

Garages in the Floodplain

By Chuck Chase, CFM

NeDNR receives many questions related to building garages in the floodplain. When you start researching the requirements for this development activity, you may find it difficult to determine which requirements apply and which do not. Ultimately, there are two general scenarios for constructing a garage in the floodplain.

The first scenario is a detached garage. A detached garage must be elevated or dry floodproofed to one foot above the base flood elevation (BFE). However, if your local ordinance recognizes appurtenant structures, the appurtenant structure, which must be less than 400 square feet in size, can be built at-grade and wet floodproofed.

The second scenario is an attached garage. When investigating the attached garage scenario it is important to determine whether the garage meets the definition of "attached." According to FEMA, for a structure to be attached it must be "structurally connected." An explanation of the term "structurally connected" is available on pages 6-13 in the May 2010 *"Substantial Improvement/ Substantial Damage Desk Reference (FEMA P-758)"*:

A lateral addition that involves no alteration of the load-bearing structure of the building, is attached to the building with minimal connection, and that has a doorway as the only modification to the common wall is considered to be "not structurally connected."

A lateral addition that has its load-bearing structure connected to the load-bearing structure of the base building, which typically involves significant alternation of the common wall, is considered "structurally connected."

If the garage is attached, it must be elevated to one foot above BFE or wet floodproofed. You will also need to determine if the addition of the garage is considered a substantial improvement. A substantial improvement is defined by FEMA as any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the value of the structure before the start of construction of the improvement. If the construction is considered a substantial improvement, the entire house must be brought into

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compliance with the community's floodplain ordinance. This often requires elevating the home to one foot above BFE or filling in the basement so the next higher floor is considered the first floor.

If it is determined that the improvement is an attached garage, but not a substantial improvement, or it is a substantial improvement but the house is already compliant, the construction can be permitted as long as it is elevated to one foot above BFE or wet floodproofed.

Seems simple, right? Inevitably, the homeowner will want a large *attached* garage, so the structure can be built at-grade and wet floodproofed. However, they also want it to be considered *detached* because the construction value is over 50% of the value of the home and they do not want to bring the entire home into compliance. These scenarios often result in one of two solutions.

The first possible solution is a breezeway. A breezeway looks like it is attached by a walkway but it is technically not structurally connected. Unfortunately, the owner cannot have it both ways. As discussed above, the garage is either structurally connected or not.

In order to sign the permit, you, as the Floodplain Administrator, could require the owner to provide a certification sealed by a professional Architect or Structural Engineer confirming that the garage is or is not structurally connected as defined by FEMA standards.



Photo 1. Example of Enclosed Breezeway.

Photo courtesy of Lasley Brahaney Architecture + Construction (lasleybrahaney.com)

Another solution that is often proposed is to add a second floor so that the garage becomes an "area below lowest floor". For this to be an allowable solution, the lowest floor must be the main purpose of the building, such as a home or office. Then the garage becomes the "area below lowest floor." In this scenario, the garage can only be used for storage of readily removable items, parking a vehicle, and access to the rest of the structure (stairs, elevator, etc.). Utilities in the garage must be elevated above the BFE, and outlets and light switches must be flood resistant or elevated. In order for the garage to maintain the definition of the "area below lowest floor", it would also have to be wet floodproofed.

It is not allowable to do something like nail plywood to the rafters of the garage and call it a second story. Ideas such as this do not meet the requirement of a second story because the primary intent of the structure, in this case, is the garage. Remember, the main intent of the structure cannot be the garage: it is simply an accessory.

Building a garage in the floodplain can be easily permitted if you know the requirements. If you encounter a situation where you are unsure of how to properly permit a garage being constructed in the floodplain, feel free to call one of the Floodplain Management Section staff members to assist you.

When Do You Need a Conditional Letter of Map Revision?

By Jamie Reinke, PE, CFM

NeDNR is regularly asked whether a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) is required for various projects or project types. No matter what role you serve in the project, knowing the requirements will ensure your project remains compliant with all floodplain regulations and serves to keep your community or client in good standing in the National Flood Insurance Program (NFIP).

A CLOMR provides an avenue for FEMA to comment on a proposed project that would affect the hydrologic or hydraulic conditions of a stream, resulting in the need to modify the existing regulatory products, while the project is still in design. A CLOMR does not modify the regulatory products, but provides assurance that if a project is built as designed in the approved CLOMR application, it will meet the minimum floodplain management requirements of the NFIP and will be recognized by FEMA post-construction when the LOMR is submitted.

