public and private property, due to water or development hazards; or which result in increased damages to development or increases in flood heights or velocities;

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

C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help to accommodate natural flood storage potential or the channelization of floodwaters;

D. Controlling filling, grading, dredging, and other development that may increase flood damage; and

E. Preventing or regulating the construction of flood barriers that unnaturally divert floodwaters, or that may increase flood hazards in other areas.

# Article 17-2 DEFINITIONS

Sections:

17-2-1 Definitions

#### 17-2-1 Definitions

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

ACCESSORY STRUCTURE: A STRUCTURE THAT IS ON THE SAME PARCEL OF PROPERTY AS A PRINCIPAL STRUCTURE, THE USE OF WHICH IS INCIDENTAL TO THE USE OF THE PRINCIPAL STRUCTURE.

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

Alluvial Fan - Inactive means an alluvial fan where floodwaters typically flow within incised channels, and adjacent lands are stable.

Alluvial Fan Flooding means flooding occurring on the surface of an alluvial fan, or similar landform, which originates at the apex; and is characterized by high-velocity flows; active processes of erosion, sediment transport, deposition, and unpredictable flow paths.

Alluvial Fan High Hazard Area (AFHH) means an area of active alluvial fan flooding that is reserved to convey and receive sediment and floodwater without altering, and thereby potentially increasing, the distribution of flood hazards across the fan to otherwise inactive areas and areas located down slope.

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

**Appeal** means a request for a review of the decision of the Floodplain Administrator or Town Engineer concerning previous determinations or actions, pursuant to this chapter. Appeals are heard and decided by the Floodplain Board.

Area of Shallow Flooding means a Federal Emergency Management Agency (FEMA) designated Zone "A" or Zone "X" area depicted on a Flood Insurance Rate Map (FIRM) for the community, or an area identified on a Flood Hazard Boundary Map that has, on an annual basis, a one percent or greater chance of flooding to an average depth of one-half foot, or greater, during the occurrence of a base flood at locations where a clearly defined channel does not exist and the path of the flooding is often unpredictable and indeterminate DESIGNATED ZONE AO, AH, AR/AO OR AR/AH ON A COMMUNITY'S FLOOD INSURANCE RATE MAP (FIRM) WITH A ONE PERCENT OR GREATER ANNUAL CHANCE OF FLOODING TO AN AVERAGE DEPTH OF ONE TO THREE FEET WHERE A CLEARLY DEFINED CHANNEL DOES NOT EXIST, WHERE THE PATH OF FLOODING IS UNPREDICTABLE, AND WHERE VELOCITY FLOW MAY BE EVIDENT. SUCH FLOODING IS CHARACTERIZED BY PONDING OR SHEET FLOW.

**Base Flood** means a flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood shall mean the peak discharge of a 100-year flood of 50 cubic feet per second (cfs) or greater. 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 Arizona Department of Water Resources and the Town of Oro Valley, which criteria are hereby, incorporated by reference and made a part of this ordinance.

**Basement** means any area of a structure with a subgrade floor, i.e., below the adjacent ground level, ON ALL SIDES.

BUILDING. SEE "STRUCTURE."

**Community** means any state or area or political subdivision thereof, or any Indian tribe, authorized tribal organization, or authorized native organization, which has authority to adopt and enforce Floodplain Management Regulations for the areas within its jurisdiction.

**Community Rating System (CRS)** means a program created by FEMA that provides premium reductions on flood insurance to individual policyholders in communities that have adopted programs, standards, and practices that exceed the minimum federal standards.

**Critical Facility** means a facility such as a hospital, nursing home, police and fire stations, and other public safety facilities that would be severely impacted by flooding interrupting critical services or leading to significant sheltering needs for the sick or elderly.

**Cumulative Substantial Damage** means the total of all repairs to a repetitive loss structure, which shall not cumulatively increase the market value of the structure by more than 49% 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 a "historic structure", provided the repair will not preclude the structure's continued designation as a "historic structure."

**Detention System** means a type of flood control system which delays the downstream progress of floodwaters 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 the flow and thereby reduces downstream flood peaks.

**Development** means any man-made change to improved or unimproved real estate, including but not limited to structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of materials and equipment located within the regulatory floodplain.

Dwelling means a habitable structure.

**ELEVATION CERTIFICATE**. AN ADMINISTRATIVE TOOL OF THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) THAT IS USED TO PROVIDE ELEVATION INFORMATION NECESSARY TO ENSURE COMPLIANCE WITH COMMUNITY FLOODPLAIN MANAGEMENT ORDINANCES, TO DETERMINE THE PROPER INSURANCE PREMIUM RATE, AND TO SUPPORT A REQUEST FOR A LETTER OF MAP AMENDMENT (LOMA) OR LETTER OF MAP REVISION BASED ON FILL (LOMR-F).

Encroachment means the advance or infringement of uses, landscape vegetation, fill, excavation, permanent structures, or development into a floodplain that may impede or alter the flow capacity of a floodplain. An equal degree of encroachment is a standard applied to the evaluation of the effects of the encroachment on increases in flood heights. It 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. Since the factors affecting hydraulic efficiency are usually not uniform within a reach, this standard will usually not result in equal measured distances between regulatory floodway limit lines and the regulatory floodplain boundaries of the watercourse.

**Erosion** means the process of the gradual wearing away of landmasses resulting from wind, water, or ice THIS PERIL IS NOT, PER SE, COVERED UNDER THE NATIONAL FLOOD INSURANCE PROGRAM.

**Erosion Hazard Area** means lands adjoining a watercourse that is regulated by this ordinance which are deemed by the Town Engineer to be subject to flood-related erosion losses (Ref. The Adopted Drainage Criteria Manual, Town of Oro Valley).

**Erosion Setback** means the minimum horizontal distance between a structure or permanent feature and the channel bank necessary to protect the structure/feature from flood related erosion damage. For method to be used for determination of the erosion setback, see the **a**dopted Drainage Criteria Manual, Town of Oro Valley.

**Existing Manufactured Home Park or Subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are affixed (including, at a minimum, the installation of utilities, construction of streets, and either final site grading or the pouring of concrete slabs) was completed before the effective date of the floodplain management regulations adopted by the community.

**Expansion to an Existing Manufactured Home Park or Subdivision** means preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**Federal Emergency Management Agency (FEMA)** means an agency of the federal government responsible for programs of disaster response and recovery, disaster preparedness, hazard mitigation, flood insurance, and other programs of technical and financial assistance.

Federal Insurance AND MITIGATION Administration (FIA FIMA) means a directorate of FEMA responsible for MANAGES the National Flood Insurance Program

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas caused by the unusual and rapid accumulation or runoff of surface waters from any source. A GENERAL AND TEMPORARY CONDITION OF PARTIAL OR COMPLETE INUNDATION OF NORMALLY DRY LAND AREAS FROM: (1) THE OVERFLOW OF FLOODWATERS; (2) THE UNUSUAL AND RAPID ACCUMULATION OR RUNOFF OF SURFACE WATERS FROM ANY SOURCE; AND/OR (3) THE COLLAPSE OR SUBSIDENCE OF LAND ALONG THE SHORE OF A LAKE OR OTHER BODY OF WATER AS A RESULT OF EROSION OR UNDERMINING CAUSED BY WAVES OR CURRENTS OF WATER EXCEEDING ANTICIPATED CYCLICAL LEVELS OR SUDDENLY CAUSED BY AN UNUSUALLY HIGH WATER LEVEL IN A NATURAL BODY OF WATER, ACCOMPANIED BY A SEVERE STORM OR BY AN UNANTICIPATED FORCE OF NATURE, SUCH AS FLASH FLOOD OR AN ABNORMAL TIDAL SURGE, OR BY SOME SIMILARLY UNUSUAL AND UNFORESEEABLE EVENT WHICH RESULTS IN FLOODING AS DEFINED IN THIS DEFINITION.

Flood Insurance Program (FIP) means the federal program established to provide flood insurance and to regulate development in flood hazard zones. Through the FIP, the federal government defines flood hazards and flood hazard zones, and publishes the information on Flood Insurance Rate Maps (FIRMs).

Flood Hazard Boundary Map (FHBM) means any official maps issued by the Town Engineer for the purpose of identifying floodplains/flood-prone areas; also, floodplains/flood-prone areas identified on recorded subdivision plats.

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

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

Floodplain or Flood-prone Area means any land area susceptible to being inundated by water from any source (see flooding).

**Floodplain Administrator** is the Town Engineer, or his/her designee, whose duty it is to oversee administration and enforcement of the floodplain management regulations contained in this document.

**Floodplain Board** means the Town Council of Oro Valley, at such times as they are engaged in the enforcement of this ordinance.

**Floodplain Management** means the operation of an integrated natural resource management program encompassing corrective and preventive measures for reducing flood and erosion damage. Floodplain management includes but is not limited to emergency preparedness planning, flood control works and Floodplain Management Regulations. **Floodplain Management Regulations** means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control), and other applications of legal and regulatory authority that control use of, and development in, flood-prone areas. This term describes federal, state, or local regulations, and any combination thereof, which provide standards for preventing and reducing flood loss and damage.

**Floodplain Use Permit** means an official document that authorizes special activity within the regulatory floodplains or erosion hazard areas of Oro Valley.

Flood Protection System means those physical structural works for which funds have been authorized, appropriated, and expended; and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to designation as a regulatory floodplain as well as the extent and depths of associated flooding. Such a system typically includes dams, reservoirs, levees or dikes. These specialized flood-modifying works are those constructed in conformance with sound engineering standards.

**Flood-Proofed** means a watertight structure with walls substantially impermeable to the passage of water, and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy, AND BY MEANS OTHER THAN ELEVATION.

**Flood-Proofing** means any combination of structural and non-structural additions, changes, or adjustments to structures that reduces or eliminates flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents BY MEANS OTHER THAN ELEVATION.

