

The Torrent



New Flood Maps Coming Soon for Middlesex & Hartford Counties

Through the Federal Emergency Management Agency (FEMA) Map Modernization Program, the municipalities in Middlesex and Hartford counties will soon be receiving new Digital Flood Insurance Rate Maps (DFIRMs). Middlesex county maps will become effective on August 28, 2008, and Hartford County maps will become effective on September 26, 2008.

FEMA's flood hazard maps are one of the basic, essential tools for flood hazard mitigation in the United States. These maps are used in both the private and public sectors by lending institutions, insurance companies, community planning officials, land developers, and engineers for designing and siting new buildings and infrastructure to be safe from flooding. Limited funding for FEMA's mapping program over the last 20 years has resulted in a backlog of outdated maps. The average age of flood maps in Connecticut is 16 years old.

Unlike previous FIRMs which were produced for each individual municipality, the new maps will be in a countywide format, which will eliminate the previous problem of flood zones not matching at town boundaries. The new maps will also be overlain onto aerial photographs from 2004 which will make identifying buildings, streets and other land features easier than previous maps which contained only some roads and watercourses on a blue-print-style map. More accurate topographic information and vertical datum was also used to produce these maps. The new digital format of these maps also means that some municipalities will be able to use this data as a GIS layer.

With this map update, communities are also in the process of updating their applicable floodplain zoning regulations or ordinances to formally adopt the new maps and ensure compliance with minimum federal National Flood Insurance Program (NFIP) standards and new state requirements for compensatory storage and equal conveyance. These changes must be completed by the new effective map date or the community will be suspended from the NFIP, meaning flood insurance policies will not be renewed or written in the community. The community will also not be eligible for disaster assistance.

For more information on the mapping process, contact Carla Feroni at (860) 424-3390, carla.feroni@ct.gov. For more information on ordinance or regulation updates, please contact Diane Ifkovic at (860) 424-3537 or Karen Michaels at (860) 424-3779.

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Reducing the Cost of Flood Insurance

Homeowners who must carry flood insurance as a condition of a mortgage, home equity loan, construction loan or reverse mortgage are often surprised at the cost, typically \$800-\$1,200 a year, in addition to a separate homeowner's insurance policy. With flood insurance rates rising each year, homeowners, working with their insurance agent, may be able to lower their flood insurance premiums while still protecting property against flood losses with some of the options listed below.

Correct Property Information

Often, homeowners are paying larger premiums due to an error in the insurance agent's system that is providing the flood quote. Pertinent information to have your agent double-check include: the exact street address including town, date of the building's construction, building type and occupancy, number of floors, flood risk zone, date of the flood insurance rate map, method of the building's construction, type of basement, if the basement is finished or unfinished, and elevation of the building. Information on the elevation of the building may be available at town hall at the building, planning or zoning department. If not, the elevation of the building can be obtained with an elevation certificate prepared by a licensed land surveyor. Although the preparation of the elevation certificate can be costly (\$500 or more), better elevation information may aid in lowering the flood insurance premium.

Grandfathering

The Federal Emergency Management Agency (FEMA) revises and republishes Flood Insurance Rate Maps (FIRMs) from time to time. The National Flood Insurance Program's (NFIP) grandfathering provision offers savings for structures that were built before a flood map was issued for the community, or that were built in com-

pliance with the flood map in effect at the time of construction. The simplest way to grandfather is to purchase a flood insurance policy before the new flood map takes effect and maintain coverage without a lapse. If a structure was built in compliance with the requirements in place at the time of construction, the zone and base flood elevation (BFE) that was in effect can be used for rating purposes, if either is affected due to a map change. Sometimes using the new zone can provide a better rate than using the older one, so property owners should always ask their agent to look at both options.

Retrofitting a Structure

If a structure was built in the 100-year floodplain before NFIP building standards were enacted by the community, the building is considered non-compliant and subject to increased flood risk and higher insurance costs. A homeowner may wish to retrofit a home be compliant with the NFIP in order to lessen flooding and lower insurance premiums. FEMA does offer a publication for homeowners entitled "Homeowner's Guide to Retrofitting: Six Ways to Protect Your House from Flooding" (FEMA 312) that provides information on elevation, dry flood-proofing, wet flood-proofing, and other options for protecting a home. It can be downloaded online at www.fema.gov.

