

KANSAS

FLOODPLAIN MANAGEMENT TIPS



August 2017

Elevating Utilities

There are cases of buildings in the floodplain that have utilities located below the Base Flood Elevation (BFE). Elevating utilities has the benefit of protecting the equipment from flooding. Does elevating the equipment also save money?

Chris Parsons, Insurance Program Specialist, with Federal Emergency Management Agency (FEMA) Region VII helped to provide the answer to that question. Chris used the example of a \$200,000 building, Zone AE, no contents coverage, minimum deductible, 2 story, 1,200-2,400 square foot home without a Community Rating System (CRS) discount as the hypothetical case. Starting with that hypothetical structure Chris calculated some basic premium numbers in different situations.

Assuming the home is elevated on a crawl space, bottom of the crawl space is 2' below BFE and the floor of the house is 1' above the BFE. What happens if there is a heat pump outside on a slab, at grade, and they were to raise the heat pump on a stand to same level as the floor of the house?

With an unvented crawl space and machinery and equipment 2' below BFE the premium would be \$1,1102. Elevating the machinery and equipment to 1' above BFE would lower the premium to \$1,033. An annual savings of \$69.

Taking same home as the example but changing the foundation type to a basement. Floor of basement is 6' below BFE and there is a furnace in the basement. How would it effect insurance premiums if the furnace were moved to a utility room on the next higher floor at 2' above the BFE?

Premium with machinery and equipment in basement at 6' below BFE would be \$3,811. Moving the machinery and equipment upstairs to 2' above the BFE would lower the premium to \$3,708. An annual savings of \$103 for this type of retrofit.

These numbers show that elevating utilities saves a little bit on the cost of flood insurance. It is going to be a case by case situation that each property owner should consider the cost involved in elevating the equipment servicing the building and compare that to the insurance premium savings. Property owners should also consider the cost associated with having the equipment damaged and unusable after a flood.

FEMA handout D671 on five ways to lower cost of flood insurance will be sent out by email with the electronic version of this newsletter. The handout includes a section on elevating utilities. There is also a section of the handout on venting crawl spaces. Chris Parsons calculated that adding flood openings to crawl spaces was one of the better cost savings options. Adding proper flood openings to the crawl space saved 13% on the flood insurance premium for our hypothetical house.

In this bulletin...

- **Elevating Utilities**
- **LOMR-F**
- **CRS Task Force**
- **Announcements**
- **Learning Opportunities**
- **Training Registration Form**

Letters of Map Revision on Fill

The Federal Emergency Management Agency (FEMA) has provided a Technical Bulletin 10-01 on “Ensuring That Structures Built on Fill or Near Special Flood Hazard Areas are Reasonably Safe from Flooding.” A key point that is made in the technical bulletin is that structures elevated on fill can still be at risk of flooding. Buildings with basements that are placed in land removed from the floodplain through the process of a Letter of Map Revision–Fill (LOMR-F) are at a added risk compared to other types of buildings. The lower the basement floor is in relation to the base flood level the higher the risk will be.

Property owners should consult with community officials before starting a LOMR-F. The site is in the floodplain until the LOMR-F is approved. This means that bringing in fill to get started must have a floodplain development permit. This protects the community from an unpermitted violation should something go wrong and the LOMR-F not be approved. In many cases, a floodplain fill will also require a permit from the Division of Water Resources (DWR). A Conditional Letter of Map Revision-Fill or CLOMR-F is the only sort of guarantee about a letter of map change being approved before the work begins.

The community Floodplain Manager will need to sign the Community Acknowledgment form for the MT-1 form that is submitted with a LOMR-F application. The community form has a place for a community official to sign and the following statement, “As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision Based on Fill (LOMR-F) or Conditional LOMR-F request. Based upon the community’s review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been or in the case of a Conditional LOMR-F, will be obtained. For Conditional LOMR-F requests, the applicant has or will document Endangered Species Act (ESA) compliance to FEMA prior to issuance of the Conditional LOMR-F determination. For LOMR-F requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA’s process. Section 9 prohibits anyone from taking or harming an endangered species. If an action might harm an endangered species a permit is required from the U.S. Fish and Wildlife Service or National Marine Fisheries Service under Section 10 of the ESA. For actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2©, and that we have available upon request by DHS-FEMA, all analyses and documentation used in making this determination. For LOMR-F requests, we understand that this request is being forwarded to DHS-FEMA for a possible map revision.

That is a lot for the community Floodplain Manager to sign off on. Breaking that down and looking at it in parts, one of the first parts is a statement that the completed or proposed project is designed to meet all of the community floodplain management regulations. It has happened that a property owner has gotten a LOMR-F with the intention of excavating a foundation and installing a basement. The floor of the basement would be below the base flood elevation and that would be a proposed development that does not meet the floodplain regulations.

There is a requirement to document Endangered Species Act (ESA) compliance. For questions about endangered species in Kansas contact the United States Fish and Wildlife Service (USFWS) Kansas Ecological Service, 2609 Anderson Avenue, Manhattan, KS 66502, 785-539-3474, kansas@fws.gov. Send a location map and information about work to be done in floodplain and ask for a determination if any endangered species will be effected. USFWS has been providing this service for free to anyone who requests it.

Letters of Map Revision on Fill, continued

Another part of the community sign off is that no fill is placed in the regulatory floodway. In the case that fill has been placed in the floodway then this should probably be a Letter of Map Revision (LOMR) instead of a LOMR-F.