Flood-related Erosion means the collapse, subsidence, or lateral migration of land along a wash as a result of undermining caused by flowing water COLLAPSE OR SUBSIDENCE OF LAND ALONG THE SHORE OF A LAKE OR OTHER BODY OF WATER AS A RESULT OF UNDERMINING CAUSED BY WAVES OR CURRENTS OF WATER EXCEEDING ANTICIPATED CYCLICAL LEVELS OR SUDDENLY CAUSED BY AN UNUSUALLY HIGH WATER LEVEL IN A NATURAL BODY OF WATER, ACCOMPANIED BY A SEVERE STORM, OR BY AN UNANTICIPATED FORCE OF NATURE, SUCH AS A FLASH FLOOD OR AN ABNORMAL TIDAL SURGE, OR BY SOME SIMILARLY UNUSUAL AND UNFORESEEABLE EVENT WHICH RESULTS IN FLOODING.

Floodway means the channel of a watercourse and the adjacent land areas that must be reserved in order to provide for the passage of floodwaters or flood flows- (see Regulatory Floodway).

Floodway Fringe is that area of the floodplain lying on either side of a Regulatory Floodway where encroachment may be permitted.

**FUNCTIONALLY DEPENDENT USE.** A USE WHICH CANNOT PERFORM ITS INTENDED PURPOSE UNLESS IT IS LOCATED OR CARRIED OUT IN CLOSE PROXIMITY TO WATER. THE TERM INCLUDES ONLY DOCKING FACILITIES, PORT FACILITIES THAT ARE NECESSARY FOR THE LOADING AND UNLOADING OF CARGO OR PASSENGERS, AND SHIP BUILDING AND SHIP REPAIR FACILITIES, AND DOES NOT INCLUDE LONG TERM STORAGE OR RELATED MANUFACTURING FACILITIES.

**Governing Body** is the local governing unit (i.e., county or municipality) empowered to adopt and implement regulations providing for the public health, safety, and general welfare of its citizenry.

Hardship means that the physical characteristics of the property in question are so unusual, exceptional, and peculiar that a variance regarding its use may be requested and granted. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, be construed to qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, requires the property owner to build elsewhere, or means that the parcel must be put to a different use than originally intended.

**Highest Adjacent Grade** means the highest natural elevation of the ground surface immediately adjacent to a structure prior to construction of the proposed walls of a structure.

Historic Structure means any structure that is:

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

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

C. Individually listed on THE State of Arizona as inventory of historic places, as approved by the Secretary of the Interior; or

D. Individually listed on the Town of Oro Valley's inventory of historic places and that have been certified by an approved State of Arizona program, as determined by the Secretary of the Interior.

Levee means a human-made structure, usually an earthen embankment designed and constructed in accordance with sound engineering practices, for the purpose of containing, controlling, or diverting the flow of water so as to provide protection from temporary flooding.

Lowest Floor means the lowest floor of the lowest enclosed area including the basement (see basement definition) or crawl space under a manufactured home if it is not vented. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered to be the lowest floor of a structure; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

Manufactured Home means a structure, transportable in one or more sections, which in the traveling mode is eight (8) feet or more wide or forty (40) feet or more in length, or when erected on site, is 320 or more square feet, and which is built on a permanent foundation and contains plumbing, heating, air cooling, and electrical systems. WHICH IS BUILT ON A PERMANENT CHASSIS AND IS DESIGNED FOR USE WITH OR WITHOUT A PERMANENT FOUNDATION WHEN ATTACHED TO THE REQUIRED UTILITIES. THE TERM "MANUFACTURED HOME" DOES NOT INCLUDE A "RECREATIONAL VEHICLE."

Manufactured Home Park or Subdivision means any lot, tract, or parcel of land used or offered for use, in whole or in part, with or without charge, for parking of manufactured homes or trailer coaches used for sleeping or household purposes. A PARCEL (OR CONTIGUOUS PARCELS) OF LAND DIVIDED INTO TWO OR MORE MANUFACTURED HOME LOTS FOR RENT OR SALE.

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. ALTERNATIVELY, THE MARKET VALUE IS THE VALUATION MADE BY THE PIMA COUNTY ASSESSOR'S OFFICE.

**Mean Sea Level** means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929, North American Vertical Datum of 1988 (NAVD '88 ), or other datum to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

**National Flood Insurance Program (NFIP)** means a program administered by FEMA that makes federally backed flood insurance available for purchase by individuals that live in NFIP participating communities.

**New Construction** means structures and any subsequent improvements to such structures for which the start of construction commenced on or after the effective date of adoption of:

A. An initial FIRM or after December 31, 1974, whichever is later, within federally regulated flood hazard zones.

B. This chapter for floodplain and erosion hazard management.

**NEW CONSTRUCTION.** FOR THE PURPOSES OF DETERMINING INSURANCE RATES, STRUCTURES FOR WHICH THE "START OF CONSTRUCTION" COMMENCED ON OR AFTER THE EFFECTIVE DATE OF AN INITIAL FLOOD INSURANCE RATE MAP OR AFTER DECEMBER 31, 1974, WHICHEVER IS LATER, AND INCLUDES ANY SUBSEQUENT IMPROVEMENTS TO SUCH STRUCTURES. FOR FLOODPLAIN MANAGEMENT PURPOSES, "NEW CONSTRUCTION" MEANS STRUCTURES FOR WHICH THE "START OF CONSTRUCTION" COMMENCED ON OR AFTER THE EFFECTIVE DATE OF A FLOODPLAIN MANAGEMENT REGULATION ADOPTED BY A COMMUNITY AND INCLUDES ANY SUBSEQUENT IMPROVEMENTS TO SUCH STRUCTURES.

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

**One Hundred Year Flood** means the flood having a one percent chance of being equaled or exceeded in any given year (see base flood).

**Person** means an individual or his agent, firm, partnership, association or corporation, or agent of the aforementioned groups, or the State of Arizona or its agencies or political subdivisions.

**Program** means the National Flood Insurance Program authorized by 42 U.S.C. 4001-4128, or as authorized by subsequent Federal statutes.

**Reach** is a hydraulic engineering term to describe longitudinal segments of a stream or watercourse. A reach will generally include the segment of the flood hazard area where flood heights are primarily controlled by manmade or natural obstructions or constrictions. In an urban area, an example of a reach would be the segment of a stream or watercourse between two consecutive bridge crossings.

Recreational Vehicle means a vehicle that is:

- A. Built on a single chassis;
- B. 400 square feet or less in area, when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable by a light duty truck; and

D. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**Regulatory Flood Elevation** means an elevation that is one foot above the calculated water surface elevation of the base flood.

**Regulatory Floodplain or Flood-Prone Area** means that portion of the geologic floodplain associated with a water-course, including its channel or any other floodplain or flood-prone area that would be inundated by the base flood. It also means areas which are subject to sheet flooding, special flood hazard areas, and those areas mapped as floodplains/flood-prone on recorded subdivision plats or other flood hazard boundary maps.

**Regulatory Floodway** means the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than A DESIGNATED AMOUNT. 1 (one) foot, where the owner of the land doing the development owns both sides of the watercourse, and not more than 0.1 foot where only one side is owned. In no case should the development increase the water surface elevation more than 0.1 foot on the property owned by others that is located upstream and downstream of the development. The aforementioned water surface elevation increases apply to all watercourse channels in Oro Valley except the Canada del Oro wash where the elevation of the existing levee system and bank protection will allow for no water surface elevation increases due to encroachment. Additionally, when main channel flood-flow velocities are greater than 4.0 feet per second (fps), flood-flow velocities shall not increase by more than 1.0 fps or 10 percent, whichever is less, in the regulatory floodway. Any velocity increase greater than the aforementioned criteria must be reviewed, and approved by the Town Engineer.

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

**Repetitive Loss Structure** means a structure, covered by a contract for flood insurance issued pursuant to the National Flood Insurance Act, that has incurred flood-related damage on two occasions during any 10-year period ending on the date of the event for which a second claim is made, and for which the cost of repairing the flood damage, on average, equaled or exceeded 25% 24% of the market value of the structure at the time of each such flood event. In addition to the current claim, the NFIP must have paid the previous gualifying claim.

**Retention System** means a type of flood control system that stops the downstream progress of flood water by employing methods of total containment which generally involve creation of storage areas that incorporate infiltration devices, such as dry wells, to dispose of stored waters, principally by percolation over some specified period of time, thereby eliminating basin contributions to downstream flood peaks or flood volumes.

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

Sheet Flow Area (see Area of Shallow Flooding)

**Special Flood Hazard Area (SFHA)** means an area IN THE FLOOD PLAIN designated by FEMA as having a special flood or flood related erosion hazard, and is the land subject to a one-percent or greater chance of flooding in any given year. A SFHA may be designated on a FHBM or FIRM as a Zone A, AO, AE, AH or shaded Zone X for the base flood, as well as for areas that the Town Engineer, using the best available data, has determined may be subject to a flood hazard during the base flood.

**Start of Construction** includes substantial improvement OR OTHER PROPOSED NEW DEVELOPMENT, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within THE TIME PERIOD WHEN THE PERMIT

WAS ACTIVE 180 days of the permit date; and provided the first Town of Oro Valley inspection is completed by the Town, at the request of the permittee, within 180 days of permit issuance. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction also includes filling, DOES NOT INCLUDE LAND PREPARATION SUCH AS the installation of streets and/or walkways, the installation on the property of accessory structures, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a structure, whether or not that alteration affects the external dimensions of the structure.

**Structure** means any building or containment unit that is constructed or erected, the use of which requires location on the ground or attachment to a foundation having a location on the ground.

Substantial Damage means damage of any origin, CUMULATIVELY TRACKED OVER A PERIOD OF TEN (10) YEARS, sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 49 percent of the market value of the structure before the damage occurred. Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a rolling 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 24 percent of the market value of the structure before the damage occurred.

