

Agricultural and Accessory Structures in Your SFHA

Agenda

- 01 Welcome and Introductions
 - 02 Concept Introduction / Definitions
 - 03 Permitting Agricultural Structures
 - 04 Permitting Accessory Structures
 - 05 Wet-floodproofing Requirements
 - 06 Considering and Granting Variances
- 



Introducing Agricultural and Accessory Structures

Definitions and Terms

- **Development:** Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

Definitions and Terms

- **Structure:** A walled and roofed building that is principally above ground.

Definitions and Terms

- **Agricultural Structure:** A structure that is used *exclusively* for agricultural purposes or uses in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock.
 - Any structure that does not meet the above definition for any reason must be considered non-agricultural.

Definitions and Terms

- **Accessory Structure:** Structures that are...
 - on the same parcel of property as a principal structure
 - the use is incidental to the use of the principal structure
 - used solely for parking or storage
 - are small (<800ft²), represent a minimal investment by owners, and;
 - have low damage potential
- Also referred to as “appurtenant structures”

Definitions and Terms

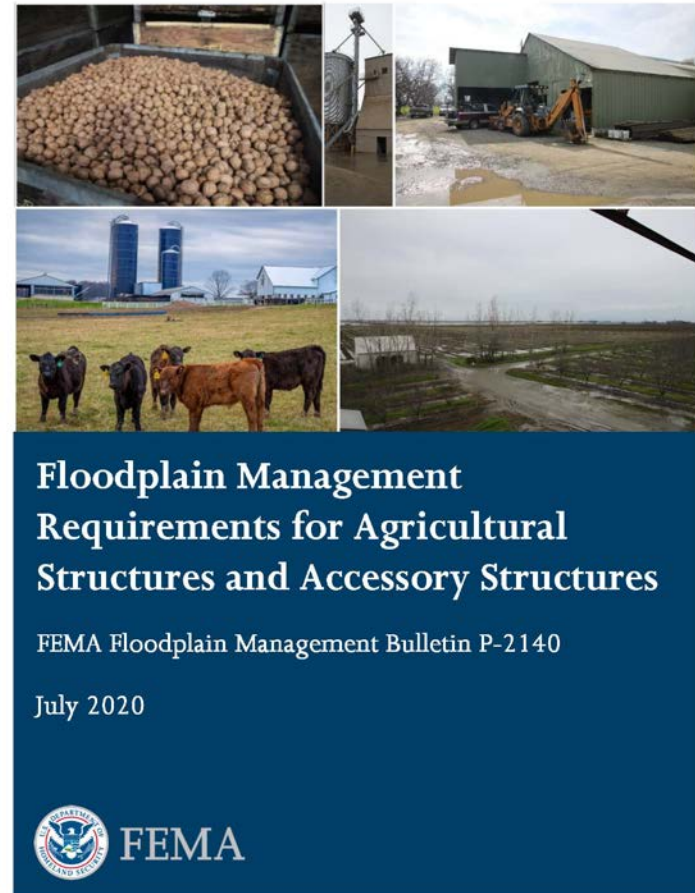
- **Low Damage Potential:**
 - Physical damage
 - Contents damage
 - Loss of function

Definitions and Terms


- **Wet Floodproofing:** Minimizing flood damage to structures by intentionally allowing floodwater to enter and exit automatically (without human intervention) to minimize unequal pressure of water on walls

FEMA Floodplain Management Bulletin P-2140


- Located in NeDNR's Digital Desk Reference under "Floodplain Management Resources" → "FEMA Region VII Guidance Documents"
- Clarifies the requirements that apply to agricultural structures and accessory structures proposed to be located in Special Flood Hazard Areas (SFHAs).



Why Make the Distinction?

- FEMA recognized that their guidance did not fully account for the wide range of uses of non-residential structures
 - There are a multitude of different types of agricultural structures
 - The specificities of the agricultural industry has changed over the past 25 years
- 

Why Make the Distinction?

