



OSAGE COUNTY EMERGENCY MANAGEMENT AGENCY

FLOODPLAIN MANAGEMENT FACT SHEET

(ACCESSORY AND AGRICULTURAL STRUCTURES)

How does the National Flood Insurance Program (NFIP) address the issue of outlying buildings in the Special Flood Hazard Area (SFHA)?

Osage County has adopted special provisions in the Floodplain Management Ordinance, established by the NFIP, which allows these types of developments. Floodplain Development Permits (FPDP) are still required and any “No-Rise” requirements must be met, but basically if all the conditions of the Floodplain Management Ordinance are met, they may not need to be elevated to be compliant with the minimum NFIP standards.

So I can just build my detached garage, garden shed, barn, or other support structure right at ground level and all is good?

Well, not exactly. The first step in constructing an Accessory or Agricultural Structure is completing the *Variance and Appeal Record* form. This form can be found at the Osage County EMA website. Before the FPDP can be issued, the owner must submit this form for the proposed project to the Floodplain Administrator, and complete the variance procedures for floodplain development described in Article 5, Section E – “*Conditions for Approving Floodplain Management Variances*” in the Floodplain Management Ordinance. If the variance is also located within the Regulatory Floodway then proof that the proposed structure will meet the “No-Rise” requirements must be submitted to the variance board for the variance review to proceed. Only after the variance board approves the proposed variance can the FPDP be issued for the proposed Accessory or Agricultural Structure.

How does receiving a variance for my Accessory or Agricultural Structure affect the flood insurance rating for the Structure?

Basically an Accessory or Agricultural Structure with the lowest floor below the BFE is a violation of the NFIP. However it has been determined by the NFIP, if communities adopt the additional regulation standards for these structures, then they would be considered an allowable variance under the minimum standards of the NFIP. Typically, variances are not allowed in the NFIP because they put both life and property at risk. But if there are support structures that will not be used as living spaces, then it was determined that they could be built below the BFE, and qualify for a variance under the NFIP as long as the community had adopted the proper language in their ordinance. It should be noted that if flood insurance will need to be carried on the new Accessory or Agricultural Structure, the variance granted structure will have a higher flood insurance rating cost, when compared to the elevated structure flood insurance rating cost.

What are the conditions for approving an Accessory or Agricultural Structure Variance?

The conditions for approving an Agricultural Structure variance are listed in Article 5, Section F – “*Conditions for Approving Variances for Agricultural Structures*” of the Floodplain Management Ordinance. The conditions for approving an Accessory Structure variance are listed in Article 5,

Section G – “*Conditions for Approving Variances for Accessory Structures*” of the Floodplain Management Ordinance. But to sum it up, the requirements for an Accessory or Agricultural Structure to qualify for a variance it must:

1. Only be used for parking or for limited storage purposes only.
2. Be built with Flood Resistant Materials below the BFE. Information about FEMA accepted flood resistance materials can be found in FEMA’s Technical Bulletin 2-08, 7-93, and 11-01. There is also a fact sheet titled “*Building with Flood Damage Resistant Materials*”. All of these documents are referenced at the end of this article.
3. Must be properly anchored to prevent flotation or lateral movement and collapse of the structure during the 1% flooding event (certification provided by a design professional).
4. Any utilities servicing the building must be located above the BFE, or floodproofed within a watertight enclosure capable of resisting flood damage, or meet the floodproofing development standards in FEMA Publication 348, Sections 3.3.4 and 3.3.5 specified on pages 3.3-7 to 3.3-11. (*Additional requirements associated with floodproofing of electrical equipment by this method are discussed in the “Non-Structural Development Activities” fact sheet.*)
5. Have flood openings in the area below the BFE to allow flood water to enter and exit.
6. If it is going to be located within a Regulatory Floodway, the development must still meet the “No-Rise” requirements, before allowing moving forward with the variance procedure. (*See the fact sheet titled “Development in the Regulatory Floodway” for more information on this process and certification.*)
7. Equipment, machinery, or other contents must be protected from any flood damage.
8. Will not qualify for Disaster Relief Assistance for repair costs after a flooding event.
9. If the structure will need to be insured, the flood insurance premium cost will be higher, then if the structure had been elevated instead.
10. Wet floodproofing techniques may be utilized if certified by a design professional.

Please be aware that many of these additional requirements for the construction of an Accessory or Agricultural Structure will require the assistance of a design professional to meet the additional NFIP standards of building below the BFE. Additional information about protecting the building utilities, flood resistant materials, and wet floodproofing certification is found in the *Additional Sources of Information* section on page 3. Wet floodproofing is different than the dry floodproofing requirements of the NFIP. Wet floodproofing means the area below the BFE will be wet during a flooding event; however, no damage will occur to this area. Dry floodproofing means that the area below the BFE will not get wet at all during the flooding event and will be able to withstand the hydrostatic and hydrodynamic forces acting upon the structure.

If all of these conditions are met, then the proposed project can move forward with the variance procedures of the Floodplain Management Ordinance described in Article 5, Section E – “*Conditions for Approving Floodplain Management Variances*” in the Floodplain Management Ordinance.

Don’t forget to address any sanitary facilities requirements in the SFHA. They will also need to be protected from flood damage and meet any additional health or state sanitary requirements.

So the requirements for receiving an Accessory or Agricultural Structure variance are the same?

Yes. The requirements between the two acceptable variances are exactly the same. There is however one additional requirement for each type of development. To qualify as an Accessory Structures it cannot be larger than four hundred square feet (400 sq. ft.) in size. And under Agricultural Structures

the Floodplain Management Ordinance specifically lists the residential farm house as NOT being an Agricultural Structure. Remember, to first qualify as an Accessory or Agricultural Structure, it must only be used for parking, the storage of materials, or access to a building.

It is also important to remember that the requirement to prove the development will not cause any increase to the existing flood heights, if the structure is going to be located within the Regulatory Floodway, can never be waived. Even through the variance procedure. No exceptions.

Before beginning the variance procedure for your Accessory or Agricultural Structure, it is highly recommended that you compare the cost of just meeting the elevating requirements of the NFIP, versus the cost and time to meet the additional NFIP regulations for structures built below the BFE. Many times it is cheaper to elevate then build below the BFE. This is especially true if the new structure will have to carry flood insurance when completed.

Additional Sources of Information

Information about the flood resistant material requirements can be found in FEMA's Technical Bulletin 2-08 titled "*Flood Damage-Resistant Material Requirements*".

For information about wet floodproofing of an enclosure, FEMA has created Technical Bulletin 7-93 titled "*Wet Floodproofing Requirements for Structures Located in Special Flood Hazard Areas*", that address the certifying requirements.

For information about flood openings, FEMA has created Technical Bulletin 11-01 titled "*Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*", that address the requirements for openings located in an enclosed area below the BFE.

To assist with the protection of the building utilities so that they also comply with the floodplain ordinance, FEMA Publication 348 titled "*Protecting Building Utilities from Flood Damage – Principals and Practices for the Design and Construction of Flood Resistant Building Utility Systems*" dated November 1999 was created.

Two fact sheets created by FEMA titled "*Building with Flood Damage Resistant Materials*" and "*Raise Electrical System Components*" will also assist those who choose to wet floodproof an enclosed area.

All of these documents can be found at the FEMA.gov website or at:

www.osagecountyema.com/pages/floodprogram.htm