Substantial Improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, CUMULATIVELY TRACKED OVER A PERIOD OF TEN (10) YEARS, the cost of which equals or exceeds 50 49 percent of the market value of the structure before the start of construction of the improvement. This term includes structures that have incurred repetitive loss or 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 will not preclude the structure's continued designation as a historic structure.

Variance means a modification of the literal provisions GRANT OF RELIEF FROM THE REQUIREMENTS of this ordinance that is granted by the Floodplain Administrator or the Floodplain Board (for FEMA floodplains) upon a finding that strict enforcement of the provisions would cause undue hardship owing to circumstances unique to the individual property for which the variance is granted, and not caused by the applicant for said variance.

Violation means the failure of a structure or other development to be fully compliant with the Town of Oro Valley Floodplain Management Regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required by this ordinance, is presumed to be in violation until such time as such documentation is provided. Violation also means unauthorized construction, grading, encroachment, diversion, or lack of maintenance of private drainage structures.

Water Surface Elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of riverine areas.

Watercourse means a lake, river, creek, stream, wash, arroyo, channel, or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur, including regulatory floodplains as designated by FEMA or the Town of Oro Valley.

((O)05-35, Enacted, 10/05/2005)

## Article 17-3 GENERAL PROVISIONS

#### Sections:

- 17-3-1 Lands to Which This Ordinance Applies
- 17-3-2 Basis for Establishing the Regulatory Floodplain Areas
- 17-3-3 Compliance
- 17-3-4 Abrogation and Greater Restrictions
- 17-3-5 Interpretation
- 17-3-6 Statutory Exemptions
- 17-3-7 Floodplain Violations
- 17-3-8 Abatement of Violations
- 17-3-9 Unlawful Acts
- 17-3-10 Remedies
- 17-3-11 Severability
- 17-3-12 Warning and Disclaimer of Liability

#### 17-3-1 Lands to Which This Ordinance Applies

This ordinance shall apply to all regulatory floodplain areas within the corporate limits of the Town of Oro Valley, but only to such areas.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-2 Basis for Establishing the Regulatory Floodplain Areas

The regulatory floodplain areas identified by the Federal Insurance AND MITIGATION Administration (FIA FIMA) of the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled The Flood Insurance Study (FIS) for Pima County, Arizona and Incorporated Areas, revised February 8, 1999, JUNE 16, 2011, with accompanying Flood Insurance Rate Maps (FIRMs) dated February 8, 1999 JUNE 16, 2011, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this ordinance. This Flood Insurance Study (FIS) and attendant mapping may be supplemented by studies for other areas that allow implementation of this ordinance. The Floodplain Board, within the incorporated limits of the Town of Oro Valley, shall require developers of land to delineate, within areas where development is ongoing or imminent, floodplains consistent with the criteria developed by the FEMA, the Arizona Director of Water Resources, and the Town Engineer, pursuant to the Town's adopted Drainage Criteria Manual. The Flood Insurance Study, AND FIRMs, <del>and FHBMs</del> are on file at the TOWN OF ORO

VALLEY Oro Valley's Department of Public Works, COMMUNITY DEVELOPMENT AND PUBLIC WORKS, 11000 N. La Canada Drive, Oro Valley, Arizona.

Additionally, areas determined by the Town Engineer and /or shown on FHBM, including floodplains/floodprone areas identified on previously recorded subdivision plats (and those recorded hereafter), are also hereby adopted, by reference, and declared a part of this ordinance.

A. Regulatory floodplains shall be subject to the following regulations, except as hereinafter provided:

 No person or persons shall construct any structure which will divert, retard, or obstruct the flow of water in any stream, watercourse, or regulatory floodplain area without having secured all necessary permits from any governmental agency from which approval is required by Federal or State or Local law, and said permits or copies thereof shall be provided to the Floodplain Administrator for review.

2. No person shall construct any structure that will divert, retard, or obstruct the flow of water in any stream, watercourse, or regulatory floodplain area without securing written authorization in the form of a Floodplain Use Permit from the Town of Oro Valley, except as exempted in Section <u>17-3-6</u> of this ordinance.

3. The FIS and areas shown on FHBM FIRMs, together with floodplains associated with washes and/or sheet flow areas having 100-year peak discharges of 50 cfs or more, are the minimum areas of applicability of this ordinance, and may be supplemented by studies for other areas that allow implementation of this ordinance. Applicants for development in the Town of Oro Valley shall delineate floodplains consistent with criteria developed by FEMA, the Town Engineer, and/or pursuant to the Town's adopted Drainage Criteria Manual.

4. All property in the regulatory floodplains, except that covered by statutory exemptions EXCEPTIONS, shall be governed according to the provisions herein.

5. Any use of land otherwise authorized by law shall be permitted, provided such use meets the minimum standards of the regulations hereinafter set forth.

#### B. Elevation and Boundary Refinements:

1. The determination of elevations (water surface, lowest finished floor, and adjacent land) and regulatory floodway and regulatory floodplain boundaries is an engineering function with calculations and decisions made in accordance with the concepts and policies set forth in this ordinance. The best technical data available shall be used for such calculations and decisions. Initial determinations shall be based on floodplain information reports of the Pima County Flood Control District, **U.S.** Corps of Engineers, U.S. Bureau of Reclamation, U.S. Geological Survey, and/or other general data that are pertinent for the conditions of the streams or the watercourses at the time the data are obtained.

2. Additional and more detailed technical analysis will, from time to time, become available through private or governmental studies and activities. These data will permit refinements in the elevations and boundaries of regulatory floodway and regulatory floodplains in the respective reaches of the streams or watercourses.

3. Whenever such additional data become available and it seems desirable to make refinements i.e. Letter of Map Amendments (LOMA's) or Letter of Map Revisions (LOMR's), such refinements or revisions may be made at the request of the property owners or developers or by the Town Engineer. The necessary engineering calculations shall be made for the property owner or developer by an Arizona Registered Professional Civil Engineer (at the owner's/ developer's expense) in conformance with requirements of this chapter, the FEMA, and the Arizona Department of Water Resources. These findings will need approval of the Town Engineer. Following the Town's approval of these refinements to regulatory floodplain areas identified on FIRMs and FHBMs, the property owner shall have calculations and forms forwarded to FEMA for review and approval.

4. The Town Engineer or his/her duly designated representative shall have the authority and responsibility to revise and refine elevations and boundaries of regulatory floodways and regulatory floodplains whenever such revisions and refinements are for the purpose and in accordance with the conditions set forth in Sections **17-4-3.B.1.d**, 17-5-8B.3, 17-5-8B.4, and 17-5-8B.5 of this ordinance.

a. The Flood Insurance Rate Map for Pima County and Incorporated Areas shall be revised to show the refined area boundaries and/or elevations.

b. The Town Engineer shall notify the owner of each property for which area boundaries and/or elevations have been revised or refined, as well as those owners of adjoining property immediately upstream and downstream, by first class mail following a duly noticed public hearing on the property involved.

c. An appeal to the Floodplain Board may be taken by any person aggrieved, in accordance with Article <u>17-6</u> of this ordinance.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-3 Compliance

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

((O)05-35, Enacted, 10/05/2005)

#### 17-3-4 Abrogation and Greater Restrictions

The provisions of this ordinance are not intended to interfere with, abrogate, or annul any ordinance, rule, regulations, or permit previously adopted or issued, and not be in conflict with any provision of this ordinance or any regulation that shall be adopted or issued pursuant to law relating to the use of structure or ordinance not in conflict with this ordinance; nor is it intended by this ordinance to interfere with or abrogate or annul any easement, covenant, or other agreement between parties, except when this ordinance imposes a greater restriction, this ordinance shall control.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-5 Interpretation

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

- A. Considered as minimum requirements;
- B. Liberally constructed in favor of the governing body; and,
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-6 Statutory Exemptions EXCEPTIONS

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

1. Existing legal uses of property or the right to continuation of such legal use. However, if a nonconforming use of land or a structure is discontinued for twelve (12) months or destroyed to the extent of fifty (50) percent FORTY-NINE PERCENT (49%) OR MORE of its MARKET value, as determined by three competent appraisers A COMPETENT APPRAISER, OR THE VALUATION MADE BY THE PIMA COUNTY ASSESSOR'S OFFICE, any further use shall comply with this article and regulations of the Town of Oro Valley.

2. Reasonable repair or alteration of property for the purposes for which the property was legally used on August 3, 1984, or any regulations affecting such property takes effect, except that any alteration, addition, or repair to a nonconforming structure which would result in increasing its flood damage potential by <del>fifty (50) percent</del> FORTY-NINE PERCENT (49%) or more shall be either flood-proofed or elevated to or above the regulatory flood elevation.

 Reasonable repair of structures constructed with the written authorization required by ARS §48-3613.

4. Facilities constructed or installed pursuant to a certificate of environmental compatibility issued pursuant to ARS Title 40, Chapter 2, Article 6.2.

B. In accordance with ARS §48-3613, a floodplain use permit giving written authorization shall not be required, nor shall the Floodplain Board or Town Engineer prohibit: BEFORE THE FOLLOWING TYPES OF CONSTRUCTION AUTHORIZED BY THIS SECTION MAY BEGIN, THE RESPONSIBLE PERSON MUST SUBMIT GRADING PLANS AND A GRADING PERMIT APPLICATION. THE APPLICANT MUST OBTAIN NECESSARY PLAN AND PERMIT APPROVALS, AS WELL AS MEET REQUIREMENTS PURSUANT TO THE ORO VALLEY ZONING CODE REVISED, TOWN OF ORO VALLEY DRAINAGE CRITERIA MANUAL, AND ANY OTHER APPLICABLE TOWN STANDARDS:

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

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

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

 Other construction, if it is determined by the Town Engineer that a floodplain use permit is unnecessary.

