

KANSAS FLOODPLAIN MANAGEMENT TIPS



October 2016

Kansas Association for Floodplain Management Conference

The Kansas Association for Floodplain Management (KAFM) held the annual conference on September 7-8, 2016 in Mulvane. This year's conference was held at the Kansas Star Hotel and Event Center. KAFM offered the opportunity to have fun, to learn about floodplain management and to network with other floodplain managers.

There was a preconference workshop on September 6, 2016 called "An Intro to Beginners GIS for Floodplain Managers." There was an early bird session the morning of September 7th on "CRS: Building Code Effectiveness Grading Schedule." At the end of the official conference there was a Certified Floodplain Manager (CFM) Review. On the morning of September 9th the CFM test was given. Though the official conference was for two days on September 7-8 there were actually four days of activities.

This year the conference agenda included sessions on USGS Stream Stats Project, Tulsa Land Bridge Project, How Flood Maps are Made, National Pollutant Discharge Elimination Systems, Flood Proofing - Elevations, Costs and Benefits, Record Keeping for Floodplain Management, Elevation Certificates and Division of Water Resources Permitting Requirements. The Floodplain 101 course is set up as over four different sessions as a course for new floodplain managers to learn all of the basics.

One of the big topics discussed at KAFM's Conference is the Association of State Floodplain Managers (ASFPM) conference to be held be in Kansas City, Missouri from April 30-May 5, 2017. KAFM is helping to host the ASFPM conference. Participants from Kansas will get a discount on conference fees to attend the ASFPM conference. There will be 20 scholarships to pay the conference dues for KAFM members to attend the ASFPM conference. KAFM members will also have the opportunity to volunteer for the ASFPM conference.

Visit www.kafm.org to find out more about KAFM and the conferences.

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Photo of Don Slone presenting CFM pin to Janelle Phillips

Floodproofing or Elevation

Residential structures must be elevated. The elevation requirement in Kansas is one foot above base flood elevation. Some communities have a higher freeboard standard. There are ten specific communities in Kansas where the Federal Emergency Management Agency (FEMA) allows residential basements to be floodproofed. Floodproofing of homes is only allowed in those specific communities.

Nonresidential structures have the option to elevate or to floodproof. The typical language, found in most community floodplain regulations, reads as follows, "New construction or substantial-improvement of any commercial, industrial, or other non-residential structures, including manufactured homes, shall have the lowest floor, including basement, elevated a minimum of one (1) foot above the base flood elevation or, together with attendant utility and sanitary facilities, be dry floodproofed to a minimum of one (1) foot above the base flood elevation."

Imagine a situation with two buildings. One building might be elevated three feet above the adjacent grade. The building next to it might be floodproofed to three feet above the adjacent grade. Both buildings are protected to the same level in that scenario. What would happen if there was a flood event and the water surface of the flooding was three feet and one inch above grade? The elevated building will have one inch of water inside of it. The flood proofed building will have three feet and one inch of water inside of it. It is clear that elevation is the better option.

A presenter at the 2016 Association of State Floodplain Managers Conference told us that in a case like that, one inch of overtopping would completely fill up a 16,000 square foot building in a little over three hours. The floodproofed building would have extensive damage while the elevated building would only have minor damage. Floodplain Managers should recommend elevation as the best flood protection measure.

Floodproofing has a long list of problems that are not usually discovered until a flood event occurs. In one case, drop-in panels to create a flood gate were stored for many years on brackets in a closet. Over the years those panels warped and bowed in the center and would not form a good seal when needed. A common problem is that gaskets deteriorate over time and develop cracks in them. No one checks on the gaskets or replaces them regularly. Parts rust or become inoperable and replacement parts are no longer available. Buildings are purchased by new owners who are not familiar with the floodproofing procedures for the building they now own. In some instances, flood gates were lost or thrown away because the new owners didn't realize what they were for. Who puts floodproofing measures in place when the owner is away?

Because of the many problems associated with floodproofing it is not surprising that FEMA made changes to the Floodproofing Certificate for Non-Residential Structures. The instructions for the most recent certificate requires the following be submitted along with the certificate.

