



#### Why are levees in the Metro East area being de-accredited?

In the case of levees in the Illinois counties of *St. Clair, Madison and Monroe*, a design problem that allows an unacceptable level of water seepage through and beneath the levees was determined to be a serious problem. New studies show that the levee system can no longer provide base flood protection for nearby residents and business owners during a large flooding event.

As the federal agency responsible for administering the National Flood Insurance Program (NFIP), the Department of Homeland Security's Federal Emergency Management Agency (FEMA) identifies flood hazards, assesses flood risks and provides appropriate flood hazard and risk information to communities across the nation. This information is made available in the form of Flood Insurance Rate Maps (FIRMs).

In its flood hazard and risk mapping role, FEMA may recognize levees and other flood protection systems on the FIRM if they provide protection from the base flood. All levee systems must be certified by a professional engineer as being designed and constructed to provide protection against the base flood. Once information is presented to FEMA showing that the levee provides protection, FEMA will review the certification and other information submitted to determine if the levee will be accredited.

It is important to note that **no** levee system provides full protection against all flooding events; they can only protect against the flooding event for which they've been built to withstand. History shows that when levees fail or are overtopped, the damage is often catastrophic.

Previously accredited levees that do not meet FEMA mapping standards are de-accredited. The areas that were protected by the accredited levee will be shown as high-risk flood zones on the new maps.

# Why does the federal government produce flood hazard maps?

The National Flood Insurance Program (NFIP) was created by Congress in 1968 to identify flood-prone areas within communities, to encourage the use of sound floodplain management, and to make flood insurance coverage available to provide an alternative to an over-reliance on disaster aid. Participation in the NFIP is a voluntary partnership between local communities and FEMA.

# Are you FLOODSMART?

#### **Quick Flood Facts**

- Floods are the #1 natural disaster in the United States
- Flood losses in the United States averaged \$2.4 billion per year for the last decade
- Just an inch of water can cause costly damage to property Everyone is at risk due to weather systems, land development run-off or regional events
- Homeowners insurance doesn't cover flood damage
- 30 percent of all flood insurance claims are filed in low- to moderate-risk areas
- New construction can increase flood risk, especially if it changes natural runoff paths
- Nearly 5 million Americans are protected with flood insurance but millions more are unaware of their personal risk for property damage - or options for protection

FloodSmart.gov

Flooding is a costly natural disaster. The NFIP is obligated to accurately identify flood risk so that community officials and property owners can make wise risk management decisions. That means providing information so that individuals can protect their at-risk financial investments with flood insurance.

#### Why don't the Metro East levees provide protection any longer?

The levee systems that extend along the Mississippi River through Madison, St. Clair and Monroe counties were last updated in the 1960s. Under-seepage has been a particular problem that has been recognized since the flood of 1993. The U.S. Army Corps of Engineers has advised FEMA that these levees do not meet USACE and FEMA standards for providing protection from the base flood. Although improvements are underway for the levees, they will take years to complete and require funding. Meanwhile, the seepage and **sand boils** beneath the structures cause more deterioration and pose a greater risk of flooding to nearby communities than previously thought. Thus, FEMA is de-accrediting levees in these counties, which means that areas previously protected by the structures will appear as Special Flood Hazard Areas on the Flood Insurance Rate Maps.

#### What is a sand boil?

Sand boils form during floods particularly when seepage occurs beneath levees that are built above a sandy or gravelly ground alongside a river. When flooding occurs, the water that is trapped between the riverside of the levee tries to find a way around the levee. If water can travel through the ground it breaks through the surface. This process forms sand boils that show as wet spots in the soil. The underground pressure forces the water up, flooding the area until the pressure beneath stabilizes. Sand bag rings placed around the area are used to contain flooding from sand boils. Left unchecked, a sand boil can lead to levee failure.

#### How do the Metro East levee de-accreditations affect me?

If you live in an area "protected" by a levee that has been de-accredited, then you and your property are at high risk of flooding.

The de-accreditation will place all property currently protected by the levees into a Special Flood Hazard Area (SFHA). If a federally regulated lender holds or issues a loan in a SFHA, flood insurance will be required.

FEMA, through the mapping process, establishes areas of risk behind levees and depicts that risk on Flood Insurance Rate Maps (FIRMs). That is why FEMA requires levee owners to provide maintenance and structural certifications. FEMA will recognize and accredit on its flood maps only those levees that continue to meet minimum federal standards of protection for property owners. Professional engineers can provide the certification required by FEMA for accreditation. After accreditation, the properties behind a levee will be considered out of the SFHA; the mandatory purchase requirement of flood insurance is no longer applicable. However, flood insurance is still available to protect your investment.

## **KNOW THE FACTS:**

Learn about federal aid and insurance before disaster strikes!