5. Any flood control district, county, city, town, or other political subdivision from exercising powers granted to it under this article. ARS 48, CHAPTER 21, ARTICLE 1.

6. 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.

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

8. The development and/or structure permitted in special permits granted by the State agency having the primary land management administrative duty over the lands if development or construction is to be on lands owned or held in trust by the State.

9. Future development in an approved subdivision provided seventy-five (75) percent of such regulatory floodplain area within the platted and approved subdivision to be developed and utilized for dwelling units or commercial or industrial structures has been so developed and utilized as of August 8, 1973.

C. Before any construction authorized by Subsection B of this section may begin, the responsible person must submit grading plans and a grading permit application. The applicant must obtain necessary plan and

permit approvals, as well as meet requirements pursuant to the Oro Valley Zoning Code (Revised), Town of Oro Valley Drainage Criteria Manual, and any other applicable Town standards.

⊕ C. In addition to other penalties or remedies otherwise provided by law, the state of Arizona, a political subdivision thereof, or a person who may be damaged or has been damaged as a result of the unauthorized diversion, retardation, or obstruction of a watercourse has the right to go through an Administrator/Board to commence, maintain, and prosecute any appropriate action or pursue any remedy to enjoin, abate, or otherwise prevent any person from violating or continuing to violate this section or regulations adopted pursuant to this article. If a person is found to be in violation of this section, the Administrator/Board shall require the violator either to comply with this section, if authorized by the Floodplain Board for FEMA regulated floodplains (the Town Engineer for non-FEMA regulated floodplains), or to remove the obstruction and restore the watercourse to its original state. The court may also award such monetary damages as are appropriate to the injured parties resulting from the violation, including reasonable costs and attorney fees.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-7 Floodplain Violations

A. DECLARATION OF PUBLIC NUISANCE. Every new structure, fill, excavation, or ALL development located or maintained within any regulatory floodplain area after August 8, 1973, in violation of this ordinance, and without written authorization from the Floodplain Board for FEMA regulated floodplains (the Town Engineer for non-FEMA regulated floodplains), is a public nuisance, per se, and may be abated, prevented or restrained by action of the Floodplain Board.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-8 Abatement of Violations

Upon discovery of a violation to this ordinance, the Floodplain Administrator shall either:

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

B. Order the owner of the property upon which the violation exists to provide whatever additional information may be required for determination by the floodplain administrator. Such information must be provided to the Floodplain Administrator within 30 days of such order. Within 30 days, the Floodplain Administrator shall either order the abatement of said violation or shall grant a variance in accordance with the provisions of Article 17-6-4 herein; or

C. For FEMA regulated floodplains, 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 ordinance, pursuant to Section 1316 of the National Flood Insurance Act of 1968, and as amended.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-9 Unlawful Acts

A. It is unlawful for any person to divert, retard or obstruct the flow of waters in any watercourse whenever it creates a hazard to life or property without securing the written authorization of the Floodplain Administrator or the Floodplain Board for FEMA regulated floodplains REQUIRED BY ARS §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 of the Floodplain Administrator or the Floodplain Board for FEMA regulated floodplain Administrator or the Floodplain Board for FEMA regulated floodplain Administrator or the Floodplain Board for FEMA regulated floodplain Administrator or the Floodplain Board for FEMA regulated floodplain Administrator or the Floodplain Board for FEMA regulated floodplain Administrator or the Floodplain Board for FEMA regulated flood

B. It is unlawful for any person to neglect maintenance responsibilities on private drainage improvements.

C. Any person violating the provisions of this section shall be subject to penalties pursuant to Article <u>1-8</u>, Penalties, Oro Valley Town Code.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-10 Remedies

All remedies provided for herein shall be cumulative and not exclusive. The conviction and punishment of any person hereunder shall not relieve such person from the responsibility to correct prohibited conditions or to remove prohibited structures, obstructions, or improvements; nor prevent the enforcement, correction, or removal thereof. In addition to the other penalties or remedies provided in this Article, 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 a watercourse 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 ordinance.

((O)05-35, Enacted, 10/05/2005)

#### 17-3-11 Severability

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

((O)05-35, Enacted, 10/05/2005)

#### 17-3-12 Warning and Disclaimer of Liability

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

((O)05-35, Enacted, 10/05/2005)

## Article 17-4 ADMINISTRATION

Sections:

- <u>17-4-1</u> Establishment of Floodplain Use Permits
- 17-4-2 Enforcement and Inspection
- 17-4-3 Duties of Floodplain Administrator and Use Permit Procedures
- 17-4-4 Designation of the Floodplain Administrator

#### 17-4-1 Establishment of Floodplain Use Permits

A. RESPONSIBILITY FOR PERMITS: It shall be the duty of the Town Engineer and all departments, officials, and public employees vested with the duty or authority to issue permits or licenses, to enforce the provisions of this ordinance; and no such license or permit shall be issued for uses or building where the same would be in conflict with the provisions of this ordinance. Any such license or permit, if issued in conflict with the provisions of this ordinance, shall be null and void.

B. FLOODPLAIN USE PERMITS: It shall be unlawful to erect, construct, reconstruct, alter, or change the use of any structure within any regulatory floodplain area covered by this ordinance without first applying for and obtaining a Floodplain Use Permit from the Town Engineer. ; but no such Floodplain Use Permit shall be required for any repairs or improvements for which the value of the materials and labor thereon does not exceed \$7500.00. For the purpose of determining the value of any such repairs, alterations, or improvements, the normal retail value of materials and reasonable value of the labor performed shall be used. Even though no Floodplain Use Permit is required, all other provisions of this ordinance shall be observed in the performance of said repairs or improvements, and this section shall be interpreted to apply only to repairs or improvements that, in fact, constitute complete units, and shall not apply to any effort to repair or improve property units, piecemeal, and by subterfuge for the purpose of avoiding applying for a permit when the cost of said work is, in fact, in excess of \$7500.00.

C. APPLICATION FOR FLOODPLAIN USE PERMIT: Application for a Floodplain Use Permit shall be made on forms furnished by the Town Engineer, and must include, without limitation, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevation of the areas in question; existing or proposed structures including walls, bank protection, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required: 1. Proposed elevation, in relation to mean sea level, of the lowest floor (including basement) of all structures. In a designated Zone AO, elevation of existing highest adjacent natural grade and proposed elevation of lowest floor of all structures must be obtained;

2. Proposed elevation, in relation to mean sea level, to which any structure will be flood-proofed;

3. Certification by an Arizona Registered Professional Civil Engineer or an Arizona Registered Professional Architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in Section 17-5-1.C; and

4. BASE FLOOD ELEVATION DATA SHALL BE PROVIDED FOR SUBDIVISIONS OR OTHER DEVELOPMENTS GREATER THAN 50 LOTS OR 5 ACRES, WHICHEVER IS THE LESSER; AND,

**4 5.** Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. Each such application shall be accompanied by an application fee, as set forth by the Town, payable to the Town of Oro Valley.

((O)05-35, Enacted, 10/05/2005)

#### 17-4-2 Enforcement and Inspection

A. ENFORCEMENT: It shall be the duty of the Town Engineer, through his/her duly appointed Floodplain Administrator and officials of the Town otherwise charged with the enforcement of the law, to enforce this ordinance and all of the provisions of the same.

B. INSPECTIONS: Inspections shall be made by the Town Engineer or by a duly appointed Floodplain Administrator.

C. COOPERATION: The Town Floodplain Administrator may request, and shall receive so far as may be necessary in the discharge of his/her duties, the assistance and cooperation of all departments, agencies, officials, and public employees vested with the duty or authority to issue permits, licenses, or to enforce the regulations of this ordinance.

D. TOWN OF ORO VALLEY ADMINISTRATION: Hydrologic, hydraulic, and related floodplain regulations, as well as engineering matters pertaining to the administration and direction of this ordinance, shall be referred to

the Town of Oro Valley Town Engineer or his/her designated representative, who shall be responsible for such reviews, advice, and recommendations.

E. COOPERATION AGREEMENTS AND CONSULTANTS: The Floodplain Administrator, through the applicable procurement and/or intergovernmental agreement procedures, may retain consultants and experts; and may enter into cooperative agreements for the delineation of floodplains and floodways as well as for such other assistance and guidance considered appropriate and necessary to obtain maximum reasonable protection and benefits under this ordinance.

((O)05-35, Enacted, 10/05/2005)

#### 17-4-3 Duties of Floodplain Administrator and Use Permit Procedures

A. The Floodplain Administrator shall issue Floodplain Use Permits required by this Section.

B. The following procedure shall be used by the Floodplain Administrator in considering issuance of Floodplain Use Permits.

> Upon receiving an application for a Floodplain Use Permit involving the use of fill, construction of structures, or the storage of materials, and prior to rendering a decision thereon the Floodplain Administrator may:

a. Require the applicant to submit, where applicable, plans in triplicate drawn to scale showing the nature, location, dimensions, and elevations of the lot; existing or proposed structures, fill, storage of materials, flood-proofing measures; and the relationship of the above to the location of the channel, regulatory floodway, the regulatory floodplain with base flood elevations, the proposed project in relation to flood heights and velocities, and the plans for flood protection. The applicant shall provide a new delineation of all regulatory floodplains affected by the project. The new delineation and reports shall be prepared in conformance with FEMA requirements and this ordinance. The delineation shall show pre- and post-project floodplain limits and water surface elevations upstream, adjacent, and downstream of the project.

 Require, where circumstances necessitate more detailed information, the applicant to furnish as much of the following additional information as is deemed necessary by the
 Floodplain Administrator for the evaluation of the effects of the proposed use upon flood flows

and the consideration of other factors necessary to render a decision on suitability of the proposed use:

(i) A typical valley cross-section showing the floodway, floodway fringe area, and the floodplain of the watercourse; elevation of land areas adjoining each side of the channel; cross-sectional areas to be occupied by the proposed development; and high water information.