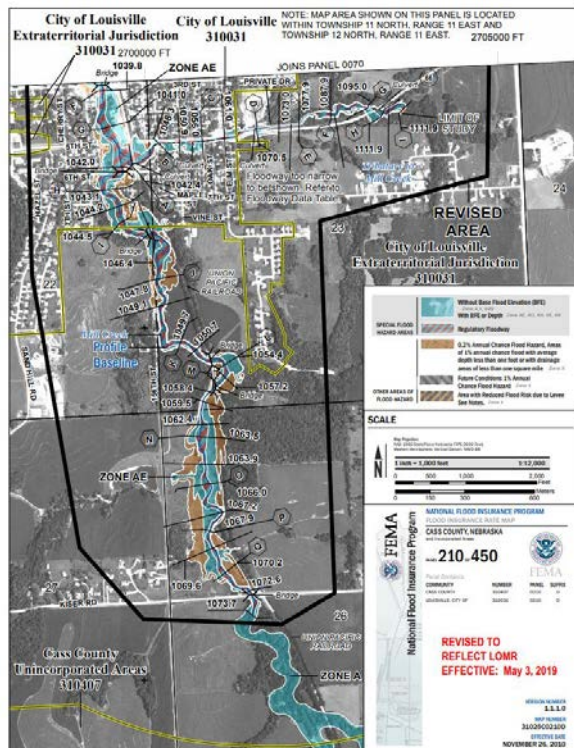


Figure 1. Letter of Map Revision Panel.

and comment for any proposed project if requested by an NFIP participating community. The CLOMR submittal requirements are nearly identical to the LOMR submittal except that a CLOMR is based on design plans as opposed to as-built plans or post-construction survey. Obtaining FEMA approval of the CLOMR makes the LOMR process easier since FEMA has already provided comments on the model and reviewed the information to ensure the model meets FEMA requirements.

There are two scenarios where the NFIP regulations require a CLOMR to be obtained before construction. The first scenario involves a stream that has Base (1-percent-annual-chance) Flood Elevations (BFEs) established, but there is no designated floodway. If a proposed encroachment causes more than a 1-foot increase in the BFE, a CLOMR must be obtained prior to construction.

The second scenario involves a stream that has BFEs established and a designated floodway. If a proposed encroachment causes any increase (greater than 0.00 foot) in the floodway profile, a CLOMR must be obtained prior to construction. These requirements are outlined in 44 CFR § 65.12, § 60.3(c)(10), § 60.3(d)(3), and § 60.3(d)(4).

While these two scenarios are the only situations where a CLOMR is required prior to construction, a CLOMR can be submitted to FEMA for review

NeDNR encourages CLOMR submittals on projects in Zone A floodplains where the project will cause an increase of more than 1-foot or alters the floodplain boundary. NeDNR also recommends a CLOMR whenever a major change is occurring to a regulatory model.

A LOMR, on the other hand, is FEMA’s official modification to the regulatory products, most commonly the Flood Insurance Rate Map (FIRM). LOMR reviews are subject to an appeal period and typically become effective within six months after they are issued. A LOMR is required whenever a physical change has modified the Special Flood Hazard Area (i.e. Zone A or Zone AE) boundary and/or the BFEs shown on the effective FIRM. The request must be submitted to FEMA within 6 months of completion of a project, by submitting technical or scientific data in accordance with 44 CFR § 65.3.

A common practice in Nebraska has been to use floodplain easements, as referenced in the 455 Neb. Admin. Code, Ch. 1, § 006, Variances and Exceptions, to avoid submitting a LOMR. This option may be used, but it must be shown that the project meets all criteria under § 006, including § 006.05 and § 006.06 (referenced below). For a Zone AE floodplain a CLOMR and LOMR would still be required and for a Zone A floodplain a LOMR would be required.

The form is titled "U.S. DEPARTMENT OF HOMELAND SECURITY FEDERAL EMERGENCY MANAGEMENT AGENCY OVERVIEW & CONCURRENCE FORM". It includes a "PAPERWORK BURDEN DISCLOSURE NOTICE" and a "PRIVACY ACT STATEMENT". Section "A. REQUESTED RESPONSE FROM DHS-FEMA" contains checkboxes for "CLOMR" and "LOMR". Section "B. OVERVIEW" includes a table for impacted communities and various checkboxes for project details and flood types.

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Example: 482031	City of Kelly	TX	48473C	00000	02/08/83
482037	Navas County	TX	48203C	02000	06/08/80

Figure 2. FEMA MT-2 Form for Submitting a LOMR or CLOMR.

006.05 Variances or exceptions may otherwise be granted upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant and (iii) a determination that the granting of a variance will not result in additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with other applicable laws or ordinances.