- Photographs of shields, gates, barriers or components designed to provide floodproofing protection.
- Written certification that all portions of the structure below the base flood elevation will be watertight or substantially impermeable to the passage of water.
- There must be a comprehensive maintenance plan that includes the exterior, all penetrations of the exterior, all shields, gates, barriers and components, all seals or gaskets for all gates, barriers or components and location of all shields, gates, barriers, components and all associated hardware and materials.

Flood insurance for non-residential floodproofing requires flood protection measures to be one foot higher than the base flood elevation to get same insurance consideration as a building elevated to the base flood elevation. For better protection during a flood elevate the structure. Elevation does not have the human error associated with it that is common to floodproofing. Floodproofing should be a last ditch option not the first and easiest choice.

Steps to the Permitting Process

Been working with a Floodplain Manager in a community here in Kansas recently. She is the City Clerk and Floodplain Manager is just one of many hats she wears. She doesn't issue floodplain development permits very often. A citizen came in for a building permit for a new garage. The citizen told the City Clerk it was not in the floodplain. The City Clerk did not double check the flood map like she should have. The citizen assumed it was not in the floodplain because he wasn't told about the floodplain when he purchased the house. The garage got built. Bad news is that the garage is in the floodway. It must have a no-rise certificate and a permit from Division of Water Resources (DWR). The permit fees are doubled because the garage is already built. The permit fees and engineering and survey work will cost a minimum of several thousand dollars. The citizen in this story is also on the City Council and is blaming his City Clerk for the problems and expense.

Situations like this pop up here in Kansas all too often. Here is a list of key steps to follow in the process for permitting development in the floodplain.

1. Determine if the property is in the floodplain. Always check the flood maps. Many communities have paper maps in their offices. The floodplain map viewer on the Division of Water Resources and the National Flood Hazard Layer are useful on line tools for the communities that have digital flood maps.
2. Find out about any required State permits. Start off by calling the Water Structures Program for DWR at 785-564-6650. A majority of all developments in the floodplain will require a permit through DWR.
3. Local community permits are required for all development in the floodplain. Community officials have overlooked certain types of development in the past. Read the definition of development in your own floodplain management regulations and you'll see it covers a lot of things and is not limited only to buildings.
4. Local community floodplain development permits are required for government projects. This means that the Floodplain Manager for a community would have to issue a permit to a Parks Director for a community to put a picnic shelter in a park or to a Road Supervisor to put a culvert in the floodplain.
5. It is not enough to have an approved permit from DWR. Communities must also issue their own local floodplain development permit and attach a copy or note the DWR permit number on their own permit.
6. Meet with property owners and explain the requirements. Miscommunication has resulted in things being built incorrectly in the floodplain. The floodplain manager may have said the lowest floor had to be one foot above the base flood elevation but the property owner thought he meant lowest finished floor. Be clear in communicating requirements to property owners.
7. Review permit applications for accuracy. Errors commonly seen on permits include:
 - Incorrect map dates. This tends to happen in communities that have had recent map changes.
 - Incorrect base flood elevations. Rounded off numbers are often a clue.
 - Incomplete information can make it impossible to determine compliance requirements.
 - Inaccurate estimates of improvement costs. Homeowners who do the work themselves don't always include the cost of their own labor or cost of materials left over from another project.
8. After community officials have properly issued a permit for the work to be done they must also verify the completed work is in compliance. This may involve checking foundation when it is poured or requiring a final finished elevation certificate when the project is complete.
9. Floodplain development permits do not overrule permit requirements in building codes, sanitation codes or zoning requirements. When there are conflicting codes use the most restrictive requirement.
10. Withhold a certificate of occupancy or revoke the permit if projects are not built in accordance with the original permit or when required documentation has not been provided. It has been found in audits of community records that elevation certificates based on construction drawings were on file but an elevation certificate for the actual finished construction was not filed.

Never make assumptions about floodplain development permits. Follow a set of permit review steps consistently for every permit. Study your own floodplain management ordinance or resolution. Contact Steve Samuelson at steve.samuelson@ks.gov or 785-296-4622 for questions about floodplain development permits.