(ii) A plan (surface view) showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and vegetation upstream and downstream, and soil types, as well as other pertinent information;

(iii) A profile showing the slope of the bottom of the channel or flow line of the watercourse;

(iv) Specifications for building construction and materials, flood-proofing, filling, dredging, grading, channel improvement, storage of materials, water supply, and sanitary facilities;

c. Ensure that the proposed development does not adversely affect the carrying capacity of channels at locations where base flood elevations have been determined but a floodway has not been designated. For purposes of this ordinance, adversely affects 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 (1) foot where the owner of the land doing the development owns both sides of the floodway and more than 0.1 foot where only one side is owned. In no case shall the development increase the water surface elevation more than 0.1 foot on the properties owned by others that are located upstream and downstream. The aforementioned water surface elevation increases apply to all watercourse channels in Oro Valley except the Canada del Oro Wash where the elevation of the existing levee system and bank protection will allow for no water surface elevation increases due to encroachment. Additionally, when main channel flood-flow velocities are greater than 4.0 feet per second (fps), flood-flow velocities shall not increase by more than 1.0 fps or ten (10) percent, whichever is less, in the regulatory floodway. Any

velocity increase greater than the aforementioned criteria must be reviewed and approved by the Town Engineer.

d. For FEMA regulated floodplains, MAY require the applicant to submit appropriate (e.g. CLOMR, CLOMR-F, etc.) applications, forms, and information to FEMA for review and approval. A Floodplain Use Permit shall be issued by the Town of Oro Valley upon acknowledgement from FEMA of the acceptance of the CLOMR.

e. Ensure other related State of Arizona and federal permits have been issued.

2. No permit shall be issued for any development that is not in conformance with this ordinance, FEMA regulations, or some 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. In making such a determination, the Floodplain Administrator may consider the following factors:

a. The danger to life and property due to increased flood heights or velocities caused by encroachments;

b. The danger that materials may be swept on to other lands or downstream to the injury of others;

c. The proposed water supply and sanitation systems, and the ability of these systems to prevent disease, contamination, and unsanitary conditions;

d. The susceptibility of the proposed facility and its contents to flood damage, and the affect EFFECT of such damage on the individual owner;

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

f. The availability of alternative locations for the proposed use that are not subject to flooding;

 g. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future;

h. The relationship of the proposed use to the comprehensive plan and Floodplain
 Management program for the area encompassing the proposed use;

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

j. The expected heights, velocity, duration, rate of rise, development potential, and sediment transport of the floodwaters expected at the site;

k. Such other factors as are relevant to the purposes of this ordinance.

3. Upon consideration of the factors listed above and the purposes of this ordinance, the Floodplain Administrator may attach such conditions to the granting of a Floodplain Use Permit as he/she deems necessary to further the purposes of this ordinance, including but not limited to:

a. Modification of waste disposal and water supply facilities;

b. Limitations on periods of use and of operation;

c. Imposition of operational controls, sureties related to temporary uses, and deed restrictions;

d. Requirements for construction of channel modifications, dikes, levees, and other protective measures;

e. Flood-proofing measures such as the following shall be designed consistent with the regulatory flood elevation for the particular area: Flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with the base flood. The Floodplain Administrator may require that the applicant submit a plan document, certified by an Arizona Registered Professional Civil Engineer, that the flood-proofing measures are consistent with the regulatory flood elevation and associated flood factors for the particular area. The following flood-proofing measures may be required, without limitation, because of specific enumeration:

- (i) Anchorage to resist floatation and lateral movement;
- (ii) Installation of watertight doors, bulkheads, and shutters;
- (iii) Reinforcement of walls to resist water pressures;
- (iv) Use of paints, membranes, or mortars to reduce seepage of water through the walls;

(v) Addition of mass or weight to structures to resist floatation;

(vi) Installation of pumps to lower water levels in structures;

(vii) Construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters;

(viii) Pumping facilities to relieve sub-surface external foundation wall and basement floor pressures;

(ix) Construction to resist rupture or collapse caused by water pressure or floating debris;

(x) Cut-off valves on sewer lines, or the elimination of gravity flow basement drains; or

(xi) Elevation of structures, and uses to the regulatory flood elevation.

C. The Floodplain Administrator shall be responsible for the following duties:

1. Obtain and maintain for public inspection and make available the following:

 a. CERTIFICATION OF THE The certified regulatory flood elevation required in Section 17-5-1.C.1, 17-5-1.C.3, AND 17-5-5; (ARS.§ 48-3609);

b. The Zone AO certification required in Section 17-5-1.C.2;

c. The floodproofing certification required in Section 17-5-1.C.3;

d. The certified opening elevation required in Section 17-5-1.C.4.b 17-5-1.C.4; and

e. Permit records for repair of flood-related damage to structures on a cumulative basis over the life of the structure. REVIEW AND MAINTAIN RECORDS OF ALL DEVELOPMENT PERMITS FOR IMPROVEMENTS AND/OR DAMAGES TO EXISTING STRUCTURES TO DETERMINE IF THE APPLICATION OF THE SUBSTANTIAL IMPROVEMENT RULES APPLY, INCLUDING ESTABLISHING A DEFINITION OF MARKET VALUE DETERMINATION AND VERIFYING THAT THE ESTIMATED IMPROVEMENT AND/OR REPAIR COSTS ARE LESS THAN 49% OF THE MARKET VALUE OF THE STRUCTURE, CALCULATED OVER A 10-YEAR PERIOD FROM THE INITIAL APPLICATION FOR IMPROVEMENT OR REPAIR OF DAMAGES. THE SUBSTANTIAL IMPROVEMENT RULES SHALL APPLY TO THE FOLLOWING.

- QUALIFYING STRUCTURES LOCATED IN REGULATORY FLOODPLAINS AS DESIGNATED BY FEMA; THOSE AREAS MAPPED AS FLOODPLAINS/ FLOOD-PRONE ON RECORDED SUBDIVISION PLATS; OR ON FLOOD HAZARD BOUNDARY MAPS PREPARED BY, OR FOR, THE FLOODPLAIN ADMINISTRATOR. QUALIFYING STRUCTURES SHALL ALSO SATISFY ONE OF THE FOLLOWING TWO ADDITIONAL CONDITIONS ,
  - A. PRE-FIRM STRUCTURES CONSTRUCTED BEFORE THE DATE OF THE INITIAL FLOOD INSURANCE RATE MAP ISSUED FOR THE TOWN DATED DECEMBER 4, 1979; OR,
  - B. LEGAL NON-CONFORMING STRUCTURES CONSTRUCTED ON, OR AFTER, DECEMBER 4, 1979 IN COMPLIANCE WITH THE EFFECTIVE FIRM AT THE TIME OF CONSTRUCTION, AND IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE WRITTEN AUTHORIZATION IN EFFECT AT THE TIME OF CONSTRUCTION.
- F. CERTIFICATION OF ELEVATION FOR SUBDIVISIONS REQUIRED BY 17-5-4.E
- G. CERTIFICATION FOR FLOODWAY ENCROACHMENTS REQUIRED BY 17-5-7.4.

H. RECORDS OF ALL VARIANCE ACTIONS, INCLUDING JUSTIFICATION FOR THEIR ISSUANCE REQUIRED BY 17-6-3.C.

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

a. Notify adjacent communities and ADWR prior to such alteration or relocation of a watercourse, and submit evidence of such notification to FIA FEMA through appropriate notification means; and

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

3. Within one hundred twenty days after completion of construction of any flood control protective works which changes the rate of flow during the flood or the configuration of the floodplain

upstream or downstream from or adjacent to the project, the person or agency responsible for installation of the project shall provide to the governing bodies of all jurisdictions affected by the project a new delineation of all floodplains affected by the project. The new delineation shall be done according to the criteria adopted by the ADWR. (A.R.S. § 48-3609 (I)).

4. Advise the district of Pima County and any adjunct jurisdiction having responsibility for floodplain management in writing and provide a copy of a development plan of all applications for floodplain use permits or variances to develop land in a floodplain or floodway within one mile of the corporate limits of the Town of Oro Valley, AZ. Also, advise the district of Pima County in writing and provide a copy of any development plan of any major development proposed within a floodplain or floodway, which could affect floodplains, floodways or watercourses within the district's area of jurisdiction. Written notice and a copy of the plan of development shall be sent to the district no later than three (3) working days after having been received by Town of Oro Valley. (A.R.S. § 48-3610 (B) (2))

5. Notify FEMA and ADWR of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

6. A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Administrator (FEMA) FEMA of the changes by submitting technical or scientific data in accordance with this part VOLUME 44 CODE OF FEDERAL REGULATIONS SECTION 65.3. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

7. USE OF OTHER BASE FLOOD DATA. WHEN BASE FLOOD ELEVATION DATA HAS NOT BEEN PROVIDED IN ACCORDANCE WITH SECTION 17-3-2 (BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD), THE FLOODPLAIN ADMINISTRATOR SHALL OBTAIN, REVIEW AND REASONABLY UTILIZE ANY BASE FLOOD ELEVATION DATA AVAILABLE FROM A FEDERAL, STATE OR OTHER SOURCE, IN ORDER TO ADMINISTER SECTION 17-5-1 (STANDARDS FOR CONSTRUCTION). ANY SUCH INFORMATION SHALL BE CONSISTENT WITH THE REQUIREMENTS OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY AND THE DIRECTOR OF THE ARIZONA DEPARTMENT OF WATER RESOURCES AND MAY BE SUBMITTED TO THE FLOODPLAIN BOARD FOR ADOPTION. 8. MAKE MAP INTERPRETATIONS, WHERE NEEDED, AS TO THE EXACT LOCATION OF THE BOUNDARIES OF THE SPECIAL FLOOD HAZARD AREAS (E.G., WHERE THERE APPEARS TO BE A CONFLICT BETWEEN A MAPPED BOUNDARY AND ACTUAL FIELD CONDITIONS). THE PERSON CONTESTING THE LOCATION OF THE BOUNDARY SHALL BE GIVEN A REASONABLE OPPORTUNITY TO APPEAL THE INTERPRETATION AS PROVIDED IN SECTION 17-6 (APPEAL AND VARIANCE PROCEDURES).

