Kansas Department of Agriculture

What is a Jurisdictional Dam?

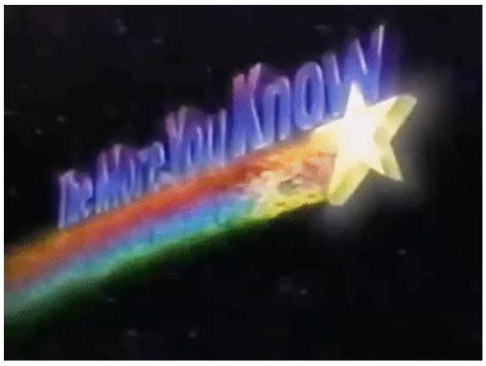
Division of Water Resources (DWR)

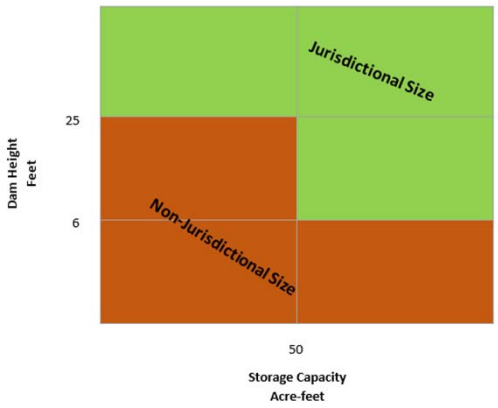
Public Service Announcement

Get a determination from DWR prior to constructing a dam!

Information to provide to KDA-DWR for a determination:

- Location of the dam
- Height
- Reservoir capacity table
- Elevation of emergency spillway (if there will be one)
- Land owner information



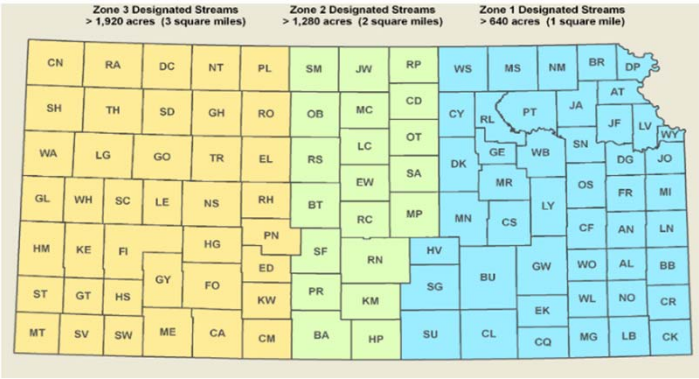


Jurisdictional Dam for KDA-DWR

- 25 feet or more in height
- 6 feet or greater in height and a storage volume at the top of the emergency spillway of 50 acre-feet or more.

My Dam is Non-Jurisdictional, Now What?

- Non-jurisdictional dams on a stream with a large enough drainage area will require a stream obstruction permit from KDA-DWR.
- If the structure is <u>not</u> on a designated stream but <u>is</u> in a FEMA defined floodplain, a floodplain fill permit will be required.



DWR Exemptions

- Embankment has a height of less than 30 feet and a storage volume at the top of the emergency spillway of less than 125 acre-feet AND is considered low hazard.
  - Must register with KDA Dam Safety to qualify for exemption.
  - Registration form can be found on our website.
- A wastewater storage structure for a confined feeding facility that has been approved by the Secretary of the Kansas Department of Health and Environment.

Class "A" Exemption Form

REGISTRATION FORM FOR EXEMPT CLASS A DAMS
K.S.A. 82a-301

"Dam" means any artificial barrier including appurtenant works with the ability to impound water, waste water or other liquids that has a height of 25 feet or more; or has a height of six feet or greater and a storage volume at the top of the emergency spillway elevation of 50 or more acre-feet. The prior written consent or permit of the chief engineer shall not be required for construction or modification of a hazard class A dam that:

1. has a height of less than 30 feet and a storage volume at the top of the emergency spillway elevation of less than 125 acre feet, ***and the dam location and dimensions have been registered with the Division of Water Resources in a written form prescribed by the chief engineer; or***
2. is a wastewater storage structure for a confined feeding facility that has been approved by the secretary of health and environment pursuant to K.S.A. 65-171d, and amendments thereto.

Complete the following information to satisfy the registration for exempt low, hazard class A dams defined in K.S.A. 82a-301(d)(1).

Dam owner information
Name:_____
Mailing Address:_____
Phone:_____
E-mail Address:_____

Legal description of location: The location of the proposed dam is (use intersection of project centerline and stream centerline): ____quarter of the ____ quarter of the ____quarter of Section_____, Township____ South, Range____ (East/West) _____County, Kansas, across, along, or in (stream or watercourse name): _____.

Location of each end of the dam: GPS location of the left abutment is _____, _____ and the GPS location of the right abutment is _____, _____.

Drainage area (acres): _____
Use intersection of dam centerline and stream centerline as drainage area point.

Dam height (feet): _____
The height of a dam or barrier shall be measured from the lowest elevation of the streambed, downstream toe or outside limit of the dam to the elevation of the top of the dam.