Training Opportunities

The Floodplain Management Program will host the following training sessions throughout Kansas. If you are interested in any of the no-cost training opportunities, please contact Tom Morey at 785-296-5440 or Steve Samuelson at 785-296-4622. A training registration form is in this newsletter.

Post Flood Responsibilities

This free class is intended for community officials responsible for administering floodplain management regulations. The course focuses on what to do during and after a disaster event. Topics include substantial damage, permitting, Increased Cost of Compliance and violations. Allowed 3.5 hours toward CFM. Limited to 20 participants.

- Valley Center - Nov. 3, 2016 8:30 a.m.-12:30 p.m.

Violations and Enforcement in Floodplain

This free class is intended for community officials responsible for enforcing floodplain management regulations. The course will focus on various types of violations, how to correct violations and enforcement procedures. Allowed 3.5 hours toward CFM. Limited to 20 participants.

- Eureka – Feb. 9, 2017 8:30 a.m.-12:30 p.m.

Elevation Certificates and Letters of Map Amendment

This free class is designed for community officials responsible for administering floodplain management as well as surveyors and engineers who complete Letters Of Map Amendment (LOMA) and Elevation Certificate forms. The course will focus on accurate completion of Federal Emergency Management Agency (FEMA) technical forms, building diagrams and base flood elevation. Approved 3.5 hours toward CFM. Limited to 20 participants.

- Topeka - Jan. 19, 2017 8:30 a.m.-12:30 p.m.

Find more information about floodplain management from Kansas Department of Agriculture Division of Water Resources on line at:
<http://agriculture.ks.gov/divisions-programs/dwr/floodplain>

Email saves money on postage. The electronic newsletter also has links and the photos are in color. If you are getting this newsletter by postal mail and would prefer email please contact Steve Samuelson at steve.samuelson@ks.gov.

Mark your calendar. The Kansas Association for Floodplain Management 2017 conference will be September 6 and 7 in Lawrence. More information will be posted at the website: www.kafm.org. Registration will be done through a link on the website. If you have questions about registration please contact Don Slone, Chairman, at 913-667-1708.

Kansas Department of Agriculture
Division of Water Resources
Floodplain Program
Training Registration Form

Name _____

Title _____

Organization _____

Address _____

City _____ State _____ Zip _____

Telephone _____ Fax _____

E-mail _____

Name, date and location of training you will attend _____

*Please share this invitation with anyone else who could benefit from the training.

**Classroom locations will be sent to registered participants one week before the training.

Please mail or fax your registration to:

KANSAS DEPARTMENT OF AGRICULTURE
FLOODPLAIN MANAGEMENT PROGRAM
6531 SE Forbes Ave., Suite B
TOPEKA, KS 66619
Fax to: 785-296-7155

For questions about training, please contact Steve Samuelson by email at steve.samuelson@ks.gov or by phone 785-296-4622, or contact Tom Morey at tom.morey@ks.gov and 785-296-5440.

Please help us keep our records current. If the name that appears on this newsletter is for an individual no longer with your organization, please call 785-296-4622, or email steve.samuelson@ks.gov to report the change.

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Kansas Department of Agriculture
Division of Water Resources
Topeka Field Office
Floodplain Management
6531 SE Forbes Ave., Suite B
Topeka, KS 66619

ASFPM 2017 National Conference in Kansas City

The 2017 Association of State Floodplain Managers National Conference will be April 30 to May 5, 2017 in Kansas City, Missouri. This conference is an excellent opportunity for floodplain managers to receive training on mapping technologies, regulations, permitting, outreach and best practices. It is estimated the conference will be attended by more than 1,000 floodplain management professionals. This conference is great chance to meet people for networking and to learn the latest news in floodplain management. Don't miss out on this opportunity for this conference when it is so close. There will be scholarships to assist with conference fees. Contact Tom Morey to find out about scholarships to attend this conference.

KDA/DWR Water Structures Floodplain Program Staff

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