

PROPOSED ORDINANCE

RELATING TO FLOODPLAINS; AMENDING THE TUCSON CODE, CHAPTER 26, FLOODPLAIN, STORMWATER, AND EROSION HAZARD MANAGEMENT, ARTICLE 1. IN GENERAL, DIVISION 1. FLOODPLAIN AND EROSION HAZARD AREA REGULATIONS, SEC. 26-2 DEFINITIONS, SEC. 26-5.2 FLOODWAY FRINGE DEVELOPMENT, SEC. 26-7.1 SETBACKS ON REGIONAL WATERCOURSES, SEC. 26-8 SUBDIVISION AND DEVELOPMENT PROJECT REQUIREMENTS, SEC. 26-10 DETENTION/RETENTION SYSTEMS, SEC. 26-12 APPEALS AND VARIANCES, SEC. 26-13 AMENDMENTS; ARTICLE 2. STORMWATER MANAGEMENT, DIVISION 3. PROHIBITIONS, NON-PROHIBITED DISCHARGES, AND REQUIREMENTS, SEC. 26-42 REQUIREMENTS; AND SETTING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF TUCSON, ARIZONA AS FOLLOWS:

SECTION 1. The following sections of the Tucson Code, Chapter 26, Article 1 and Article 2 are amended to read as follows:

**ARTICLE I.  
IN GENERAL  
DIVISION 1.  
FLOODPLAIN AND EROSION HAZARD AREA REGULATIONS**

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**Sec. 26-2. Definitions.**

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*Critical facility* means any new and substantially improved public or private facility, or any addition to an existing public or private facility, that is used for public emergency management or provides services and functions essential to the community. Critical facilities ~~should~~ be designed and constructed to be located outside of FEMA SFHA and other one hundred (100) year regulatory and jurisdictional floodplains, and provide a minimum lowest floor elevation set at or above five hundred (500) year floodplains-WSEL, or the RFE<sub>CF</sub> - BFE +2 ft. If a new development or substantially improved facility is proposed in a five hundred (500) year floodplain then the minimum building pad elevation shall be set at or above the five hundred (500) year water surface elevation, and the minimum lowest floor elevation shall be set at or above the five hundred (500) year water surface elevation plus one (1) foot, and provide all weather access for the five hundred (500) year flood condition. Critical facilities include: critical airport facilities (air traffic control towers, electrical vaults, emergency generators, police station, fire station, and fueling stations), emergency incident command centers, other emergency facilities including fire stations, police departments; utility facilities; nursing homes or elderly care facilities; hospitals; storage facilities that have hazardous

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materials; and schools or day care facilities. Other critical facilities may be designated as determined by city administration (department directors with city manager or designee's concurrence).

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Levee means a man-made structure designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to reduce risk from temporary flooding. Classic Levee includes concrete-encased earthen berms or soil cement structures with regulatory scour protection. A Classic Levee may also be a road/railroad prism meeting all FEMA levee requirements including compaction. A Floodwall Levee is a water-tight wall structure with regulatory scour protection meeting all FEMA levee requirements. Channel System Levee is a structure constructed within a channel that meets FEMA levee requirements.

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*Regulatory flood elevation* means the elevation which is one (1) foot higher than the calculated water surface elevation of the base flood.

In an AO Zone the RFE shall be one (1) foot higher than the depth number specified on the FIRM,

In an AO Zone the RFE shall be one (1) foot higher than the depth number specified on the FIRM, or two (2) feet if no depth number is specified.

\* \* \*

Repetitive loss property means any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978. At least two (2) of the claims must be more than ten (10) days apart but within ten (10) years of each other. A repetitive loss property may or may not be currently insured by the NFIP.

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*Retention system* means a type of flood control facility which stores surface runoff and stops the downstream progress of surface water runoff or flood waters by employing methods of total containment such that the stored water infiltrates into the subsurface ground layers. No flow is discharged directly into a downstream watercourse from a retention system or basin, except for bleed pipes used for maintenance purposes only.

Infiltration rates shall include a safety factor of two (2)

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#### **Sec. 26-5.2. Floodway fringe development.**

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(11) Place service equipment and mechanical items, including but not limited to water heaters, heating/cooling equipment, ductwork, electrical service panels and/or other facilities, as deemed necessary by the Floodplain Administrator or Designee, at or above the regulatory flood elevation.

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#### **Sec. 26-7.1. Setbacks on regional watercourses.**

Unless a more restrictive setback has been determined, the minimum setback to structures, for the corresponding regional watercourses, shall

be as indicated in Table I.