Letters of Map Change (LOMC)

A Letter of Map Change (LOMC) is a letter from FEMA that reflects an official revision to an effective FIRM. There are several types of LOMCs, including the Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and others. All LOMCs are issued in lieu of revising and republishing the effective FIRM for one small map change. If the land where the structure is built meets or exceeds the

BFE, the homeowner may wish to apply for a LOMA. The LOMA confirms that the structure is officially excluded from the 100-year floodplain. This LOMA can be presented to a lender to have the mandatory purchase requirement for flood insurance removed from the property. If the homeowner wishes to maintain flood insurance coverage, the property could now qualify for a Preferred Risk Policy (PRP) at a much lower premium.

Mortgage Balance

In most instances, a lender is requiring a homeowner to purchase flood insurance as a condition of a mortgage. The amount of flood insurance purchased is in direct relationship to the amount of the mortgage. If you have paid down your mortgage, the lender may allow you to purchase a reduced amount of flood insurance for the property.

Deductible Rates

Increasing your deductible can lower your flood insurance premium. The higher the deductible selected, the lower the premium. However, remember that a higher deductible will result in the policyholder being responsible for paying for damage up to that amount out of pocket after a flood event.

Contents Coverage

If your lender is requiring you to carry flood insurance as a condition of a mortgage, only coverage on the building is required. Contents insurance is optional. If cost is an issue, contents coverage can be reduced or eliminated. However, just like raising your deductible, if a flood occurs, the homeowner is responsible for any out-of-pocket expenses to replace the contents of the home.

Refunds from the NFIP

The general public often has questions about receiving flood insurance premium refunds from the National Flood Insurance Program (NFIP). The NFIP does provide for flood insurance premium refunds under certain conditions. Depending on the situation, some refunds will be in full, others will be pro-rated. It is suggested that a homeowner contact their insurance agent with any questions regarding eligibility for refunds.

FULL REFUNDS

Risk Not Eligible For Coverage—This reason is used to nullify a policy when a policy was issued on property not eligible for NFIP coverage. Some examples include: property located in a COBRA zone, contents located in an open building, or buildings located entirely over water. A full refund can be issued back to the date of policy inception, regardless of years.

Property Closing Did Not Occur—If flood insurance was a condition of a mortgage or other home loan, and the loan did not close and the transfer of property did not take place, a full refund is available for the current year.

Avoidance of Policy Due to Credit Card Error—This reason is used when an error or billing dispute occurs, such as processing error or fraud, on a credit card payment. A full refund is available for the current policy year.

Avoidance of Policy Prior to Effective Date—This reason is used when coverage is not mandatory and a policyholder decides during the 30-day waiting period, or prior to the effective date of a renewal, not to take the policy, after submitting a premium payment. A full refund is available for the current policy year.

Non-Payment—A policy may be nullified if the property owner's check is

returned due to insufficient funds or any other reason the check is not good. A full refund is available for the current year of the policy. This type of refund cannot be used if the client simply refuses to pay the insurance agency.

Insurance No Longer Required by Lender Because Property is No Longer Located in a Special Flood Hazard Area Because of a Physical Map Revision, Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR)—Flood insurance was initially required by the lender because the property was determined to be in a 100-year floodplain. Following the map revision, if the property is no longer located in the floodplain, the policy may be cancelled provided the lender confirms in writing that insurance is no longer required. A full refund is available for the current policy year. A policyholder may wish to convert the standard policy to a Preferred Risk Policy (PRP) at a reduced premium rate to reflect the lower risk.

Insurance No Longer Required Based on FEMA Review of Lender's Special Flood Hazard Area Determination—In this case, flood insurance was initially required by the lender because the property was determined to be in the 100-year floodplain. The lender and the borrower can jointly submit a request for a flood hazard area determination from the Federal Emergency Management Agency (FEMA). FEMA will review the data used by the lender to make their floodplain determination. If FEMA issues a Letter of Determination Review (LODR) stating the property is not located in the floodplain, flood insurance is not required on the structure. A full refund for the current policy year can be given provided no claim has been paid or is pending.

Cancel/Rewrite Due to Misrating—If a

standard policy is written instead of a PRP, a full refund is available for up to 6 policy years. An incorrect lowest floor elevation, BFE, flood zone, community number, or building description also qualifies as a misrating.

PRO-RATED REFUNDS

Building or Contents Sold or Removed—If an insured building or insured contents are sold or removed a pro-rated refund is available for up to two policy years.

