Illinois Department of Natural Resources/Office of Water Resources

The Flood Record

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Elevations Certificates: Excellent Compliance Tool but Check for Accuracy

Marilyn Sucoe, IDNR/OWR, Adapted from December 2020/January 2021 NFIP/CRS Update newsletter.

Under the National Flood Insurance Program (NFIP) a community is required to obtain the elevation of the lowest floor of the building, the machinery and equipment, and the base flood elevation to confirm compliance with your ordinance. **An Elevation Certificate (EC) is an excellent tool to document compliance for a BUILDING, but it must be checked for accuracy**. In my personal experience more than half of all ECs have errors. The EC instructions, available on the FEMA website, take you step by step through each line of the form to help with your review.

I encourage you to use these instructions, but for more help, the Community Rating System (CRS) Program has just released eight videos that cover training on the EC. Use this link to watch the EC videos. The videos describe each section of the EC and explain the most common errors seen on the forms and how to avoid them. They are intended to serve community officials, but please feel free to share these videos with the surveyors, engineers, and architects in your community.

The videos are titled:

1. How To Fill Out Section A For CRS Purposes
2. How to Fill Out Section B For CRS Purposes
3. How to Fill Out Section C & D For CRS Purposes
4. How to Fill Out Section E & F For CRS Purposes
5. How to Fill Out Section G For CRS Purposes
6. General Issues, Part 1
7. General Issues, Part 2
8. How To Correct an EC

In this Issue

- Elevation Certificates: Excellent Compliance Tool but Check for Accuracy
- 2021 ASFPM Annual Conference - ONLINE
- Need Help Making a Floodplain Determination? Try the Elevation Finder website
- Northeastern Illinois Floodway Permit Delegation Program
- Online Courses for Floodplain Management Learning
- FEMA Releases Updated Technical Bulletin 3 and 6 that Focus on Dry Floodproofing
- Risk Rating 2.0 Report
- No BFE and No Clue What to do?

2021 ASFPM Annual Conference - ONLINE

The Association of State Floodplain Managers (ASFPM) 2021 annual conference will be virtual. Building on the success from last year, ASFPM is planning an even better experience for the 2021 virtual conference. The full virtual program can be found at the ASFPM conference website.

Reminder: Scholarships will be available from IAFSM for local officials to attend

For the scholarship application, please visit the IAFSM website at www.illinoisfloods.org .

Need Help Making a Floodplain Determination? Try the Elevation Finder website

In the example below the Base Flood Elevation (BFE) is about 585 and the barn appears to be in the floodplain. The property owner is telling you that floodwater has never made it to the barn. Using the state's Elevation Finder website, you can see the ground elevation at the barn is 612.46, well above the BFE of 585.

The site uses the latest LiDAR mapping processed by the Illinois State Geological Survey (ISGS) for each county in Illinois. Every year new counties are flown, and data is being processed and updated. You can see a map of the Illinois LiDAR Acquisition by Year at the ISGS Clearinghouse. The metadata is also available at the Illinois Height Modernization webpage. If you want to learn more about LiDAR, NOAA offers a one-hours class Introduction to LiDAR.

Northeastern Illinois Floodway Permit Delegation Program

IDNR/OWR Bartlett office has run the Northeastern Illinois Delegation Program since the early 1990s. Delegation from the OWR allows local governments to issue floodway permits for specified minor projects that involve work within a delineated floodway. To be eligible to participate, the community must:

- be an active member of the National Flood Insurance Program,
- have a floodplain ordinance which meets or exceeds minimum state standards,
- and the community must pass a Community Assistance Visit.

Fifty-nine communities have been delegated this authority, which include the unincorporated areas of Will County and the entire counties of Lake and DuPage.

Before a floodway project can be locally permitted, the project must first apply for a delegation letter from the Bartlett office. The Bartlett office will review the project to be certain that the proposed work meets the criteria for delegation. If we find the proposed work may be delegated, we will send a letter to the applicant delegating the review of the proposed work to the delegated community.

OWR does not delegate projects that involve:

- work in public waters
- construction, operation, and maintenance of dams
- revised floodway mapping
- work within an approximate flood hazard area (Zone A).

If you have any questions regarding this program, please call the OWR Bartlett office at 847/608-3116.

Online Courses for Floodplain Management Learning

Whether you want to increase your basic knowledge or maintain your Certified Floodplain Management (CFM) certificate, there are online options for floodplain management training. Please use the links below to explore these online opportunities.

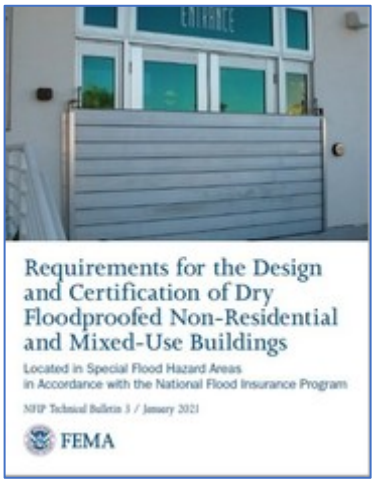
FEMA, through the Emergency Management Institute (EMI), offers free Independent study classes in addition to their on-campus course. These include:

- How to Read a Flood Insurance Rate Map (IS-273),
- How to Use a Flood Insurance Study (IS 274),
- Substantial Damage Estimations for Floodplain Administrators (IS-285), and
- Elevation Certificate Overview (IS-1105.a).