- Agricultural structures can now be wet-floodproofed using variances
 - Elevation or dry floodproofing may not be appropriate in some circumstances
 - Accessory structures that are larger than recommended size limits can be permitted with variances
 - Eligible accessory structures can be wet-floodproofed by permit
- 

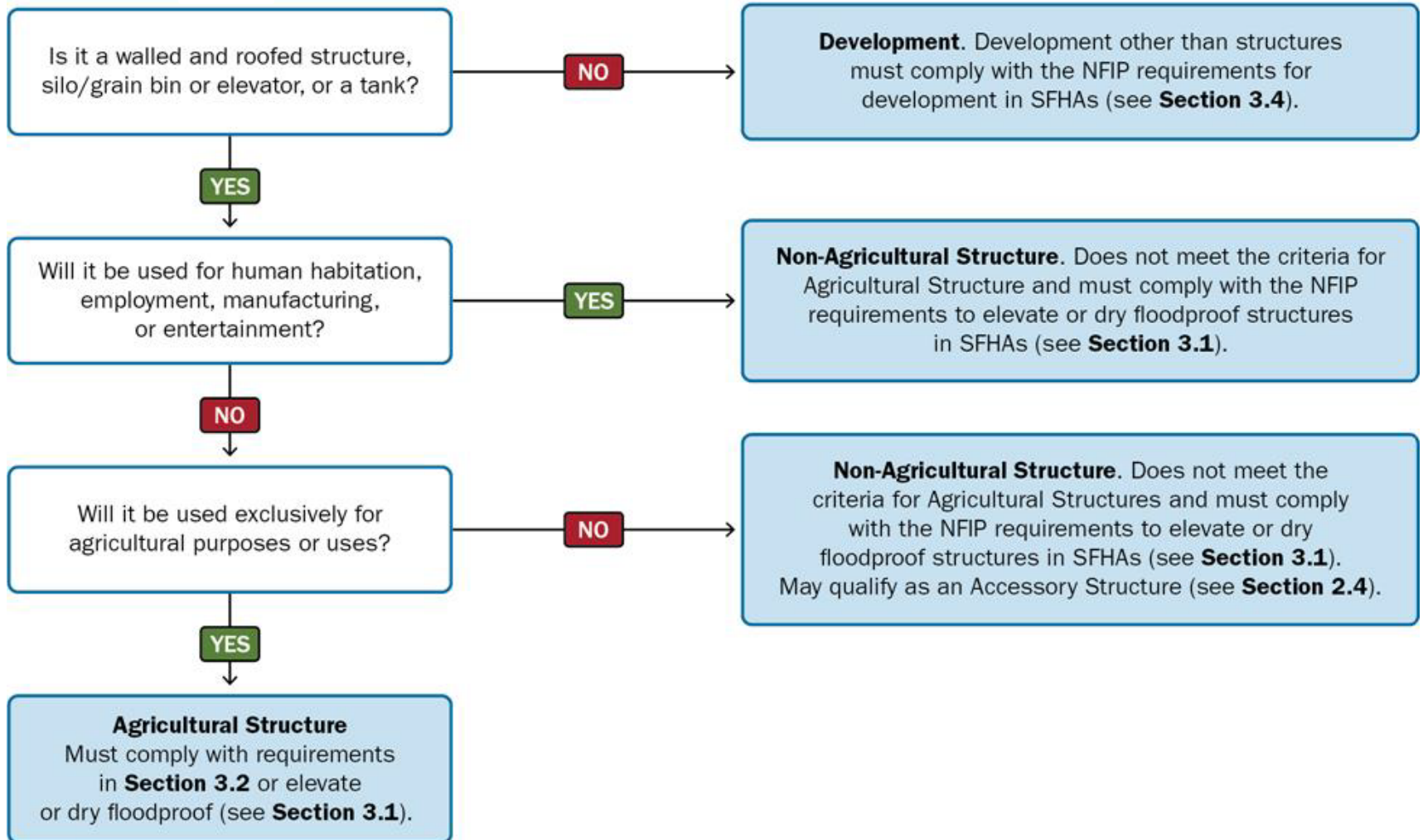
Important to understand...