Duplicate NFIP Policies—When a duplicate NFIP policy has been issued, only one policy can remain in effect. The insured can choose which policy is to remain in effect and which policy is to be canceled. A pro-rated refund is available for up to 6 policy years.

Policy Not Required by Lender—A policy can be cancelled if the lender required the insurance to close the loan and it was later determined that the property was not located in the 100-year floodplain. The lender must state this in writing. A pro-rated refund is available for the current policy year.

Mortgage Paid Off—If flood insurance was required as a condition of a mortgage and the loan has now been paid off, provided no claim has been paid or is pending, a pro-rated refund for the current policy year is available.

Duplicate Policy From Sources Other Than The NFIP—An NFIP policy can be canceled if a duplicate policy has been obtained outside the NFIP system. A pro-rated refund is available for the current policy year.

Floodplain Focus: Flood Forces

The force of moving versus standing flood water act very differently upon a structure to cause damage during a flood.

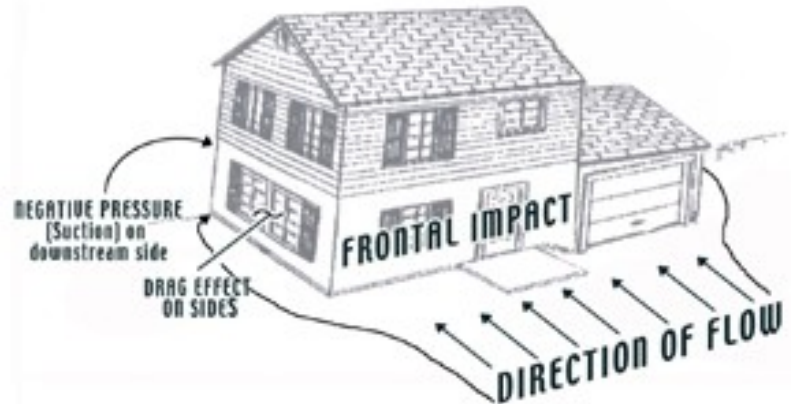
Hydrodynamic Forces (Pressure of Moving Water)

Hydrodynamic forces are created when floodwaters moving at high velocity, cause damage to a building's walls and foundation. Hydrodynamic force can damage a building's walls in three ways: 1. frontal impact, as water strikes the structure; 2. drag effect, as water runs along the sides of a structure; and 3. eddies or negative pressures, created as water passes on the downstream side of a building that can cause a suction effect.

High velocity flood flows, moving faster than 5 feet per second, can also move large quantities of sediment and debris and cause scouring that can lead to additional structural damage. High velocity flows can also be created or exacerbated by the presence of man-made or natural obstructions. The faster water moves, the more pressure it puts on a structure and the more it will erode stream banks and scour the earth around a building's foundation.

High-velocity floods require special design considerations for buildings, roads, bridges and other manmade structures in their path. While velocity is one factor in determining the potential harm of a flood, the total impact of moving water is also related to the depth of the flooding. Research demonstrates that deep water and low velocities can cause as much damage as shallow water and high velocities.

Hydrodynamic Forces On A Building

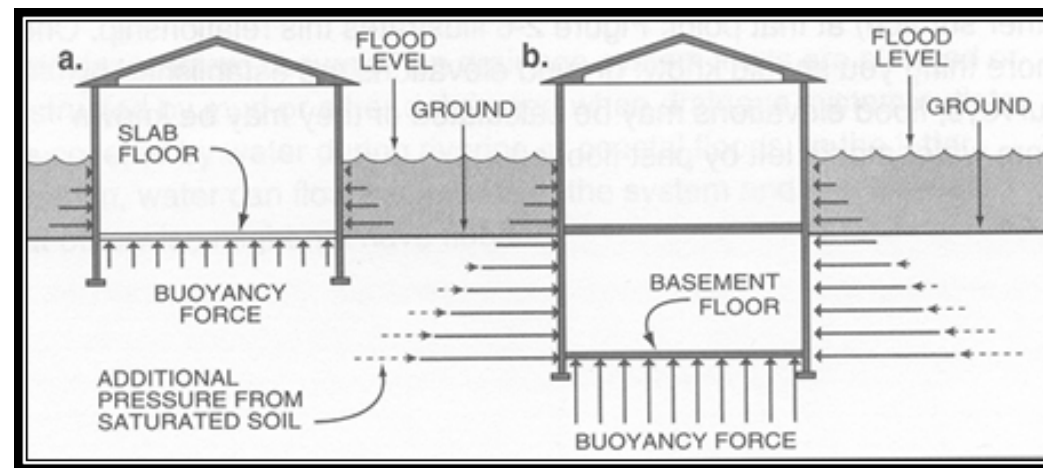


Hydrostatic Forces (Pressure of Standing Water)