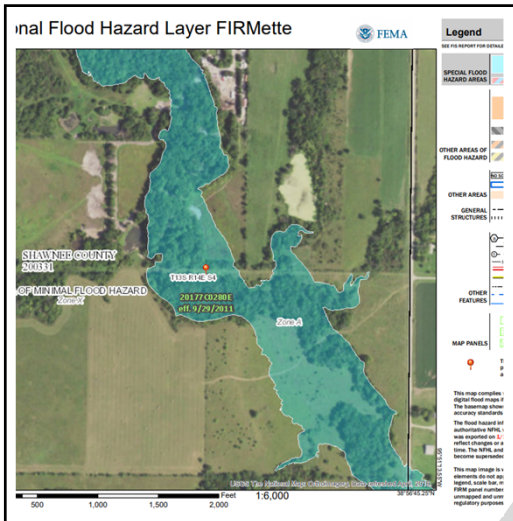
Area capacity table: Please attach a reservoir area capacity table for the dam. The table identifies the number of acres enclosed by each contour within the reservoir area and the total storage capacity of the reservoir in acre-feet at the elevation of each contour. The data shall be compiled for all contours in the reservoir up to the elevation of the top of the dam. Computations of capacity shall be based on the natural topography of the reservoir basin but may include the volume of any excavation in the reservoir made during construction of the dam. **The storage in acre-feet must be shown in the table for the proposed emergency spillway elevation. This will be used to identify the jurisdiction of the dam.**

Location map: Submit a U.S.G.S. topographic map, aerial photograph or a detailed plat showing the location and layout of the proposed dam, the location of the stream, and the property lines. The distance from the North-South distance and the East-West distance from a section line or southeast corner of section should be marked on the map along with a north arrow and map scale.

Hazard class determination: List any homes, businesses, highways, improved roads, railroads, camp grounds, recreational facilities, or public utilities located downstream from the dam that could be inundated if the dam fails.

Hazard Classifications: Class "A" — Low

- Dam located in an area where failure could damage only farm or other uninhabited buildings, agriculture or undeveloped land including hiking trails, or traffic on low-volume roads.
- Low volume roads are 0 through 500 vehicles per day.
- If there is a roadway across the top of the dam, 0 through 100 vehicles per day is considered low volume.

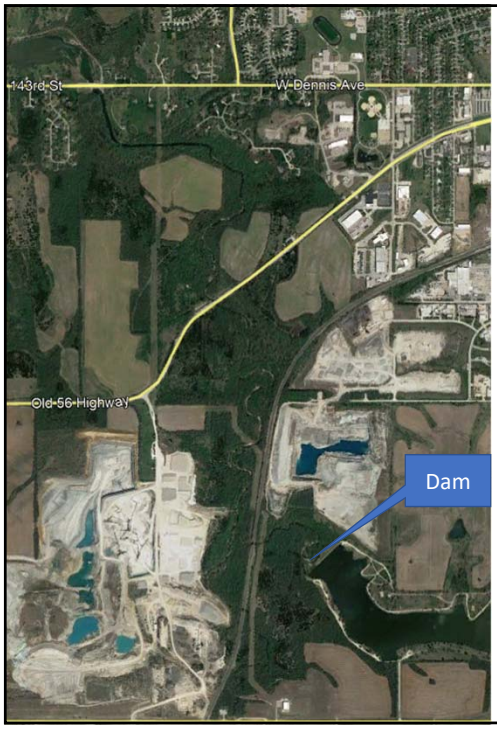


My Dam is Class "A" Exempt, Now What?

- If the project is within a Federal Emergency Management Agency (FEMA) designated floodplain, the project will require a floodplain fill permit.

Hazard Classifications: Class "B" — Significant

- Dam located in an area where failure could:
  - endanger a few lives
  - damage an isolated home
  - damage traffic on moderate-volume roads
  - damage low-volume railroad tracks
  - interrupt the use or service of a utility serving a small number of customers
  - inundate recreation facilities, including campground areas intermittently used for sleeping and serving a relatively small number of persons
- Moderate-volume roadway is considered 501 through 1,500 vehicles per day.
- Roadway across the top of the dam 101 through 500 vehicles per day.



Hazard Classifications: Class "C" — High

- Dam located in an area where failure could result in any of the following:
  - extensive loss of life
  - more then one home
  - damage to industrial or commercial facilities
  - interruption of a public utility serving a large number of customers
  - damage to traffic on high-volume roads
  - inundation of a frequently used recreation facility serving a relatively large number of persons
  - two or more individual hazards described in hazard class B
- High volume roads are more than 1,500 vehicles per day.
- Roadway across the top of the dam more than 500 vehicles per day.

Additional Permitting

- USACE 404 Permitting
- DWR Water Rights Permitting
- Local permitting (county, city, etc.)

DWR Contacts

- Dam Permits – Ambrose Ketter
  - 785-564-6653 or Ambrose.Ketter@ks.gov
- Stream Obstruction & Floodplain Fill Permits – Contact Janelle Phillips
  - 785-564-6656 or Janelle.Phillips@ks.gov

Questions?

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