The form that the Floodplain Manager is signing also states that all necessary Federal, State and local permits have been or will be obtained. Most community officials know which local permits are required within their own communities but not about State level permits. Contact DWR for a permit determination by calling 785-564-6650. When DWR requires a permit then DWR will coordinate with seven other State agencies for you under the Environmental Coordination Act.

In addition, the community's Floodplain Manager is also signing off on the fact that any existing or proposed structure to be removed from the Special Flood Hazard Area (SFHA) will be reasonably safe from flooding as defined in Title 44 of the Code of Federal Regulations Part 65.2 and that documentation will be supplied to the Federal Emergency Management Agency (FEMA) upon request. The definition of reasonably safe means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

Many community officials are not comfortable making that determination on their own. Before they sign the community form they ask that the developer provide certification that the development associated with the LOMR-F will be reasonably safe from flooding. There is suggested language for professional certification in Technical Bulletin 10-01.

The community form on the MT-1 requires community officials to verify proposed development complies with the community's floodplain regulations. This is complicated somewhat by situations when fill is placed on a location, often by a property owner trying to sell property in a floodplain, not knowing what future development will occur at the location. It is further complicated by the fact that FEMA Technical Bulletin 10-01 has diagrams and instructions on how to build a basement on fill in the floodplain with a LOMR-F.

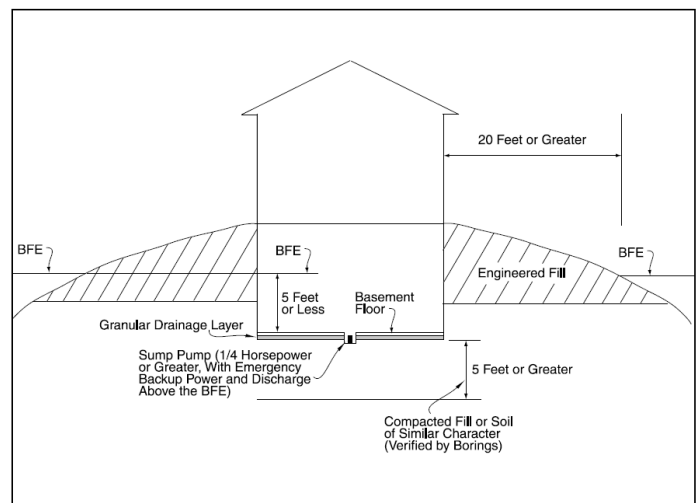


Diagram from Technical Bulletin 10-01

Some communities have modified their floodplain management regulations to try and avoid some of these problems. It is typical for floodplain ordinances and resolutions to say that these regulations apply to Zones A, AO, AH and AE on the Flood Insurance Rate Map (FIRM) for the community. Once a LOMR-F is approved the property is no longer in the SFHA. Some communities have added a statement to regulations that says, "These regulations also apply to properties removed from the floodplain by a Letter of Map Revision on Fill." This gives community officials authority and clear jurisdiction in situations with LOMR-F.

Community Rating System Task Force

The Community Rating System (CRS) Task Force is an interagency multidisciplinary advisory body providing guidance to FEMA on the CRS program. The CRS Task was involved in the development and review of the 2017 CRS Coordinator's Manual. State of Kansas National Flood Insurance Program Coordinator, Tom Morey, is a member of the CRS Task Force. For questions about the 2017 CRS Coordinator's Manual contact Tom Morey at 785-296-5440 or tom.morey@ks.gov.

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 Responsibility

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 for certified floodplain managers. Limited to 20 participants.

- El Dorado – Oct. 31, 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.

- Wichita– November 16, 2017 8:30 a.m.-12:30 p.m.

Basics of the National Flood Insurance Program

This class is for officials responsible for administering their local floodplain management ordinance. The focus is on the National Flood Insurance Program (NFIP) and concepts of floodplain management, maps and studies, ordinance administration, and the relationship between floodplain management and flood insurance. Allowed 3.5 hours toward CFM. Limited to 20 participants.

- Hutchinson - Oct. 17, 2017 8:30 a.m.-12:30 p.m.

Kansas Department of Agriculture/Division of Water Resources has recently hired Martin Koch. Martin is the newest member of the floodplain management team at Forbes Field. Martin will work with floodplain mapping projects. Come meet Martin at the Kansas Association for Floodplain Management conference.

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.

4626
Kansas Department of Agriculture
Division of Water Resources
Topeka Field Office
Floodplain Management
6531 SE Forbes Ave., Suite B
Topeka, KS 66619

ASFPM 2018 National Conference in Phoenix

The 2018 Association of State Floodplain Managers National Conference will be June 17-22, 2018 in Phoenix, Arizona. 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.

KDA/DWR Water Structures Floodplain Program Staff

Tom Morey, CFM, RS, NFIP Coordinator	785-296-5440	tom.morey@ks.gov
Tara Lanzrath, CFM, Floodplain Mapping Specialist	785-296-2513	tara.lanzrath@ks.gov
Steve Samuelson, CFM, NFIP Specialist	785-296-4622	steve.samuelson@ks.gov
Dane Bailey, CFM, Floodplain Mapping Coordinator	785-296-7769	dane.bailey@ks.gov
Martin Koch, Floodplain Mapping Specialist	785-296-0854	martin.koch@ks.gov

Mailing Address:
6531 SE Forbes Ave., Suite B
Topeka, KS 66619
Fax: (785) 862-9110

<http://agriculture.ks.gov/dwr>