



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ENGINEERING & CONSTRUCTION
BUREAU OF DAM SAFETY & FLOOD CONTROL
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To: NJ Communities Impacted by Hurricane Sandy

Subject: National Flood Insurance Program Rebuilding Requirements

Date: November 15, 2012

After hurricane Sandy, residents and business owners are understandably anxious to repair damaged building components after the storm. Municipalities are already burdened with the necessity to make sure that structures are safe. Rebuilding requirements after a flood or any other disaster must also consider the flood protection requirements contained in community's flood damage protection ordinance that were passed as a condition of participation in the National Flood Insurance Program.

A primary goal of the National Flood Insurance Program is to break the damage – rebuild – damage cycle by requiring all new, substantially improved, and substantially damaged structures within mapped special flood hazard areas (100-year storm) to be constructed in a manner that is reasonably safe from flooding. That requires proper building elevation and protection techniques.

The definition of “**substantial damage**” is: “damage of any origin sustained by a structure whereby the cost of restoring the structure to it's before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.” This definition applies whether or not actual repair work is performed. FEMA regulations (44 CFR 60.3) require new construction and substantially improved or damaged structures within mapped special flood hazard areas to meet specific floodplain development standards. The purpose of these regulations is to make sure that damage is minimized when the next flood occurs.

It is the responsibility of the floodplain administrator of the local community participating in the National Flood Insurance Program, to determine if a damaged structure is in a FEMA mapped special flood hazard area and, if so, to determine if the structure has been substantially damaged. If a structure has been substantially damaged, it must then meet the flood protection requirements. NJDEP staff is available to assist your community with the requirements; however we cannot make the substantial damage determinations on your behalf. After a federal disaster declaration, FEMA staff is also available to provide assistance.

Some rules of thumb can be used to make your task easier. For example, if a structure has been moved off of its foundation, it is nearly certain that it has been substantially damaged. The U.S. Army Corps of Engineers has estimated that substantially damage thresholds are approached

once flood waters exceed about two feet above the first floor on a traditionally constructed structure with a basement. If there is no basement, that threshold is approached with about three feet of flood water over the lowest floor. In such situations, a more detailed determination of damages and comparison to the market value of the structure is required.

FEMA has developed guidance on substantially damaged structures. That can be found in the manual "Answers to Questions about Substantially Damaged Buildings," available at <http://www.fema.gov/library/viewRecord.do?id=1636>. FEMA also has an electronic "Substantial Damage Estimator" that can be downloaded at <http://www.fema.gov/library/viewRecord.do?id=4166>.

When determining if a structure has been substantially damaged, you must compare the cost of returning the structure to its before damaged condition to the market value of the structure prior to the damage. Acceptable estimates of "cost of repair" or damage sustained include itemized estimates by a licensed contractor or other professional estimators in the construction industry. For structures with a National Flood Insurance Program (NFIP) policy, you may also use the damage estimate by the NFIP claims adjuster for the structure only, not including contents. You may also use building code valuation tables published by the major building code groups. Finally, the building department may use its own professional judgment based on knowledge of local and regional building costs. However, you must be consistent in your judgment. FEMA's "Substantial Damage Estimator" can help.

The market value pertains only to the structure. You may estimate the market value by use of a professional appraiser, or the adjusted property appraisal for the structure only. Other techniques may be used as screening tools. However the closer the damage comes to 50 percent, the greater the accuracy of the determination should be. Should a structure not be substantially damaged, but the owner decides to provide additions, rehabilitations or other improvements during the repair, you must combine the total cost of repair with the cost of the improvement. If the combined cost equals or exceeds 50 percent of the market value of the structure prior to the damage, it is considered to be a substantial improvement, and the entire structure must meet floodplain development requirements.

Please contact us if your community will need any technical assistance in this effort. **Please forward a copy of all substantial damage determination letters and a list of all substantially damaged properties in your community to my office.** For further assistance on NFIP rebuilding requirements please call Jim Watt of my staff at (609) 292-2296.

Sincerely,

A handwritten signature in cursive script that reads "John H. Moyle". The signature is written in dark ink and is positioned above the printed name and title.

John H. Moyle, P.E., Manager
Bureau of Dam Safety and Flood Control
NJ NFIP Coordinator