The weight of standing water puts hydrostatic pressure on a structure. The deeper the water, the more it weighs and the greater the hydrostatic pressure. Because water is a fluid, it exerts the same amount of pressure sideways (lateral pressure) as it does downward. As water gets deeper, it exerts more lateral pressure than shallow water. Most walls are not built to withstand lateral pressure. Studies and tests have shown that the lateral force presented by three feet of standing water

can be enough to collapse the walls of a typical frame house.

Basement walls and floors are particularly susceptible to damage by hydrostatic pressure. Not only is the water deeper, a basement is subjected to the combined weight of water and saturated earth. Water in the ground underneath a flooded building will seek its own level, resulting in uplift forces that can break a concrete



basement floor. Hydrostatic pressure can also cause damage due to flotation or buoyancy. Improperly anchored buildings can float off their foundations and empty in-ground storage tanks can pop out of the ground even forcing their way through several inches of concrete.

Source: FEMA publication (FEMA 480) "Floodplain Management Requirements: A Study Guide and Desk Reference for Local Officials," available online at www.fema.gov.

News Briefs

FEMA Issues Revised Levee Memorandum

Procedure Memorandum No. 45-*Revisions to Accredited Levee and Provisionally Accredited Levee Notation* (PM 45) became effective June 1, 2008, revising Procedure Memorandum No. 43-*Guidelines for Identifying Provisionally Accredited Levees* (PM 43) issued in 2007.

With the implementation of PM 43, the areas landward of accredited levees and Provisionally Accredited Levee (PAL) systems were mapped as Zone X (shaded). PM 43 also provided guidance that allows for the map study to continue while a levee owner or community compiles documentation that indicates they are in compliance with National Flood Insurance Program (NFIP) regulations.

PM 45 provides greater clarity to minimize confusion on the current levee notes shown on Digital Flood Insurance Rate Maps (DFIRM). A new "Note to Users" associated with accredited levee systems was developed. The revised note strikes a balance between acknowledging the ability of a levee system to provide protection and encouraging a consideration of insurance and other protective measures. PM 45 can be viewed or downloaded at: <http://www.fema.gov/plan/prevent.fhm/gsmemos.shtm>.

Hurricane Season 2008

The 2008 hurricane season started on June 1. FEMA has launched a new campaign targeted at residents living in hurricane-prone areas—"Get Serious, Be Prepared Now". FEMA is urging residents to prepare

a disaster kit for homes, develop an emergency plan for families in the event of a disaster and be informed of evacuation routes and changing weather conditions. More information can be found at: www.ready.gov or www.fema.gov

On May 22, 2008, the National Oceanic and Atmospheric Administration (NOAA) released its 2008 hurricane season predictions. Projected climate conditions point to a near normal season or above normal hurricane season in the Atlantic Basin this year. For 2008, the prediction is for 12 to 16 named storms, including 6 to 9 hurricanes and 2 to 5 major hurricane (Category 3, 4, or 5 on the Saffir-Simpson Scale). An average season has 11 named storms, including six hurricanes for which two reach major status. The first named storm of the season, Tropical Storm Arthur, developed on May 30, 2008.

Flood Insurance Rates Increased May 1, 2008

Effective May 1, 2008, premium rates for National Flood Insurance Program (NFIP) flood insurance policies will increase an average 8% for new or renewed policies.

The rates for properties in V Zones (coastal areas) will be increasing 10%. Large rate increases are being implemented again this year as a result of the Heinz Center's Erosion Zone Study, which clearly indicates that current rates significantly underestimate the increased hazard from steadily eroding coastlines.

The rates for properties in A zones (riverine areas) will increase 9% for pre-FIRM structures and 6% for post-FIRM structures. These increases

keep post-FIRM structures at actuarial levels and will slightly decrease the subsidy for pre-FIRM structures.

Rates for a Preferred Risk Policy (PRP) will increase 8% and a Standard X-Zone policy will increase 10%. Other changes include an increase to the Federal Policy Fee from \$30 to \$35 and an increase to the Increase Cost of Compliance (ICC) premium from \$1 to \$6 for PRP policyholders.