- These regulations can only be practiced and enforced if they are in your community's floodplain ordinance
- If your community is interested in including this language in your ordinance, please reach out to me after the presentation to start the process



Permitting Agricultural Structures

Permitting Ag. Structures



Permitting Ag. Structures

- Once you've determined the structure meets all criteria, consider:
 - Elevating the structure to BFE +1ft
 - Dry-floodproofing the structure to BFE +1ft
 - Or a combination of both
- If neither can be considered, the last option is wet-floodproofing
 - Can only be done through a variance

To wet floodproof:

- Must be classified as an agricultural structure
- Must have low damage potential
- Must not pose risks to public health safety, and welfare
 - No storage volatile or toxic materials
- Must follow wet floodproofing requirements detailed in your ordinance

Additional Considerations

- Utilities must be elevated to the BFE +1ft
- The structure cannot be converted
 - If usage is changed, must be brought into compliance with appropriate regulations
 - Have owner sign a non-conversion agreement
 - Consider having it attached to the property deed

Examples of Ag. Structures

- Equipment storage structures



Examples of Ag. Structures

- Horse barn with storage



Examples of Ag. Structures

- Silos and Grain Elevators



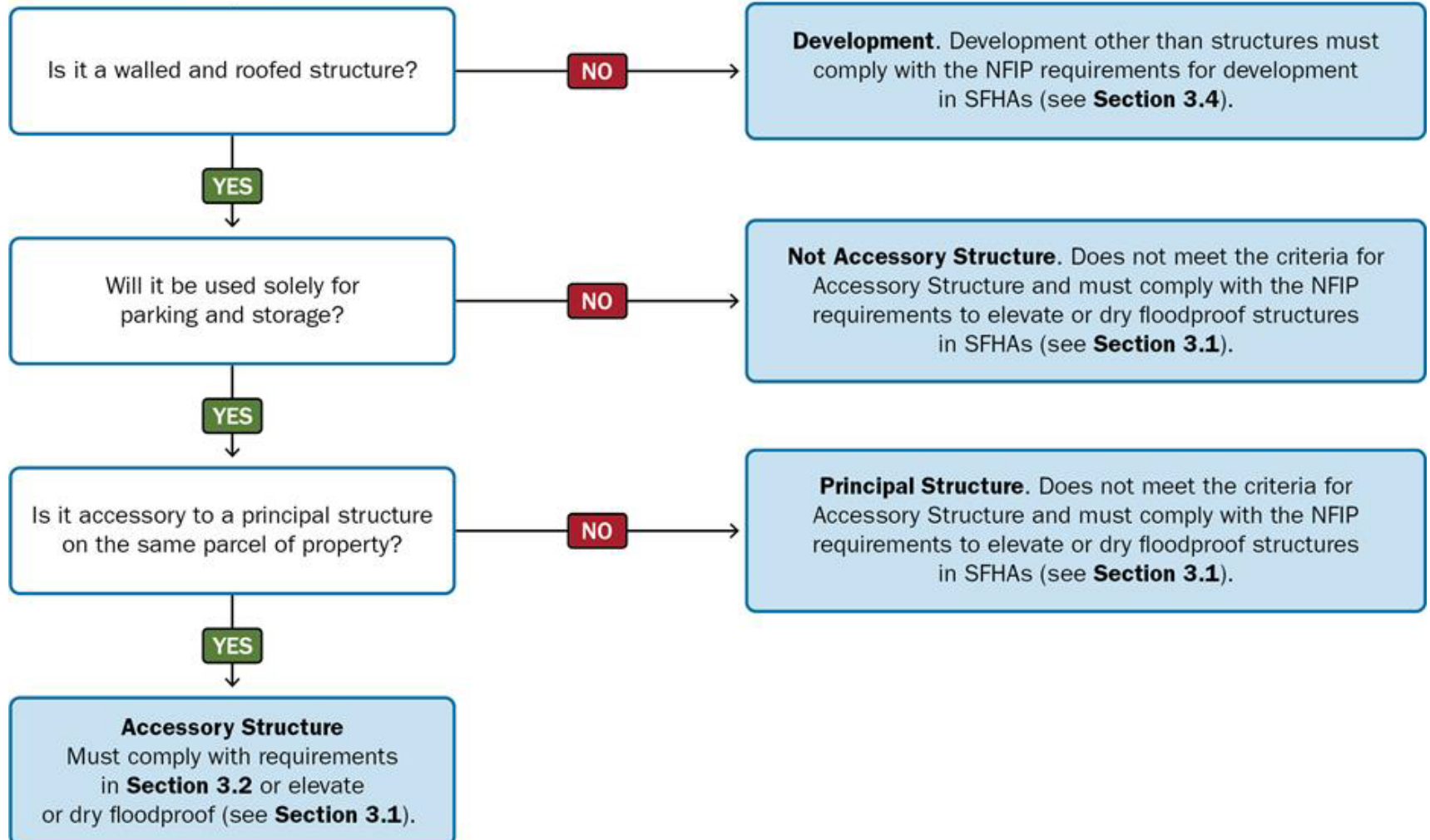
Not an Ag. Structure





Permitting Accessory Structures

Applying the Definitions: Accessory Structures



Permitting Accessory Structures

- Elevation: Generally preferred method
 - Must be elevated to exist to the BFE +1ft
- Dry-floodproofing:
 - Made watertight with flood-resistant materials to BFE +1ft
 - Must resist flotation/lateral movement
- Wet-floodproofing:
 - Can be permitted for accessory structures

Additional Considerations

- No larger than a one-story two-car garage
 - Nebraska recommends 800ft² (25ft x 32ft)
 - This size limit would be defined in your floodplain ordinance
 - Any accessory structure larger than this size would require a variance to wet-floodproof, or should be permitted as a non-residential structure (elevation or dry-floodproofing only)

Additional Considerations

- Utilities must be elevated to the BFE +1ft