9 TAKE REMEDIAL ACTIONS ON VIOLATIONS OF THIS ORDINANCE AS REQUIRED IN SECTION 17-3-8 (ABATEMENT OF VIOLATIONS) HEREIN.

((O)05-35, Enacted, 10/05/2005)

## 17-4-4 Designation of the Floodplain Administrator

The Town Engineer or his/her designee is hereby appointed to administer, implement, and enforce this ordinance and guidelines set forth in Article 17.4, Administration, by processing Floodplain Use Permits in accordance with its provisions.

# Article 17-5 PROVISIONS FOR FLOOD HAZARD REDUCTION

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## Sections:

- 17-5-1 Standards of Construction
- <u>17-5-2</u> Standards for Storage of Materials and Equipment
- 17-5-3 Standards for Utilities
- <u>17-5-4</u> Standards and Submittal Requirements for Subdivisions
- 17-5-5 Standards for Manufactured Homes
- 17-5-6 Standards for Recreational Vehicles
- 17-5-7 Floodways
- 17-5-8 Floodway Fringe Area Requirements
- 17-5-9 Flood Related Erosion-Prone Area

## 17-5-1 Standards of Construction

In all regulatory floodplain areas, the following standards are required:

A. Anchoring

 All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure RESULTING FROM HYDRODYNAMIC AND HYDROSTATIC LOADS, INCLUDING THE EFFECTS OF BUOYANCY.

- 2. All manufactured homes shall meet the anchoring standards of Section <u>17-5-5</u>.
- B. Construction Materials and Methods

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

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

3. All new construction, substantial improvements, and other proposed new development shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment, as well

as other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

 Within Zones AH or AO, adequate drainage paths around structures on slopes are required to guide floodwaters around and away from proposed or existing structures and downstream development.

## C. Elevation and Flood-proofing

1. New construction and substantial improvement of any structure shall have the lowest floor, including basement, elevated at or above the regulatory flood elevation. In areas without a detailed study but within regulatory floodplain boundaries, the applicant shall have an Arizona Registered Professional Civil Engineer prepare a detailed study to determine the depth of the regulatory flood. Nonresidential structures may meet the standards in Section 17-5-1.C.3. Upon the completion of the structure, the elevation of the lowest floor including basement, shall be certified by an Arizona Registered Professional Civil Engineer or an Arizona Registered Professional Land Surveyor, and provided to the Floodplain Administrator and the Town Building Official.

2. New construction and substantial improvement of any structure 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. Nonresidential structures may meet the standards in Section 17-5-1.C.3. Upon completion of the structure an Arizona Registered Professional Civil Engineer shall certify to the Floodplain Administrator that the elevation of the structure meets this standard.

Nonresidential construction shall either be elevated in conformance with Section 17-5-1.C.1 or
 or together with attendant utility and sanitary facilities:

a. Be flood-proofed so that below the regulatory flood elevation the structure is watertight with walls substantially impermeable to the passage of water;

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

c. Be certified by an Arizona Registered Professional Civil Engineer or an Arizona Registered Professional Architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Floodplain Administrator and the Town Building Official.

4. Require, for all new construction and substantial improvements of non-residential structures, that HAVE fully enclosed areas below the lowest floor REGULATORY FLOOD ELEVATION 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 CONSTRUCTED OF FLOOD RESISTANT MATERIALS TO THE REGULATORY FLOOD ELEVATION, HAVE ALL SERVICE FACILITIES ELEVATED AT OR ABOVE THE REGULATORY FLOOD ELEVATION, AND BE designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by an Arizona Registered Professional Civil Engineer or an Arizona Registered Professional Architect to OR meet or exceed the following minimum criteria:

a. A minimum of two openings, on different sides of each enclosed area, shall be provided having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.

b. The bottom of all openings shall be no higher than one foot above grade.

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

Manufactured homes shall meet the above standards and the standards in Section <u>17-5-5</u>.

((O)05-35, Enacted, 10/05/2005)

## 17-5-2 Standards for Storage of Materials and Equipment

A. The storage or processing of materials is prohibited if they are, in time of flooding: buoyant, flammable, explosive, or could be noxious, deadly, or injurious to human, animal, or plant life.

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

((O)05-35, Enacted, 10/05/2005)

## 17-5-3 Standards for Utilities

A. All new or replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.
B. ON-SITE Waste disposal systems shall not be installed WHOLLY OR PARTIALLY in a REGULATORY floodway, or in a regulatory floodplain EROSION SETBACK, OR AS ESTABLISHED BY ADEQ, WHICHEVER IS MOST RESTRICTIVE.

((O)05-35, Enacted, 10/05/2005)

## 17-5-4 Standards and Submittal Requirements for Subdivisions

A. All subdivision proposals shall be consistent with the need to minimize flood damage.

B. All subdivision proposals (ALSO REFERRED TO AS A FINAL SITE PLAN) shall have all public utilities and facilities, including but not limited to sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

C. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards (See adopted Drainage Criteria Manual).

D. Suitability of the Land:

Land that has been found by the Floodplain Board to be unsuitable for development with permanent structures based on hydrological and engineering studies of flooding can be platted and used for only open-space and green-belt uses such as those identified in Section 17-5-7.B.1. This includes land which is:

1. Physically unsuitable because of flooding, poor drainage, and other features which may endanger health, life, or property, aggravate erosion, increase the flood hazard; or increase the burden imposed on the community, its governmental units, and its citizens;

2. Subject to flooding because of its proximity to the stream or watercourse; or because of low elevation. In applying this provision, the Floodplain Board, with technical support and recommendations from the Town Engineer, shall consider:

a. Land subject to flooding by the base flood shall not be platted for residential occupancy, or building sites, or for any other uses that may increase the flood hazard or endanger health, life, or property, unless each lot contains a building site that meets requirements set forth below, in Section 17-5-4G and H, and within other pertinent sections of this ordinance;

b. Fill shall not be used to raise land within the regulatory floodway. In other areas subject to flooding by the base flood, fill may be used provided that the proposed fill does not restrict the flow of water and increase flood heights or velocities in the regulatory floodway, according to the same standards established for street fill described in Section 17-5-4F.2 17-5-8, and provided that compensatory flood storage is provided.

E. Flood situation to be shown on plat. Plats submitted shall show the following:

1. Tentative development plans and preliminary development plans (plats) shall show the location, by survey, of watercourses, channels, irrigation laterals, private ditches, culverts, lakes, or other water features, including direction of flow, water level elevations, and the location and extent of areas subject to frequent inundation;

2. All preliminary subdivision proposals shall identify the area of special flood hazard, regulatory floodplain, the elevation of the base flood, pre- and post-development water surface elevations, and pre- and post-development floodplain limits.

3. All tentative, preliminary, and final subdivision plans will provide the elevation(s) of proposed structure(s) and pads. If the site is filled above the base flood elevation, the final lowest floor and pad elevation shall be certified by an Arizona Registered Professional Civil Engineer or an Arizona Registered Professional Land Surveyor and provided to the Floodplain Administrator and the Town Building Official.

4. Final and preliminary plats shall show the limits of the regulatory floodplain and the regulatory floodway;

5. Tentative and preliminary plats and plans (ALSO REFERRED TO AS A FINAL SITE PLAN) shall show proposed improvements for areas subject to flooding and/or for areas which contain extremely poor drainage facilities such that the proposed improvements make the areas safe from flooding for the respective type of occupancy.

#### F. Street Elevations

1. Refer to the Town's adopted Drainage Criteria Manual and Subdivision Street Standards for additional information and requirements.

2. Fill used for the streets in areas subject to flooding shall not increase flood heights more than A DESIGNATED AMOUNT AS DEFINED IN 17-5-8.A.1,b. 4-(one) foot where the owner of the land doing the development owns both sides of the floodway and not more than 0.1 foot where only one side is owned. In no case should the development increase the water surface elevation more than 0.1 foot on the property owned by others upstream and downstream. Fill in regulatory floodplains for streets shall require the same review and permitting process as any other project requesting fill in a regulated floodplain. The aforementioned water surface elevation increases apply to all watercourse channels in Oro Valley except the Canada del Oro Wash where the elevation of the existing levee system and bank protection will allow for no water surface elevation increases due to encroachment. Additionally, when main channel flood-flow velocities are greater than 4.0 feet per second (fps), flood flow velocities shall not increase by more than 1.0 fps or ten (10) percent, whichever is less, in the regulatory floodway. Any velocity increase greater than the aforementioned criteria must be reviewed and approved by the Town Engineer.

3. The developer shall provide pre- and post-developed water surface elevation for streets proposed for placement in or adjacent to areas subject to flooding. Headwater ponding limits and water surface elevations shall be shown upstream of all culvert crossings.

#### G. Building Site:

1. Residential lots shall contain a building site, either natural or man-made, which is not subject to flooding by the base flood.

2. In areas subject to flooding by the base flood, where no fill is proposed, the building line shall be located no closer to the watercourse or channel than the edge of the area subject to flooding by the base flood. In areas where fill is used to raise the elevation of the building site, no fill shall be placed in the regulatory floodway, and the building line shall be located no less than twenty five (25) feet landward from the edge of the fill.

H. Setback from Channels:

Along reaches of all regulated watercourses, erosion hazard setback requirements from banks of washes shall be established in accordance with the Town's adopted Drainage Criteria Manual or standards accepted by the Town Engineer.