The ASFPM website offers a list of Pre-Approved Continuing Education Credit courses to help you maintain your CFM as well. NOAA offers a one-hours class Introduction to LiDAR. There are also 39 free courses offered by COMET, under the support of NOAA, that are more technical in nature, with topics like hydrology, urban flooding, and flood forecasting.

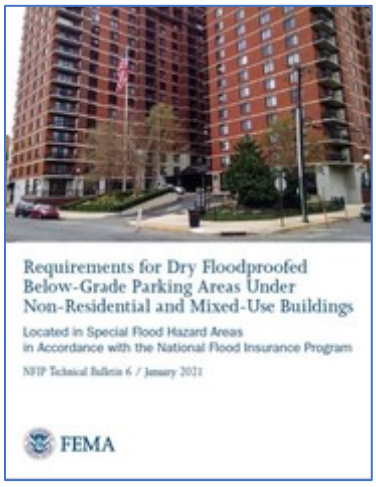
FEMA Releases Updated Technical Bulletin 3 and 6 that Focus on Dry Floodproofing

NFIP Technical Bulletin 3, *Requirements for the Design and Certification of Dry Floodproofed Non-Residential and Mixed-Use Buildings in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program*



Updates include:

- Discussion of the factors and planning considerations that influence the decision-making process when determining the feasibility of dry floodproofing a building.
- Step-by-step instruction regarding dry floodproofing design requirements.
- An example about seepage calculation that illustrates how to determine if the structure can be considered substantially impermeable.
- Instructions for the National Flood Insurance Program Floodproofing Certificate.



NFIP Technical Bulletin 6, *Requirements for Dry Floodproofed Below-Grade Parking Areas Under Non-Residential and Mixed-Use Buildings in Special Flood Hazard Areas in Accordance with the National Flood Insurance Program*

Updates include:

- Identification of issues specific to dry floodproofing below-grade parking areas.
- References to TB 3 for extensive guidance on design requirements.
- Updated discussion on design considerations such as protecting points of entry, managing internal flow of seepage and equalization of flood loads vertically in multi-level below grade parking areas.

Risk Rating 2.0 Report

If you want more details on the new flood insurance rating coming in October 2021, a recently released 18-page report by the Congressional Research Service, titled *National Flood Insurance Program: The Current Rating Structure and Risk Rating 2.0*, provides an in-depth review of the changes coming to the NFIP.

No BFE and No Clue What to do?

Adapted from article in IAFSM Current Winter 2016/17, by Dallas Alley, CFM, Building and Zoning Director, Village of Swansea, IL

All of us have been faced with Zone A floodplains with no Base Flood Elevation (BFE) calculated. Your ordinance requires the BFE determination for new development like a new subdivision. However, if you are working with an existing homeowner hoping to get a Letter of Map Amendment (LOMA), before you tell them to spend thousands of dollars to hire an engineering firm and conduct a detailed hydrologic/hydraulic study, there are a few other options, that are FREE.

1. Look at homes nearby to see if a LOMA has already been issued. If your county has digital maps, the National Flood Hazard Layer viewer can be used. In the photo you can see the homes along this lake that all can use the BFE calculated for the two LOMAs shown. If your community is still on paper maps, you will use FEMA's Map Service Center Map to find existing LOMAs under the Existing Products, LOMC . Older LOMAs will list the BFE directly on the letter. For newer LOMAs, the case file will need to be requested from the FEMA library using the FIS data request form.

2. Has there been a roadway bridge/culvert replacement or other recent development nearby that calculated the BFE? State, county, township, and local community bridge or culvert replacement projects typically require a state floodway permit, which may have required the calculation of the BFE. That analysis can be used to establish the BFE on an Elevation Certificate (EC).

3. Have FEMA calculate the BFE for FREE! FEMA will calculate a BFE in Approximate A zones as part of every LOMA application. The homeowner will need to have an EC prepared. The surveyor will leave the BFE section of the EC blank and simply add a statement such as "no BFE available from federal, state or local sources". The EC is submitted to FEMA using the MT-EZ form for a LOMA. FEMA's contractor will then calculate a BFE as part of the LOMA process. To improve FEMA's determination, you can add information to the LOMA application such as surveyed cross-sections of the creek or river channel or details for a downstream culvert or bridge.

If you are a new local floodplain administer, send any contact updates to Marilyn Sucoe at **marilyn.sucoe@illinois.gov**.

4. If an analysis is needed, FEMA has an old publication, mentioned in the MT-EZ application form, that can be reviewed: Managing Floodplain Development in Approximate Zone A Areas. Ultimately a full engineering analysis can be completed, including both hydrological modeling to determine the amount of water in the stream and hydraulic modeling to determine the flood water's depth.