- The structure cannot be converted
 - If usage is changed, must be brought into compliance with appropriate regulations
 - Have owner sign a non-conversion agreement
 - Consider having it attached to the property deed

This DECLARATION made this ___ day of _____, 20___, by _____
("Owner") having an address at _____

WITNESSETH:

WHEREAS, the Owner is the record owner of all that real property located at _____ in the City of _____ in the County of _____, designated in the Tax Records as _____.

WHEREAS, the Owner has applied for a permit or variance to place a structure on that property that either (1) does not conform, or (2) may be noncompliant by later conversion, to the strict elevation requirements of Article _____ Section _____ of the Floodplain Management Ordinance of _____ ("Ordinance") and under Permit Number _____ ("Permit").

WHEREAS, the Owner agrees to record this DECLARATION and certifies and declares that the following covenants, conditions and restrictions are placed on the affected property as a condition of granting the Permit, and affects rights and obligations of the Owner and shall be binding on the Owner, his heirs, personal representatives, successors and assigns.

UPON THE TERMS AND SUBJECT TO THE CONDITIONS, as follows:

1. The structure or part thereof to which these conditions apply is: _____

2. At this site, the Base Flood Elevation is _____ feet above mean sea level, National Geodetic Vertical Datum.

3. Enclosed areas below the Base Flood Elevation shall be used solely for parking of vehicles, limited storage, or access to the building. All interior walls, ceilings and floors below the Base Flood Elevation shall be unfinished or constructed of flood resistant materials. Mechanical, electrical or plumbing devices shall not be installed below the Base Flood Elevation.

4. The walls of the enclosed areas below the Base Flood Elevation shall be equipped and remain equipped with vents as shown on the Permit.

5. Any alterations or changes from these conditions constitute a violation of the Permit and may render the structure uninsurable or increase the cost for flood insurance. The jurisdiction issuing the Permit and enforcing the Ordinance may take any appropriate legal action to correct any violation.