006.06 Variances and exceptions shall be granted only upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

It is important to note that NFIP participation occurs at the local level. If a FEMA audit determines that a project has placed a community in violation of the NFIP, the community could be suspended from the program, jeopardizing all NFIP policies in the impacted community.

In addition, state agencies need to be especially diligent in conducting studies on the possible floodplain impacts that may be caused by a state-owned or state-funded project. In fact, Neb. Rev. Stat. § 31-1023 reads:

State agencies, boards, and commissions; flood plain management duties. (1) All state agencies, boards, and commissions shall take preventive action to minimize flood hazards and losses in connection with state-owned and state-financed buildings, roads, and other facilities, and shall take such steps as are necessary to insure compliance with the minimum standards adopted by the department in accordance with subdivision (5) of section 31-1017 when such facilities are being

located or constructed in any area where no local government is - 8 - enforcing flood plain management regulations pursuant to section 31-1019 or 31-1021. If a local government with jurisdiction over the land upon which any such facility is to be located or constructed is enforcing flood plain management regulations pursuant to section 31-1019 or 31- 1021, the state agency, board, or commission locating or constructing such facility shall comply with such regulations unless such compliance is specifically waived by the department.

As always, NeDNR is here to help. If you have any question related to when a CLOMR or LOMR is required, or any questions related to floodplain management, please reach out to staff in the Floodplain Management Section.

Nebraska's Five-Year Business Plan

By Jamie Reinke, PE, CFM

As part of NeDNR's Cooperating Technical Partners (CTP) agreement with FEMA, the Floodplain Management team is tasked with developing a vision for mapping priorities for five-years into the future. NeDNR and FEMA have separate mechanisms for how projects are selected, but often the mapping priorities of the two agencies are well aligned.

NeDNR, by state statute, prioritizes mapping needs by considering the following factors:

1. Potential for future development;
2. Potential for flood damage or loss of life;
3. Probability that adequate data and maps will be prepared within a reasonable time by other sources;
4. Availability and adequacy of any existing maps;
5. Availability of flood data and other information necessary to produce adequate maps; and
6. Degree of interest shown by the local governments in the area in utilizing flood data and maps in an effective flood plain management program.

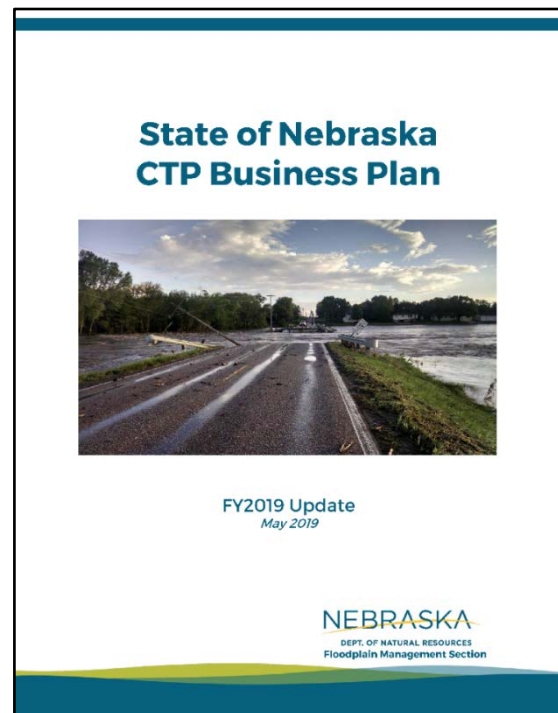


Figure 3. NeDNR's FY2019 Business Plan.

Similarly, FEMA has identified the following types of projects as the highest priority:

1. On-hold County Wide Projects
2. Levee PMR Projects

3. On-going Watershed Projects
4. Watershed Projects
5. Paper Inventory Reduction Projects

NeDNR uses the data associated with regulatory maps throughout the state regularly, whether for a Base Flood Elevation (BFE) Determination or for providing technical assistance to communities. When we use this data, it often becomes clear which areas of the state are in need of updated regulatory maps, however, we are still required to consider the state statutes and FEMA's priorities before identifying a project for future funding.