I. Easements for Drainage:

Whenever any watercourse is located in the area being subdivided, an easement or common area encompassing each side of the watercourse shall be provided for the purpose of protecting and or maintaining the watercourse for flood and drainage purposes, and such further width for construction of bank protection or for allowing for natural meander of the stream or watercourse that may be reasonably expected, or for all these as will be adequate for the purpose, as determined by the Town Engineer.

J. Detention/Retention systems:

See Town's adopted Drainage Criteria Manual for requirements pertaining to Detention/Retention systems by visiting the website townoforovalley.com or the administrative offices at 11000 N. La Canada Drive OF THE TOWN OF ORO VALLEY.

## 17-5-5 Standards for Manufactured Homes

All manufactured homes that are placed within or substantially improved while located within a regulatory floodplain shall:

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

B. Be securely anchored to an adequately anchored foundation system to resist flotation, collapse, or lateral movement by one of the methods listed below. This anchoring requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

1. 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

2. By providing over-the-top and frame ties to ground anchors. Specifically:

a. Over-the-top ties shall be provided at each of the four corners of the manufactured home, with two (2) additional ties per side at intermediate locations – except that manufactured homes less than 50 feet in length shall require only one (1) additional tie per side; and

b. Frame ties be provided at each corner of the home with, five (5) additional ties per side at intermediate points - except that manufactured homes less than 50 feet in length shall require only four (4) additional ties per side; and

d. All components of the anchoring system are capable of carrying a force of 4,800 pounds.

C. UPON COMPLETION OF INSTALLATION OF THE MANUFACTURED HOME, CERTIFICATION BY A REGISTERED PROFESSIONAL ENGINEER OR SURVEYOR THAT THE ELEVATION REQUIREMENTS OF THIS SECTION HAVE BEEN SATISFIED SHALL BE PROVIDED TO THE FLOODPLAIN ADMINISTRATOR FOR VERIFICATION.

## 17-5-6 Standards for Recreational Vehicles

All recreational vehicles placed within a regulatory floodplain area will either:

A. Be on site for fewer than 180 consecutive days, and be fully licensed and ready for highway use, to the extent that they are not prohibited by any other ordinance. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions, or

B. Meet the permit requirements of Article <u>17-4</u> of this ordinance, and the elevation and anchoring requirements for manufactured homes in Section <u>17-5-5</u>.

((O)05-35, Enacted, 10/05/2005)

## 17-5-7 Floodways

Located within regulatory floodplain areas, established in Section <u>17-3-2</u>, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that carry debris, potential projectiles, and increase erosion potential, the following provisions apply:

A. Encroachments, including fill, new construction, substantial improvements, and other development are generally prohibited in floodways. The Floodplain Administrator will consider encroachments where certification by a an Arizona Registered Professional Civil Engineer is provided demonstrating that encroachments will result in no increase in flood levels during the occurrence of the base flood discharge, and that the encroachment will not pose a threat to life or property.

B. Floodway Requirements:

1. USES PERMITTED: The following open space uses shall be permitted within a floodway to the extent that they are not prohibited by any other ordinance or state or federal permit requirements, nor conflict with uses permitted in adjoining zones, and provided they do not require structures, fill, or storage of materials or equipment:

 Agricultural uses, including general farming, pasture, grazing or outdoor plant nurseries, horticulture, viticulture, truck farming, sod farming, wild crop harvesting, and restoration of native vegetation;

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- b. Private and public recreational uses;
- c. Accessory residential uses, including lawns, gardens, and play areas.

## C. LIMITATIONS:

1. No use shall be allowed within a floodway which:

a. Acting alone or in combination with existing or future uses creates a danger or hazard to life or property.

- b. Increases the water surface elevation of the base flood;
- c. Adversely affects groundwater recharge.
- 2. No ON-SITE waste disposal systems or septic drain fields shall be installed wholly or partly in a floodway.

D. If Section <u>17-5-9</u> is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions in Article 17.5.

((O)05-35, Enacted, 10/05/2005)

### 17-5-8 Floodway Fringe Area Requirements

A. Floodway fringe areas shall be subject to the following regulations:

1. The following uses shall be permitted within a floodway fringe area to the extent that they are not prohibited by any other ordinance but only upon issuance of a Floodplain Use Permit:

a. Any use permitted in Section 17-5-7.

b. Any other use not involving structures, provided it is elevated above the regulatory base flood elevation and a determination is made by the Town Engineer that the use will not increase the base flood elevation more than one (1) foot where the owner of the land doing the development owns both sides of the floodway, and not more than 0.1 foot where only one side is owned. In no case should SHALL the development increase the water surface elevation

more than 0.1 foot on the property owned by others upstream and downstream, nor unduly restrict the capacity of the channels or floodway of tributaries to the main stream or watercourse, drainage ditches, or other drainage facilities or systems. The aforementioned water surface evaluation increases apply to all watercourse channels in Oro Valley except the Canada del Oro Wash where the elevation of the existing levee system and bank protection will allow for no water surface elevation increases due to encroachment. Additionally, when main channel flood-flow velocities are greater than 4.0 feet per second (fps), a land use/development activity shall not increase flood-flow velocities immediately downstream of the activity by more than 1 fps or ten (10) percent, whichever is less, in the regulatory floodway. Any velocity increase greater than the aforementioned criteria must be reviewed and approved by the Town Engineer.

c. Structures, including dwellings, may be erected or moved provided the first LOWEST floor or basement floor is placed at or above the regulatory flood elevation. Land may be filled, provided that the top of such fill shall be at or above the regulatory flood elevation for the particular area, and shall extend at such elevations at least twenty-five (25) feet beyond the limits of any structure erected or placed thereon. The placement of structures and any accompanying fill shall not affect base flood elevation beyond the limits set in Section 17 - 508.A.1.b. above.

B. The following minimum requirements apply in all zones designated on the FIRM, the FHBM, and the floodplain of those watercourses with a base flood flow rate EQUAL TO, OR GREATER THAN, of = 50 cfs:

1. All new construction (including pre-fabricated structures and mobile homes) and substantial improvements shall be anchored to prevent floatation and lateral movement, and be constructed with flood resistant materials and methods.

2. All proposed plats and proposals for other developments, including their utilities, streets, and drainage structures, shall be located and designed to be consistent with the need to minimize flood damage.

3. All tentative DEVELOPMENT PLANS, preliminary and final plat proposals, SITE PLANS, FINAL SITE PLANS, IMPROVEMENT PLANS, AND FINAL PLATS, and other proposed new developments shall include base flood elevation data OR AS OTHERWISE DIRECTED BY THE TOWN ENGINEER. 4. The Town must be furnished, for permanent record, all elevations and flood-proofing levels for all new or substantially improved structures, whether such structures contain a basement.

5. If in a riverine situation, all adjacent communities and the State Coordinating Office must be notified prior to any alteration or relocation of the watercourse, and copies of such notifications must be sent to the FIA. FEMA. Within the proposed altered or relocated portion of any watercourse, the flood carrying capacity shall be maintained.

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

## C. LIMITATIONS:

- 1. No use shall be allowed within a floodway fringe which:
  - a. Acting alone or in combination with existing or future uses creates danger or hazard to life or property.

b. Increases the water surface elevation for the base flood BY MORE THAN THAT ALLOWED UNDER SECTION 17-5-8.A.1.b; AND,

c. Adversely affects groundwater recharge.

2. No waste disposal systems or septic drain fields shall be installed wholly or partly in a floodway fringe.

## D. CRITICAL FACILITIES:

- 1. CRITICAL FACILITY MEANS ANY OF THE FOLLOWING:
  - A. A STRUCTURE OR FACILITY THAT PRODUCES, USES OR STORES HIGHLY VOLATILE, FLAMMABLE, EXPLOSIVE, TOXIC, AND/OR WATER REACTIVE MATERIALS;

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- B. HOSPITALS, EMERGENCY MEDICAL FACILITIES, NURSING HOMES AND/OR HOUSING FACILITIES LIKELY TO HAVE OCCUPANTS WHO MAY NOT BE SUFFICIENTLY MOBILE TO AVOID INJURY OR DEATH DURING A FLOOD;
- C. ESSENTIAL EMERGENCY RESPONSE FACILITIES, SUCH AS POLICE STATIONS, FIRE STATIONS, EMERGENCY SHELTERS AND/OR OPERATION CENTERS THAT ARE NEEDED FOR PUBLIC SAFETY AND/OR FLOOD RESPONSE ACTIVITIES BEFORE, DURING AND AFTER A FLOOD; AND
- D. PUBLIC AND PRIVATE UTILITY FACILITIES, SUCH AS, BUT NOT LIMITED TO POWER, WATER AND WASTEWATER TREATMENT, AND/OR COMMUNICATIONS, THAT ARE VITAL TO MAINTAINING OR RESTORING NORMAL SERVICES TO FLOODED AREAS BEFORE, DURING AND AFTER A FLOOD.
- APPLICABILITY. THE CRITICAL FACILITY REQUIREMENTS SHALL ONLY APPLY ALONG WATERCOURSES WHICH HAVE FEMA DESIGNATED FLOODPLAINS. WHERE THE 0.2 PERCENT CHANCE FLOODPLAIN HAS NOT BEEN ESTABLISHED, THE TOWN ENGINEER MAY REQUIRE THAT THIS FLOODPLAIN BE DELINEATED BY THE APPLICANT.
- 3. CRITICAL FACILITIES SHALL BE LOCATED OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN, IF POSSIBLE. IF A CRITICAL FACILITY MUST BE LOCATED IN A 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN, IT MUST BE DEMONSTRATED THAT THERE IS EITHER A CRITICAL NEED TO LOCATE IT WITHIN THE FLOODPLAIN, OR THAT THERE IS NOT A SUITABLE ALTERNATIVE SITE, AS JUSTIFIED BY AN ARIZONA REGISTERED CIVIL ENGINEER. ANY CRITICAL FACILITY LOCATED WITHIN A 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN SHALL BE PROTECTED FROM THAT EVENT. PROTECTION INCLUDES, BUT IS NOT LIMITED TO, ELEVATING THE LOWEST FLOOR AND ALL UTILITIES AND MECHANICAL SERVICES TO A MINIMUM OF ONE FOOT ABOVE THE BASE FLOOD OR TO THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN WATER SURFACE ELEVATION, WHICHEVER IS GREATER, PROVIDING ELEVATED ACCESS RAMPS, IF APPROPRIATE, ADEQUATELY PROTECTING THE FACILITY FROM BOTH LATERAL AND VERTICAL EROSION ASSOCIATED WITH THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN, PROVIDING ALL WEATHER ACCESS DURING THE BASE FLOOD AND DEVELOPING AN EMERGENCY RESPONSE PLAN.
- 4. EXISTING CRITICAL FACILITIES WITHIN THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN THAT PROPOSE SUBSTANTIAL IMPROVEMENTS AND/OR REPAIRS SHALL BE PROTECTED FROM THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOOD EVENT.