6. Other conditions: _____

In witness whereof the undersigned set their hands and seals this _____ day of _____, 20___.

Owner _____ (Seal)

Witness _____ (Seal)

Examples of Accessory Structures

- Storage sheds



Examples of Accessory Structures

- Two-car, one story garage (needs flood vents)



Examples of Accessory Structures

- Detached garage (needs flood vents)



Not an Accessory Structure



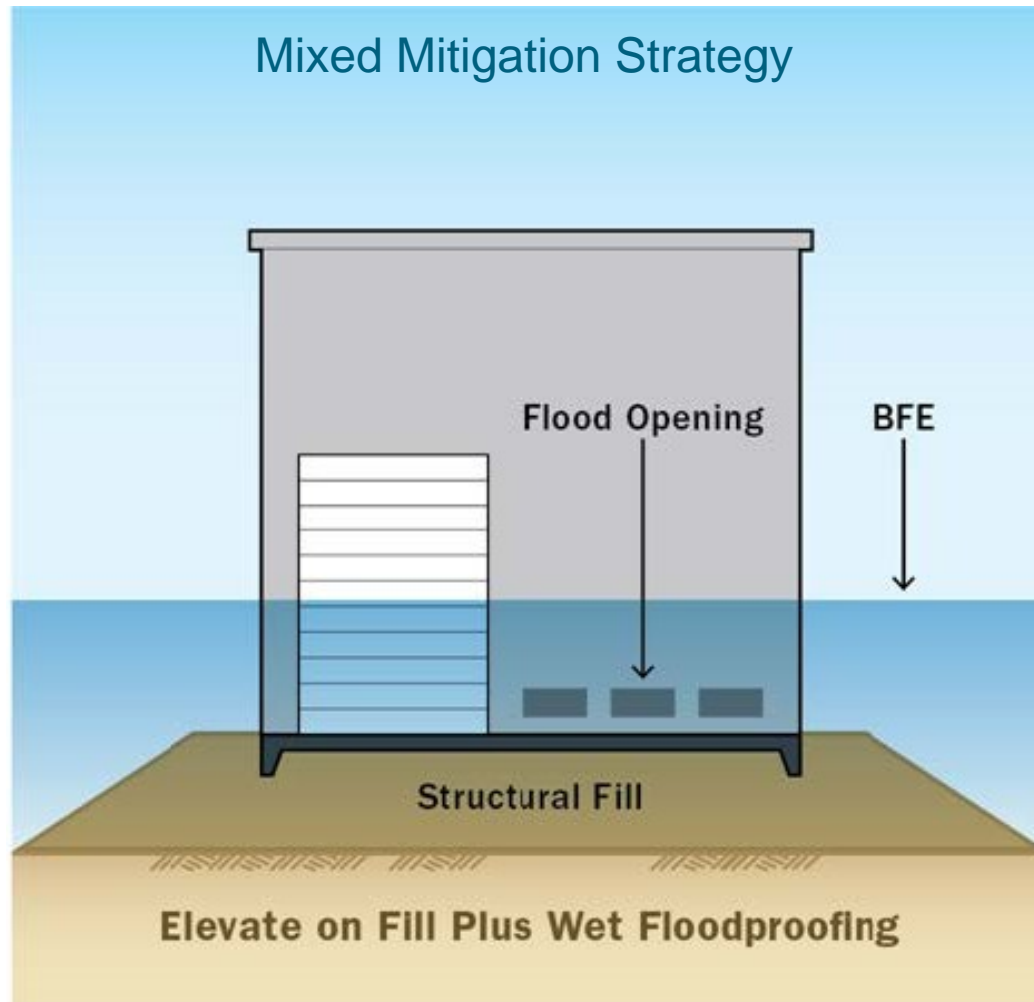
An aerial photograph showing a wide, muddy river winding through a landscape. The river is surrounded by green fields, some of which are partially submerged in floodwater. The sky is overcast and grey. The text is overlaid in the center of the image.

