

Kansas Administrative Regulations

Kansas Department of Agriculture—Division of Water Resources

Article 45.—Design of Levees

5-45-1. Levees and floodplain fills; definitions.

As used in K.S.A. 24-126 and amendments thereto, in the regulations adopted pursuant to that statute, and by the division of water resources in administering K.S.A. 24-126 and amendments thereto, unless the context clearly requires otherwise, the following words and phrases shall have the meanings specified in this regulation: (a) "Approval" means the written approval of plans and specifications by the chief engineer authorizing the applicant to proceed with the construction and maintenance of a levee or floodplain fill project.

(b) "Authorized representative" means any staff employee designated by the chief engineer to perform duties and functions on behalf of the chief engineer.

(c) "Base flood" means a flood having a one percent chance of being equaled or exceeded in any one year.

(d) "Benchmark" means a reference point or object of known elevation and location that is not expected to move horizontally or vertically during the life of the project.

(e) "Chief engineer" means the chief engineer, division of water resources, Kansas department of agriculture.

(f) "Design flood" means a flood having a selected probability of being equaled or exceeded in any one year for the degree of protection required.

(g) "Environmental mitigation" means any of the following:

- (1) Site-specific modification of a project;
- (2) implementation of a practice or management; or
- (3) the reservation of a part of the project to protect or replace environmental values destroyed or adversely affected by the project.

(h) "Equal and opposite conveyance" means the location of development offsets from stream banks so that floodplain lands on each side of a stream outside the stream

channel convey a share of the flood flows proportionate to the total conveyance available on each respective side of the stream.

(i) "Floodplain" means the land in and adjacent to a stream that is inundated by a base flood.

(j) "Floodplain fill" means material, usually soil, rock, or rubble, that is placed in a floodplain to an average height of greater than one foot above the existing ground and that has the effect of diverting, restricting, or raising the level of floodwaters on a stream.

(k) "Floodway" means the channel of a stream and adjacent land areas that have been determined as being necessary to convey the base flood, as calculated using the minimum requirements of the national flood insurance act of 1968, 42 U.S.C. 4001 et seq., as amended September 23, 1994, and 44 C.F.R. part 59, subpart A, sec. 59.1 and 44 C.F.R. part 60, subpart A, sec. 60.3, as amended October 1, 2007.

(l) "Floodway fill" means floodplain fills, other than a levee, placed wholly or partially within the boundaries of the floodway at locations where the floodway has been identified.

(m) "Floodway fringe" means those portions of a floodplain outside of the boundaries of a regulatory floodway within reaches of a stream where a floodway has been established.

(n) "Floodway fringe fill" means floodplain fills, other than a levee, placed wholly outside the floodway boundaries at locations where the floodway has been identified.

(o) "Geometric analysis" means a determination of the cross-sectional area of a valley below the base flood elevation that will be blocked by a proposed floodplain fill or levee. The resulting area is then divided by the width of the water surface of the base flood at that location. This value is an estimate of how much the proposed project will increase the base flood elevation.

(p) "Levee" means any floodplain fill with an average height of more than one foot above the surrounding terrain constructed generally parallel to a water course and whose purpose is to repel floodwaters.

(q) "Perennial stream" means a stream, or a part of a stream, that flows continuously during all of the calendar year, except during an extended drought.

(r) "Person" means a natural person, partnership, organization, or other similar entity.

(s) "Safety berm" means a linear soil mound, guardrail, or similar traffic barrier located on the bank of a traffic way to prevent a vehicle from overturning or endangering persons in the vehicle.

(t) "Stream" means any watercourse that has a well-defined bed and well-defined banks and that has a watershed above the point in question marking the site of the project that exceeds the following number of acres in the zones specified:

(1) Zone three: 640 acres for all geographic points within any county west of a line formed by the adjoining eastern boundaries of Phillips, Rooks, Ellis, Rush, Pawnee, Edwards, Kiowa, and Comanche counties;

(2) zone two: 320 acres for all geographic points within any county located east of zone three and west of a line formed by the adjoining eastern boundaries of Republic, Cloud, Ottawa, Saline, McPherson, Reno, Kingman, and Harper counties; and

(3) zone one: 240 acres for all geographic points within any county located east of zone two.

The flow of a stream is not necessarily continuous and can occur only briefly after a rain in the watershed. If the site of the project has been altered so that a determination of whether the well-defined bed and banks did exist is not possible, it shall be presumed that the bed and banks did exist if the watershed acreage criteria specified in this subsection have been met, unless the owner of the project conclusively demonstrates that the well-defined bed and banks did not exist when the project site was in its natural state and had not yet been altered by human activity.

(u) "Unconsolidated material storage stockpile" and "UMSS" mean a collection of material that is placed in a floodplain to an average height of greater than one foot above the existing ground, has the potential to divert, restrict, or cause an unreasonable effect on a base flood, and is one of the following:

(1) A pile of sand or gravel that meets all of the following requirements:

(A) Is not mechanically compacted;

(B) is not cemented together;

(C) is not covered or coated with a substance increasing the structural integrity of the pile; and

(D) is not placed as fill for grading or a foundation; or

(2) a pile of nonsoil material consisting of discrete units meeting all of the following requirements:

(A) Are not fastened or cemented together;

(B) are not anchored to the ground;

(C) are not mechanically compacted; and

(D) are not dense enough or arranged in a manner to resist the hydraulic force of a base flood.

(v) "Unreasonable effect," if caused by a levee or floodplain fill, means any of the following:

(1) An increase in the elevation of the design and base flood profiles of more than one foot at any location outside a floodway;

(2) any increase in the elevation of the design and base flood profiles within a floodway; or

(3) a cumulative increase of more than one foot in the elevation of the design and base flood profiles.

(w) "Watershed" means all of the area draining toward a selected point on a stream. (Authorized by and implementing K.S.A. 2007 Supp. 24-126; effective May 1, 1987; amended, T-5-12-30-91, Jan. 1, 1992; amended April 27, 1992; amended Sept. 22, 2000; amended Oct. 3, 2008.)

***** Authenticated Kansas Administrative Regulation *****