PROTECTION INCLUDES, BUT IS NOT LIMITED TO, ELEVATING OR FLOOD PROOFING THE LOWEST FLOOR AND ALL UTILITIES AND MECHANICAL SERVICES TO A MINIMUM OF ONE FOOT ABOVE THE BASE FLOOD OR TO THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN WATER SURFACE ELEVATION, WHICHEVER IS GREATER, PROVIDING ELEVATED ACCESS RAMPS, IF APPROPRIATE, ADEQUATELY PROTECTING THE FACILITY FROM BOTH LATERAL AND VERTICAL EROSION ASSOCIATED WITH THE 0.2 PERCENT ANNUAL CHANCE (500-YEAR) FLOODPLAIN, PROVIDING ALL WEATHER ACCESS TO THE BASE FLOOD AND DEVELOPING AN EMERGENCY RESPONSE PLAN.

((O)05-35, Enacted, 10/05/2005)

### 17-5-9 Flood Related Erosion-Prone Area

The protection of Town residents and their property from injury and damage that can occur as a result of streambank lateral migration due to erosion and scour is of primary importance in the administration of this ordinance and the following criteria apply:

A. The Floodplain Administrator shall require Floodplain Use Permits for proposed construction and other development within all flood related erosion-prone areas, as determined by lateral migration analysis described in the Town's Drainage Criteria Manual or in other predetermined, documented evidence. Areas generally most susceptible to lateral erosion and scour include, but are not limited to, locations of historical stream/wash meandering, locations where poorly defined or poorly consolidated banks occur, wash reaches characterized by changes in the direction, velocity, or amount of streamflow, and locations in the proximity of stabilizing features or structures such as rock outcrops or bridges.

B. Permit applications shall be reviewed to determine whether the proposed site alterations and improvements will be reasonably safe from flood-related erosion, and will not cause flood-related erosion hazards or otherwise aggravate the existing hazard.

C. If a proposed development or structure including associated permanent features such as a patio wall or swimming pool or any other feature that is attached to the structure is found to be in the path of flood-related erosion, or would increase the erosion hazard, such improvements shall be relocated or adequate protective measures shall be taken to avoid aggravating the existing erosion hazard.

D. Adjacent to all washes with a base flood flow rate OF 50 cfs OR MORE, a setback from the wash is required for all new development to create a safety buffer. The setback shall be determined using the method outlined in the Town of Oro Valley Drainage Criteria Manual. The buffer may be used for suitable open space purposes, such as for outdoor recreation and wildlife habitat areas, and for other activities using temporary and portable structures only. The erosion setback shall be calculated streamward from the outer most permanent/fixed feature on the property and this structure or feature constructed in such a manner that it will be protected should lateral channel migration occur to its base.

## Article 17-6 APPEAL AND VARIANCE PROCEDURES

Sections:

17-6-1 Nature of Variances

<u>17-6-2</u> Floodplain Board

<u>17-6-3</u> Appeals and Request for Variance Considerations

17-6-4 Conditions for Variances

## 17-6-1 Nature of Variances

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

It is the duty of the Town of Oro Valley to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below the base flood elevation are so serious (as much as \$25 for \$100 of insurance coverage) that variances from the base flood elevation shall not be granted. Variances from other requirements in the Floodplain Management Ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this ordinance are detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

Additionally, **ARS** §48-3609 (J) states that the land for which the variance is granted shall be ineligible for exchange of State land pursuant to the flood relocation and land exchange program provided for by title 26, chapter <u>2</u>, article 2. A copy of the notice shall be recorded in the office of the Pima County recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land. The floodplain administrator shall maintain a record of all variance actions, including justification for their issuance, and report such variances in a biennial report to FEMA and ADWR.

## 17-6-2 Floodplain Board

A. The Floodplain Board of Oro Valley shall hear and decide requests for variances from the requirements of this ordinance to FEMA regulated floodplains, as well as hear appeals to decisions from previous determinations or actions on non-FEMA regulated floodplains by the Floodplain Administrator or the Town Engineer.

B. The Floodplain Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this ordinance with regard to FEMA regulated floodplains and floodplains identified on the Town's Flood INSURANCE RATE Hazard Boundary Maps.

((O)05-35, Enacted, 10/05/2005)

## 17-6-3 Appeals and Request for Variance Considerations

A. In passing upon appeals and requests for variance, the Floodplain Board shall consider all technical evaluations, all relevant factors, and all standards specified in other sections of this ordinance, and also consider:

- 1. The danger that materials may be swept onto other lands to the injury of others;
- 2. The danger of life and property due to flooding or erosion damage;

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

- 4. The importance of the services provided by the proposed facility to the community;
- 5. The necessity to the facility of a waterfront location, where applicable;

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

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

 The relationship of the proposed use to the comprehensive plan and Floodplain Management Program for the area encompassing the proposed use; ĩ

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

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

11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water system, and streets and bridges.

B. Upon consideration of the factors of Section 17-6-3A and the purposes of this ordinance, the Floodplain
 Board may attach such conditions to the granting of appeals and variances as it deems necessary to further the purposes of this ordinance.

C. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance; and shall report any such variances that are issued in FEMA regulated floodplains in its biennial report, which is also, submitted to the Federal Emergency Management Agency.

B. ANY APPLICANT TO WHOM A VARIANCE IS GRANTED SHALL BE GIVEN WRITTEN NOTICE OVER THE SIGNATURE OF THE FLOODPLAIN ADMINISTRATOR, OR THEIR DESIGNEE, THAT:

- THE ISSUANCE OF A VARIANCE TO CONSTRUCT A STRUCTURE BELOW THE BASE FLOOD ELEVATION WILL RESULT IN INCREASED PREMIUM RATES FOR FLOOD INSURANCE UP TO AMOUNTS AS HIGH AS \$25 FOR \$100 OF INSURANCE COVERAGE, AND
- 2. SUCH CONSTRUCTION BELOW THE REGULATORY FLOOD ELEVATION INCREASES RISKS TO LIFE AND PROPERTY; AND
- 3. THE LAND UPON WHICH THE VARIANCE IS GRANTED SHALL BE INELIGIBLE FOR EXCHANGE OF STATE LAND PURSUANT TO THE FLOOD RELOCATION AND LAND EXCHANGE PROGRAM PROVIDED BY ARS §37-610. A COPY OF THE NOTICE SHALL BE RECORDED IN THE OFFICE OF THE PIMA COUNTY RECORDER AND SHALL BE RECORDED IN A MANNER SO THAT IT APPEARS IN THE CHAIN OF TITLE OF THE AFFECTED PARCEL OF LAND.

E. A PERSON AGGRIEVED IN ANY MANNER BY AN ACTION OF THE FLOODPLAIN REVIEW BOARD MAY WITHIN THIRTY DAYS APPEAL TO THE FLOODPLAIN BOARD.

#### 17-6-4 Conditions for Variances

A. Variances shall only be issued upon:

1. A showing of good and sufficient cause;

2. A determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

 A determination that failure to grant the variance would result in exceptional hardship to the applicant;

4. A showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to the wash WATER. This includes only facilities defined in Article 17.2 of this ordinance in the definition of functionally dependent use (which is unlikely due to the Town of Oro Valley's arid climate); and

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

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

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

D. The Floodplain Administrator, at his/her discretion, may grant a variance for non-FEMA regulated flood hazard areas.

E. GENERALLY, VARIANCES MAY BE ISSUED FOR NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS TO BE ERECTED ON A LOT OF ONE-HALF ACRE OR LESS IN SIZE CONTIGUOUS TO AND SURROUNDED BY LOTS WITH EXISTING STRUCTURES CONSTRUCTED BELOW THE REGULATORY FLOOD ELEVATION, PROVIDED THE PROCEDURES OF SECTIONS 17-4 AND 17-5 OF THIS ORDINANCE HAVE BEEN FULLY CONSIDERED. AS THE LOT SIZE INCREASES BEYOND ONE-HALF ACRE, THE TECHNICAL JUSTIFICATION REQUIRED FOR ISSUING THE VARIANCE INCREASES.

# Article 17-7 ORDINANCE AMENDMENTS

Sections:

17-7-1 Procedures

## 17-7-1 Procedures

A. The Floodplain Board may from time to time, after a public hearing required by law (ARS §38-431.01, and other Open Meeting Laws), amend, supplement, or change the regulations set forth herein or subsequently established. Any amendment, supplement, or change may be initiated by the Floodplain Board or by petition of affected persons hereafter provided.

B. The procedures established by this Article are to provide for appropriate and timely ordinance amendments, with due consideration of the purpose of this ordinance.

Article 17-8 FEES

Sections:

17-8-1 Fee Schedule

# 17-8-1 Fee Schedule

Fees for floodplain use permits will be charged based on the fee schedule approved by the Town Council.