Wet-floodproofing Agricultural and Accessory Structures

General Wet-floodproofing Regulations

- Fully enclosed areas below the base flood elevation shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters:
 - A minimum of two openings having a net total area of not less than one (1) square inch for every one (1) square foot of enclosed space,
 - The bottom of all openings shall not be higher than one (1) foot above grade, and
 - Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they allow the automatic entry and exit of floodwaters
- Only allowed for storage of materials/parking of vehicles


Wet-floodproofing Structures



Wet-floodproofing Accessory Structures

- By permit
- Must:
 - Be small structures with low damage potential
 - Be incidental to a principal structure on the same parcel
 - Be one story, no larger than the size of a two-car garage
 - Have defined wet floodproofing construction requirements in ordinance

Wet-floodproofing Ag. Structures

- By variance
 - Must:
 - Be walled and roofed
 - Be used exclusively for agricultural purposes
 - Have low damage potential
 - Not pose risks to public health, safety, and welfare (no manure storage or any volatile, toxic, or water-reactive materials)
- 

An aerial photograph of a wide, muddy river flowing through a valley. The water is brown and turbulent. The surrounding land is mostly green, but large areas are submerged in floodwater, appearing as a mix of brown and green. In the distance, a faint rainbow is visible through the overcast, grey sky. The overall scene depicts a significant natural event, likely a flood.

Considering and Granting Variances

Variations shall only be issued:

- upon a showing of good and sufficient cause
- if failure to grant the variance would result in an exceptional hardship to the applicant
- if the development will not result in increased flood heights
- if the development will not result in additional threats
- is the minimum necessary, considering the flood hazard, to afford relief

Remember, burden of proof is on the applicant.
Additional information should be requested as needed.

Variations for Accessory Structures:

- Everything from last slide AND:
 - The structure represents minimal investment and has low damage potential
 - Including structure, contents, and loss of function
 - Is larger than the size limits specified in ordinance
 - Complies with wet floodproofing construction requirements

Variations for Ag. Structures:

- Everything from variance slide AND:
 - The structure represents minimal investment and has low damage potential
 - Including structure, contents, and loss of function
 - Is used exclusively for agricultural purposes
 - Complies with wet floodproofing construction requirements



Community-wide Exceptions

Community-wide Exceptions

- Granted by FEMA to allow communities to permit specific development without variances
- Only for communities with exceptional circumstances that require a deviation from minimum standards
 - Burden of proof lies with the community
- FEMA regional offices will monitor the community's compliance with the specific provisions of the approval

Community-wide Exceptions

- For agricultural and accessory structures, would allow the community to permit...
 - Accessory structures larger than the recommended size limit
 - Agricultural structures with wet-floodproofing measures


...without the need for variances.

*Unless the structure varies from the granted exception

Community-wide Exceptions

- The application requires:
 1. A description of the nature, extent of, and reasons for the exception request
 2. A description of the extraordinary circumstances and local conditions that would cause hardship or inequity
 3. Supporting justification – Environmental, topographic, hydraulic/hydrologic data
 4. Supporting information regarding additional mitigation strategies
 - Available warning time; frequency of flooding; depth of water, velocity and duration; safety and access; emergency operations plans; protection of contents and equipment
 5. Proposed ordinance language to effectively administer the exception (cannot be adopted until exception is approved)

Community-wide Exceptions

- FEMA will review the request, and will work with the community to obtain additional information as needed
 - NeDNR will work with FEMA to review the ordinance language
 - FEMA will conduct a study to determine human environment impacts
 - FEMA regional office will notify community of outcome, and will provide guidance as needed
- 



Questions?

Contacts

Chuck Chase
Outreach Coordinator
chuck.chase@nebraska.gov
(402) 471-9422

Elijah Kaufman
Environmental Specialist II
elijah.kaufman@nebraska.gov
(402) 471-0640

Adele Phillips
Flood Mitigation Planner
adele.phillips@nebraska.gov
(402) 471-9252

Michele York
Administrative Programs Officer
michele.york@nebraska.gov
(402) 471-1214