#### Insurance:

Annual premium -- \$100,000 coverage \$682/year (Average)

#### Federal disaster aid:

Small Business Association loan \$ 50,000 @ 4% interest \$2,880/year for 30 years

Find out more at Floodsmart.gov

In fact, FEMA encourages homeowners living behind any levees to purchase flood insurance because overtopping or failure of these structures still remains a possibility. Without the security

of flood insurance, you face the possibility of catastrophic losses that will be difficult to overcome should a base flood event occur. Disaster aid for a flooding event only will cover a portion of the losses you will incur from a flood.

### What is a Special Flood Hazard Area?

In support of the National Flood Insurance Program, FEMA identifies flood hazard areas throughout the United States by producing Flood Insurance Rate Maps (FIRMs). FIRMs identify the Special Flood Hazard Areas (SFHAs) as high-risk areas that will be inundated by flooding when the base flood occurs. It is these high-risk areas that are managed by communities in order to protect life and property. Residents who know the risk of flooding can then make wise choices about their safety and property.

On FIRMs for the Metro East area, these zones will be depicted as AR or AE. Some areas may be **dual zoned** with both AR and AE.

#### What is an AE Zone?

The National Flood Insurance Program identifies zones on its Flood Insurance Rate Maps that indicate the risk of flooding. The "A" denotes the area as a Special Flood Hazard Area; the "E" indicates that a Base Flood Elevation has been calculated and a Flood Insurance Study has been conducted.

It is these high-risk areas are managed by communities in order to protect life and property. If federally regulated lender issues a loan on a property located in a SFHA, the purchase of flood insurance is required.

FEMA encourages all residents living in AE Zones to speak with their insurance agent about purchasing a flood insurance policy to protect their property and maintain their financial security.

#### What is an AR Zone?

The National Flood Insurance Program assigns zones on its Flood Insurance Rate Maps, which indicate the risk of flooding. An AR Zone is a Restoration Zone on FEMA flood risk maps. The "A" denotes the area as a Special Flood Hazard Area; the "R" denotes that a restoration of a levee system to a level of base-flood protection is underway.

An AR Zone on a FIRM indicates that the increased flood hazard is considered temporary until the flood control system once again can provide base-flood protection. (See AR Zone criteria, page 4)

#### What are the criteria for a community to apply for the AR Zone designation?

FEMA has determined that the Metro East communities are eligible for the AR Zone designation since the communities are engaged in the process of restoring a flood protection system which:

- 1. was constructed using federal funds;
- 2. is recognized as providing base flood protection on the community's effective Flood Insurance Rate Map;
- 3. was decertified by a federal agency responsible for flood protection design or construction.

Thus far, Metro East communities have met most, but not all, of the requirements for the AR Zone designation. Each community must still submit a **developed area map** identifying "developed areas" as defined in the Code of Federal Regulations. These maps must be submitted by the Mayor or Village President of each "community" impacted by the levee de-accreditation

by the end of the 90-day appeals period for the AR zone process to continue and for AR zones to appear on the official FIRM when it becomes effective.

#### How do communities benefit from the AR Zone designation?

The Zone AR designation is a method of recognizing on flood risk maps that:

- 1. a flood protection system is being restored to provide protection against a base flood event;
- 2. reduced flood insurance rates will be available through NFIP insurers;
- 3. elevation requirements will be relaxed for new and substantially improved buildings that will be exposed to flood risk during the restoration period.

The AR Zone process also helps eligible communities establish a plan for restoring flood protection with the assurance that a restoration project will result in the eventual removal of the Special Flood Hazard Area designation from protected areas. The incentives in the AR Zone areas are intended to encourage communities to quickly restore base flood protection in at-risk areas.

#### How long does the AR Zone designation remain in effect?

AR Zone designation will be assigned only once during the restoration of a flood protection system. For communities receiving federal funding for levee restoration, the project must be completed within 10 years of the application's submittal. Metro East counties fall into this category.

#### What happens if the AR Zone designation is not approved?

If FEMA does not receive the complete documentation submittal for the AR Zone, or a levee restoration project does not meet AR Zone conditions specified in the Code of Federal Regulations, the area previously protected by the levee will be shown on the map in a Special Flood Hazard Area (AE Zone) until the levee is restored to protect against the base flood. (See AE Zone definition above.)

#### What is a dual flood zone?

Dual zones (AR/AE) are flood zones with a risk of flooding from other water sources not protected by the flood protection system being restored. This means that despite the completion of a levee repair project, the area will continue to be in a high risk flood zone due to a flooding source other than the AR Zone source. In this situation, flood insurance purchase requirements apply.

## What is the purpose of 3-foot elevation requirements in developed areas of AR Zones?

In "developed areas" in the AR Zones, the minimum elevation required for all new construction in developed areas is 3 feet above the highest adjacent grade or the AR Zone Base Flood Elevation, whichever is lower.