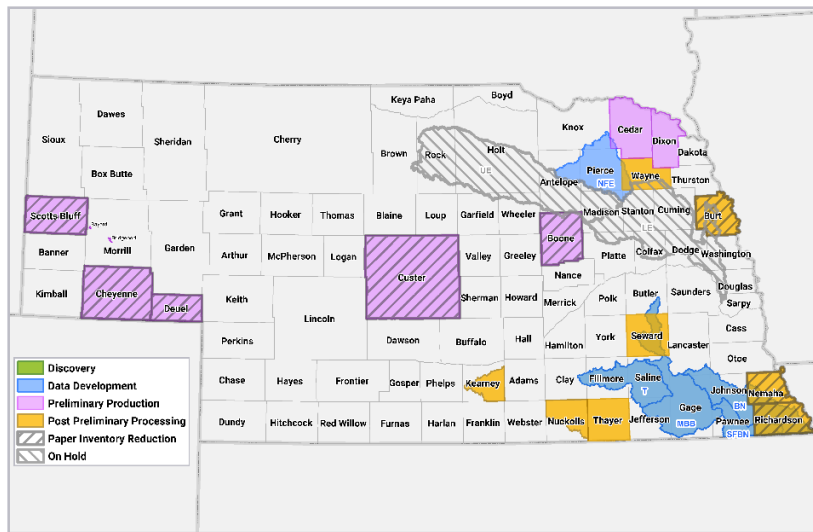


Figure 4. NeDNR’s Proposed FY2019 Projects.

NeDNR works to sequence projects in our five-year business plan in a logical manner to address these mapping needs. Projects are selected at a watershed level and, when possible, NeDNR is leveraging the work of other agencies to avoid overlapping efforts and to maintain cost-efficiency. This allows NeDNR to maximize funding opportunities to provide more of the state with updated, high-quality regulatory products.

The FEMA Fiscal Year 2019 Business Plan update was due the end of May. The spring 2019 flooding resulted in significant changes to NeDNR’s five-year plan. The Lower Elkhorn and Upper Elkhorn watersheds were placed on-hold while NeDNR works to obtain new topographic data (LiDAR) to accurately map the changes in stream alignment. To view changes to NeDNR’s future mapping project sequencing please view the current business plan [here](#).

Questions or comments can be directed to Katie Ringland at katie.ringland@nebraska.gov.

Submit Your Stories!

2019 has been a challenging year for residents throughout the state. We would like to highlight success stories or lessons learned from those who were most involved in this year’s disasters and recovery efforts. Please send your stories to jamie.reinke@nebraska.gov for next quarter’s newsletter no later than October 1, 2019.

Mark Your Calendar

If you have questions about any of these opportunities, please contact Chuck Chase at chuck.chase@nebraska.gov or 402.471.9422.

Kansas Association for Floodplain Management 16th Annual Conference; September 4-5, 2019, Lawrence, Kansas

The KAFM will host their annual conference Wednesday, September 4, 2019 at 10:30 am through Thursday, September 5, 2019 at 2:30 pm at the Double Tree by Hilton, 200 McDonald Drive, Lawrence, Kansas. There will be opportunities for floodplain management training, CFM credits, and networking with other professionals in floodplain management.

Please visit <http://www.kafm.org/about-us/kafm-conference/> for more information.

Critical Infrastructure Security and Resilience Awareness, October 2, 2019, Omaha, Nebraska.

This course focuses on local preparedness efforts as they relate to the national approach to critical infrastructure security and resilience. Designed for critical infrastructure owners, operators and managers; state, local, tribal, and territorial officials; and sector specific agency managers, the course will describe the challenge of critical infrastructure security and resilience, the risk management framework, and how informed planning is consistent with and expands on nationally accepted emergency management standards as the basis for planning across the mission areas of prevention, protection, mitigation, response, and recovery.

For more information, please contact the Nebraska Preparedness Partnership at npp@neprep.org or (402) 979-7207. To register, visit this [link](#).

Iowa Floodplain and Stormwater Management Association Annual Fall Conference; October 3, 2019, Ankeny, Iowa

IFSMA will host their annual fall conference on Thursday, October 3, 2019 at the Otter Creek Golf Course Clubhouse, 4100 NE Otter Creek Drive, Ankeny, Iowa. There will be opportunities for floodplain management training, CFM credits, and networking with other professionals in floodplain management.

Please visit <https://www.iowafloods.org/> for more information.

National Flood Insurance Program Training Videos

NFIP Training courses for insurance agents, claims adjusters, surveyors and community officials are being offered through the FEMA Emergency Management Institute (EMI) Independent Study (IS) Program. IS courses are open and free to anyone. Floodplain administrators may find these videos helpful.

The Independent Study catalog is available at <https://training.fema.gov/is/crslist.aspx>. Course exams require a FEMA Student Identification (SID) Number, which can be obtained at <https://cdp.dhs.gov/femasid>.

WANT MORE INFORMATION?

Visit NeDNR's Floodplain Website at
<https://dnr.nebraska.gov/floodplain>

Or Contact

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