Table I

Watercourse	Minimum Setback in Straight Section (Feet)	Minimum setback in Curved Section (Feet)
Pantano Wash	<del>350</del> <u>360</u>	<del>870</del> <u>900</u>
Rillito Creek	360	<del>895</del> <u>900</u>
Santa Cruz River	490	<del>1,220</del> <u>1,230</u>

Curved sections are any sections of the watercourse that do not meet the criteria of equation 7.7a of the Standards Manual.

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When banks are protected to the regulatory design requirements the setback to structures shall be fifty (50) feet.

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Setbacks for other regional watercourses may be determined from guidelines in the *Standards Manual*.

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#### Sec. 26-8. Subdivision and development project requirements.

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(a) *Suitability of Land:*

\* \* \*

(3) When planning and designing developments adjacent to, surrounding or affected by watercourses, the owner/developer should conform to policies set forth in the adopted general plan of the city, existing basin management plans, and this chapter. ~~In these areas where basin~~ For all basin management areas plans have not yet been formulated, the first consideration in approaching alternative drainage design concepts shall be to maintain ~~the~~ natural configurations or existing drainage patterns to reduce exposure to flood and erosion hazards as well as promote groundwater recharge. Where natural washes cannot be maintained, a mitigation plan shall be established with emphasis being placed on earthen or naturally appearing channels with landscaping and texture/color added to bank protection materials. The design of earthen channels will be encouraged in order to allow for a more permeable surface which permits reintroduction of the water into the groundwater system, allowing for the reintroduction of native plant species which promotes a natural, partially soil-stabilized system.

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#### Sec. 26-10. Detention/retention systems.

(a) When deemed necessary by the city engineer, flood detention/retention systems shall be employed in lieu of or in combination with structural flood control measures to reduce flooding potential or restrict it to a level no greater than pre-platting and/or pre-development conditions. ~~All proposed residential not densities of three (3) or more units per acre and all proposed commercial and industrial developments greater than one (1) acre in size shall provide some method of peak and volumetric runoff reduction.~~ The amount of reduction is stipulated within the

*Stormwater Detention/Retention Manual*, and subsequent amendments, which was approved for use by the city engineer as development standard in the Technical Standards Manual section 4-03.0.

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**Sec. 26-12. Appeals and variances.**

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(b) *Variances.* The floodplain board shall hear and decide all requests for variances from the requirements of this ordinance. Stormwater technical advisory committee (STAC) or stormwater advisory committee (SAC), as designated at the time by the floodplain administrator, shall make recommendations to the Director of the Department of Transportation and Mobility to be forwarded to the mayor and council on technical issues raised by appeals and variance requests.

\* \* \*

(e) A variance shall be granted only if, based on technical evidence prepared by an Arizona registered professional engineer, the floodplain board finds all of the following:

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(8) That a reduction in erosion hazard set back is determined based on current flow rates, channel geometrics, bank soil conditions and follows the approaches recommended in relevant technical manuals.

\* \* \*

(j) *Stormwater technical advisory committee (STAC).* The STAC shall make recommendations to the Director of the Department of Transportation and Mobility to be forwarded to the mayor and council on technical issues raised by appeals and variance requests.

\* \* \*

(k) *Stormwater advisory committee (SAC).* The SAC shall review all proposed amendments to Chapter 26 of the Tucson Code and shall provide written conclusions and recommendations to the director of the Department of Transportation and Mobility to be forwarded to the mayor and council and to the planning commission, as applicable, prior to a public hearing on the proposed amendments.

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**Sec. 26-13. Amendments.**

(a) SAC or STAC, as determined at the time by the floodplain administrator, shall review all proposed amendments to chapter 26 of the Tucson Code and shall provide written conclusions and recommendations to the Director of the Department of Transportation and Mobility to be forwarded to the mayor and council prior to a public hearing on the proposed amendments. Floodplain administrator shall request the directors of the Planning and Development Services Department and Department of Transportation and Mobility to reconstitute and/or convene as necessary the SAC or STAC.

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**ARTICLE II.**

## STORMWATER MANAGEMENT

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### DIVISION 3. PROHIBITIONS, NON-PROHIBITED DISCHARGES, AND REQUIREMENTS

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#### Sec. 26-42. Requirements.

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(f) In the event of a spill or release, the owner, operator, or the person who has control of the source or location of any spill or release, which may result in a discharge that is not in compliance with this article, shall immediately take all reasonable safety precautions including, if appropriate, calling 911 and completing the following steps:

\* \* \*

(3) Notify the Tucson Department of Transportation and Mobility, Stormwater Management Section and the Arizona Department of Environmental Quality of the release by telephone before noon of the next working day;

(4) Provide written notification, within five (5) working days, to the Tucson Department of Transportation and Mobility, Stormwater Management Section of the type, volume, cause of the discharge, corrective actions taken, and measures to be taken to prevent future occurrences.