For areas not designated as "developed areas" within the AR Zone, the following elevation requirements apply:

1. For flood depths of less than 5 feet, the minimum elevation required for all new construction is 3 feet above the highest adjacent grade or the Base Elevation of the AR Zone, whichever is lower;

2. If flood depths exceed 5 feet, the minimum elevation required for all new construction is the AR Zone Base Flood Elevation level.

#### What is meant by "developed area" in AR Zones?

As part of the AR Zone application, a developed area map is required. "Developed area," as defined in 44 CFR 59.1, incorporates larger urbanized areas as well as isolated developed subdivisions beyond the urbanized area. The definition also includes land that is planned and permitted or where construction is underway. Each community must submit a map to FEMA accurately identifying those areas that meet the FEMA definition of "developed areas". That map must also be adopted as part of their flood protection ordinance by the time the new FIRM becomes effective.

#### Are there ways to offset the cost of flood insurance?

Remember, no levee system provides full protection from all flooding events. Flood insurance may seem costly -- but just like home and auto insurance -- it is the most sensible way to protect your home and valuables. Here are a few options for you to consider when trying to reduce the cost of insurance:

Homeowners insurance typically does not cover flood damage.

#### **Grandfather Clause**

The process of issuing new maps takes time. The Metro East maps are scheduled to be effective in late 2009. By purchasing flood insurance before the new maps go into effect, you can maintain low- to moderate-risk flood zone rates for the life of the policy, as long as you do not let the policy lapse. The premium is substantially lower than purchasing the insurance after the maps become effective when the zone designation changes to high-risk.

#### **Community Rating System**

A second method to reduce the cost of insurance involves the community's participation in a Community Rating System (CRS). Residents are able to obtain insurance premium discounts if their community's floodplain management program exceeds the National Flood Insurance Program's (NFIP) minimum standards. This discount occurs in 5-percent increments.

#### Speak with your insurance agent and lender

You may be able to purchase a less expensive premium with a higher deductable by speaking with your lender and insurance agent. Your lender may allow you to purchase a policy with a higher deductible that will lower the premium. Your insurance agent can proved more details.

#### Is it possible to improve levees to meet FEMA standards?

A levee owner would have to complete the improvements, have the structure certified by a professional engineer and, finally, the levee would have to be accredited by FEMA as meeting the standards specified in Code of Federal Regulations, 44:65.10. Once the levee improvement is complete, communities may submit documentation through the MT-2 process to show that the levee provides the minimum amount of protection required by FEMA.

It is important to note that FEMA does not design, build, certify, maintain or inspect flood control systems or levees.

The agency, through the mapping process, establishes areas of risk behind levees and depicts that risk on Flood Insurance Rate Maps (FIRMs). That is why FEMA requires levee owners to provide maintenance and structural certifications. FEMA only will recognize on its flood maps those levees that continue to meet minimum federal standards of protection for property owners. Professional engineers can provide the certification required by FEMA for accreditation. After accreditation, the properties behind a levee will be considered out of the high risk flood hazard area and will not be *required* to be insured for flooding.

FEMA, however, encourages homeowners living behind levees to purchase flood insurance because overtopping or failure of the structures still remains a possibility. Insurance in lower risk flood zones is less expensive.

#### Why is FEMA coming out with new flood risk maps now?

Flooding has proven to be a costly natural disaster.

FEMA was charged by Congress through the National Flood Insurance Act of 1968 to identify flood risk so that community officials and property owners can make wise risk management decisions. That

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means providing information so that individuals can take steps to protect their families and business as well as protect their financial investments with flood insurance.

Since 2004, FEMA has been updating and modernizing the nation's flood hazard maps. These maps indicate the risk for flooding by county throughout the state. Many of the current maps are outdated but the new digital mapping techniques being used will provide more detailed, reliable and current data about flood hazards state-wide. The result: a better picture of the areas most likely to be impacted by flooding and a better foundation from which to make key decisions.

#### What are the benefits of the new flood hazard maps?

The Map Modernization project will benefit numerous groups of people in different ways:

- Property owners will have the ability to make more informed decisions about how flooding can impact their safety and how they can protect their financial investments.
- Insurance agents, insurance companies, and lending institutions will have easy on-line
  access to updates and upcoming changes in order to serve their customers and community
  more efficiently.
- Community planners and local officials will gain a greater understanding of the flood hazards and risks that affect their community and can therefore improve local planning activities to protect their citizens.
- Builders and developers will have access to more detailed information for making decisions on where to build and how construction can affect local flood hazard areas.

#### What are FEMA levee standards? How did they originate?

FEMA levee standards were enacted by official Rule Change in 1986 as a way to assure that levees accredited by FEMA meet design, operation and maintenance standards that will provide Base Flood **protection to residents living near them.** FEMA adopted the United State Army Corps of Engineers' levee certification standards, which appear in Code of Federal Regulations Section 65.10. These regulatory requirements provide guidance for the mapping of areas by levee systems.