Optional Standards

The *Nebraska Minimum Standards for Floodplain Management Programs* establishes the standards that all Nebraska communities must enforce in their floodplains. In the model ordinances, NeDNR has identified a number of higher regulatory standards as well as a number of optional standards. The optional standards either clarify existing requirements or add safety factors to development.

Certification for Floodplain Administrator

Description: While there are no official requirements to be the community's floodplain administrator, a working knowledge of floodplain management will ensure that development happens safely and in line with a community ordinance. A community's governing body could require the designated floodplain administrator to become a Certified Floodplain Manager (CFM) from the Association of State Floodplain Managers. A floodplain administrator can attend any number of NeDNR or FEMA trainings to gain the knowledge needed for the certification. The CFM must be maintained with continuing education credits, which can be received by attending the Nebraska Floodplain and Stormwater Association's annual conference or NeDNR trainings.

Benefits: Having a CFM on staff to review floodplain development will ensure the permitting process goes smoothly for all parties involved. It will give the community confidence that all permitting processes are done as accurately and appropriately as possible.

Costs: The cost of the certification will have to be borne by the community as well as the training to maintain the certification. Contact NeDNR for specific ongoing costs.

Ordinance Language: this would be included in the Floodplain Management Administration section:

The designated floodplain administrator shall, within one year of being designated, become a Certified Floodplain Manager.

Letters of Map Revision

Description: Any property owner looking to obtain a Letter of Map Revision Based on Fill (LOMR-F) needs to obtain a community acknowledgement form before FEMA will review the LOMR-F. The community acknowledgement form requires a community to

sign saying "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(c), and that we have available upon request by DHS-FEMA, all analyses and documentation used to make this determination."

This statement leaves liability on the community if the floodplain administrator does not have the documentation of "reasonably safe from flooding." Often, an applicant wants to obtain a LOMR-F and then drop a basement in the area that is removed (since that removed area becomes Zone X if approved). Having a basement, even though the area is removed from the floodplain, will likely not be reasonably safe from flooding unless steps are taken to ensure it. FEMA published Technical Bulletin 10, which outlines a simplified approach for an applicant to demonstrate that the proposed development on the area to be removed from the floodplain can be reasonably safe from flooding, particularly for situations with a desired basement.

Some of those standards in the simplified approach include a 20 foot setback distance from the edge of the floodplain to the nearest wall of the basement as well as a requirement that the bottom floor of the basement is no more than 5 feet below BFE. Adhering to Technical Bulletin 10 is a requirement for all LOMR-F applicants, but ensuring the language is in the community's ordinance will make the process smoother. For more detail, please contact NeDNR.

Benefits: Having this ordinance language reduces community liability by having a review process for any LOMR-F application. It also ensures more buildings constructed on sites to be removed from the floodplain are safer.

Costs: None.

Administration: The property certification based upon the Technical Bulletin 10 Simplified Approach should be requested when a property owner requests a community acknowledgement form. Also, when the property owner comes in for a floodplain development permit for the fill, the floodplain administrator may want to discuss the process for a LOMR-F.

Ordinance Language: This would be included in Application for Permit and Demonstration of Compliance section.

A. Letters of Map Revision: Federal regulations in Title 44 of the Code of Federal Regulations, Chapter 1, Part 65.5 and 65.6 allow for changes to the special flood hazard area through a Letter of Map Revision (LOMR) or a Letter of Map

Revision Based on Fill (LOMR-F), provided the community determines that the land and any existing or proposed structures that would be removed from the floodplain are "reasonably safe from flooding." The community acknowledgement form asserting this is required for LOMR and LOMR-F applications and must be signed by the floodplain administrator. The floodplain administrator shall not sign a community acknowledgement form unless all criteria set forth in the following paragraphs are met:

- i. Applicant shall obtain floodplain development permit before applying for a LOMR or LOMR-F.
- ii. Applicant shall demonstrate that the property and any existing or proposed structures will be "reasonably safe from flooding," according to the minimum design standards in FEMA Technical Bulletin 10-01.
- iii. All requirements listed in the Simplified Approach in FEMA Technical Bulletin 10-01 shall be met and documentation from a registered professional engineer shall be provided. If all of these requirements are not met, applicant must provide documentation in line with the Engineered Approach outlined in FEMA Technical Bulletin 10-01.]

Appurtenant Structures

Description: In floodplain management ordinances, only two types of buildings typically are considered: residential and nonresidential. Each has different compliance criteria. Many property owners want to construct small sheds in their backyard for storage. Elevating or dry floodproofing would likely be prohibitive or cost more than the structure itself. The Nebraska Minimum Standards for Floodplain Management Programs allows communities to include a third building type: "appurtenant structures," which have different compliance criteria. Appurtenant structures, as long as they are only used for storage, can be allowed to have the lowest floor below BFE if anchored, flood vented, and with elevated electrical fixtures. Including this language in an ordinance gives flexibility for property owners looking to install these low cost structures.

Benefits: Having this language in a community's ordinance will allow flexibility for property owners to have a small storage shed on their property without having to elevate or dry floodproof the structure.

Costs: Allowing buildings to be wet floodproofed and have floodwaters enter the structure will result in more flood damage.

Administration: Appurtenant structures will still need to have a floodplain development permit and an elevation certificate.

Ordinance Language: this should be included immediately after the Space Below Lowest Floor, in the Elevation and Floodproofing Requirements section:

A. Appurtenant Structures

- i. Structures accessory to a principal building may have the lowest floor below one foot above base flood elevation provided that the structure complies with the following requirements:
 - a. The structure shall not be used for human habitation.
 - b. The use of the structure must be limited to parking of vehicles or storage of items readily removable in the event of a flood warning.
 - c. The floor area shall not exceed 400 square feet.
 - d. The structure shall have a low damage potential.
 - e. The structure must be adequately anchored to prevent flotation, collapse, or other lateral movement.
 - f. The structure shall be designed to automatically provide for the entry and exit of floodwaters for the purpose of equalizing hydrostatic forces. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
 - A minimum of two openings having a net area of not less than one (1) square inch for every one (1) square foot of enclosed space,
 - 2. The bottom of all openings shall not be higher than one (1) foot above grade, and
 - 3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they allow the automatic entry and exit of floodwaters.
 - g. No utilities shall be installed except electrical fixtures in the structure, which must be elevated or floodproofed to one (1) foot above base flood elevation.

- h. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.
- i. If the structure is converted to another use, it must be brought into full compliance with the minimum standards governing such use.