NFIP policyholders can pay their annual flood insurance premiums with a credit card. Premiums can be paid using VISA, American Express, MasterCard, Diners Club or Discover credit cards. Although the full premium charge is made to the credit card at the time coverage is purchased or renewed, policyholders then can choose to spread payments to the credit card company over several monthly installments.

High Risk Structures to Lose CRS Discount

Effective May 1, 2008, flood insurance policies for buildings that are rated as having the lowest floor one foot or more below the base flood elevation (BFE) will no longer be eligible for the community's Community Rating System (CRS) discount.

In most cases, the affected structures are non-compliant, in violation of NFIP regulations. This policy only affects elevation-rated buildings, typically new construction or post-FIRM buildings. Only buildings in the mapped floodplain are affected. This rule does not affect those V zone properties with approved breakaway walls.

UPCOMING CONFERENCES & WORKSHOPS

September 2-5, 2008. Floodplain Management Association (FMA) Annual Conference, San Diego, California. www.floodplain.org, contact: Iovanka Todt at (619) 204-4380.

September 7-11, 2008. Dam Safety 2008, Indian Wells, California. <http://damsafety.org>.

September 15-18, 2008. Wetlands 2008: Wetlands and Global Climate Change, Portland Oregon. www.aswm.org, contact Laura Burchill (207) 892-3399.

November 17-20, 2008. Association of State Floodplain Managers (ASFPM) 4th National Floodproofing Conference, New Orleans, Louisiana. www.floods.org, contact ASFPM (608) 274-0123.

UPCOMING EMERGENCY MANAGEMENT INSTITUTE COURSES

The Emergency Management Institute (EMI) is located at the Federal Emergency Management Agency (FEMA) National Emergency Training Center (NETC) in Emmitsburg, Maryland. EMI serves as the national center for emergency management training of federal, state, and local government officials. Tuition, housing, and all books and materials are provided at no cost. Participants are responsible for the cost of a meal pass (approximately \$100). The following is a list of upcoming EMI courses through September 2008. To apply, call Diane Ifkovic, CTDEP, (860) 424-3537 or email at diane.ifkovic@ct.gov. For more information on the courses listed, visit the EMI website: <http://training.fema.gov>.

E170 HAZUS-MH for Hurricanes—February 2-5, 2009

E172 HAZUS-MH for Flood—January 12-15, 2009

E174 HAZUS-MH for Earthquake—April 27-30, 2009

E179 Application of HAZUS-MH for Disaster Operations—April 20-23, 2009

E190 Introduction to ArcGIS—October 20-23, 2008, February 23-26, 2009

E194 Advanced Floodplain Management Concepts—August 18-21, November 3-6, 2008, April 4-7, 2009

E202 Debris Management Planning—September 22-25, 2008, February 23-26, 2009

E210 Recovery from Disaster: The Local Government Role—October 20-23, 2008

E212 Unified Mitigation Assistance Program—March 23-26, 2009

E241 Cooperating Technical Partners: Special Topics—March 2-5, 2009

E271 Hydrologic Engineering Center Hydrologic Modeling System—January 12-15, 2009

E273 Managing Floodplain Development through the NFIP—December 15-18, 2008

E274 National Dam Safety Technical Workshop—February 18-19, 2009

E275 Benefit Cost User Workshop—January 26-28, 2009

E276 Benefit Cost Analysis: Entry Level Training—November 17-19, 2008

E278 NFIP Community Rating System (CRS)—August 11-14, Sept. 15-18, December 1-4, 2008

E279 Retrofitting Floodprone Residential Buildings—April 6-9, 2009

E282 Advanced Floodplain Management Concepts II—July 7-10, Oct. 13-16, 2008, Feb. 2-5, 2009

E284 Advanced Floodplain Management Concepts III—November 10-13, 2008, March 23-26, 2009

E296 HAZUS MH/DMA 2000 Risk Assessment—August 4-6, 2008

E312 Building Science Seminar—January 20-22, 2009

E313 Basic HAZUS Multi-Hazards—December 1-4, 2008

E317 Comprehensive Data Management for HAZUS MH—Sept. 8-11, 2008, March 16-19, 2009

E464 Disaster Resistant Jobs: Strategies for Community Risk Management—August 25-28, 2008

E727 Executive Order 11900: Floodplain Management Training—October 14-16, 2008