Living With Levees
Information for Property Owners and Professionals

The United States has thousands of miles of levees along its rivers, lakes, and coastlines. These levees reduce the risk of flooding for communities across the Nation. The Federal Emergency Management Agency (FEMA), homeowners, business owners, insurance professionals, real estate professionals, and lending professionals have a shared responsibility to ensure that people are aware of flood hazards and risks and of the available options to reduce flood-related damage and loss of life.

What Levees Are and How They Are Used

Levees are manmade structures, such as earthen embankments, that help contain or control the flow of water during a flood. Farmers first built levees to protect agricultural areas from frequent flooding – some of these levees date back more than 150 years. These same levees are now in place in residential areas, where they do not provide as much protection as residents would like to believe. Other levees were designed to help reduce risk to urban areas, but only from a certain size of flooding event.

It is important to remember that most levees are designed and constructed in accordance with sound engineering practices to provide a certain level of protection during a flood. Larger floods can overtop any levee, and levees require regular maintenance to retain their designed level of risk reduction.

Levees' Impact on Flood Risk Reduction, Not Elimination

Levees reduce risk during certain flood events. They do not provide complete protection from flooding. In addition, they can and do deteriorate over time and must be maintained to retain their effectiveness. When levees fail or are overtopped, the results can be catastrophic. In fact, the flood damage can be greater than if the levee had not been built.

Key Terms

Several key terms with which all stakeholders should be familiar are used in this document.

- *Accredited Levee* – A levee that is shown on an effective National Flood Insurance Program (NFIP) map as reducing the risk of the 1-percent-annual-chance flood.
- *Non-Accredited Levee* – A levee that is not shown as reducing the risk of the 1-percent-annual-chance flood on the affected NFIP map because it did not meet minimum Federal standards for accreditation.
- *Provisionally Accredited Levee* – A levee that is temporarily shown on an NFIP map as providing 1-percent-annual-chance flood risk reduction while the additional data and documentation required to meet the minimum Federal standards for accreditation are gathered by the levee owner for submission to FEMA.

RISK MAPPING, ASSESSMENT, AND PLANNING PROGRAM (RISK MAP)

The Federal Emergency Management Agency's Risk MAP Program delivers quality data that increases public awareness and leads to action to reduce risk to life and property. Risk MAP is a nationwide program that works in collaboration with States, Tribes, and Local communities using best available science, rigorously vetted standards, and expert analysis to identify risk and promote mitigation action, resulting in safer, more resilient communities.

RiskMAP
Increasing Resilience Together

FEMA

Even without a major flood, levees can fail if they are not properly maintained. Improper drainage, erosion, seepage, subsidence, and even earthquakes can all cause levees to fail and result in significant, even catastrophic flooding. It is important for individuals to understand the risks associated with levees and the steps each person can take to prepare for potential floods and obtain financial protection.

FEMA's Role in Identifying Levee-Related Flood Risks

FEMA is responsible for managing the NFIP. Through the NFIP, FEMA provides flood insurance policies because most homeowner insurance policies do not cover damage due to flooding. In addition, FEMA is charged with accurately identifying flood hazards and assessing flood risks, including hazards and risks in levee-impacted areas.

FEMA does not build, maintain, or certify levees. It is the responsibility of the levee owner (e.g., local community, county, levee board, State, U.S. Army Corps of Engineers) to certify that the levee meets or exceeds minimum Federal requirements for reducing flood risks and to provide appropriate data and documentation to FEMA to support that certification. If evidence of certification is not provided, FEMA will not accredit the levee as providing the minimum federally required level of risk reduction.

Key Terms

- *Special Flood Hazard Area (SFHA)* – An area subject to inundation by the 1-percent-annual-chance flood.
- *High-Risk Area or Zone* – An area designated on an NFIP map as an SFHA and labeled as Zone A, A1-30, AE, AH, AO, AR, A99, V, V1-30, or VE, including areas behind levees.
- *Moderate-to-Low Risk Area or Zone* – An area on an NFIP map shown as outside the SFHA and labeled Zone B, C, or X, where the risk of flooding is lower than the risk inside the SFHA.

Since the 1970s, FEMA has provided communities with flood hazard information in the form of Flood Insurance Rate Maps (FIRMs). FIRMs show high-risk areas, referred to as Special Flood Hazard Areas (SFHAs), which have a 1-percent chance of flooding to a certain level in any given year. FIRMs also show moderate- and low-risk areas. Under its Risk Mapping, Assessment, and Planning (Risk MAP) program, FEMA is updating FIRMs nationwide, which includes updating the accreditation of levees.

Owners carrying mortgages for insurable buildings in high-risk areas will be required by most lenders to also carry flood insurance. (Note: Flood insurance is required in high-risk areas as a condition of any mortgage that is federally backed, regulated, or insured.) This includes buildings in areas behind non-accredited levees. For buildings that are newly mapped into a high-risk area, including buildings behind levees that are now non-accredited, the NFIP provides rating options to help lower the cost (e.g., Preferred Risk Policy extension, grandfathering). Property owners should contact their insurance agent for more information.

Individuals/Clients who own buildings in a moderate- or low-risk flood zone, including owners of buildings behind an accredited or provisionally accredited levee, will not be federally required to purchase flood insurance protection; however, a lender can still require it. FEMA strongly recommends the purchase of flood insurance for buildings behind levees, because *the flood risk behind the levees is just reduced, not removed*. Knowledgeable insurance, real estate, and lending professionals are likely to recommend flood insurance, too.

How Property Owners Can Take an Active Role in Flood Protection

You can take steps to protect your life, the lives of your family members, and your property in the event of a flood. It is important to take action now, to be aware of your risk, and to be prepared in case flooding occurs. Here are some tips:

- **Be aware of levees in your area.** Check with your local government officials to find out if you live in an area near a levee. You should also ask about the condition of the levee. Has it been inspected recently? How large a flood is it intended to protect against? What areas are likely to flood if the levee fails or is overtopped?
- **Understand your flood risk.** Find out where your home or business is in relation to levees, and whether or not you are in a mapped high-risk flood zone. Areas behind a non-accredited levee (i.e., in a high-risk zone) have about a one-in-four chance of being flooded over the course of a 30-year mortgage.
- **Prepare for the worst.** Make sure you have an emergency plan for your family, and be aware of local evacuation procedures.
- **Protect yourself financially.** Consult with your insurance agent and purchase a flood insurance policy. Most homeowner insurance policies do not cover damage from flooding.

How Lending Professionals, Insurance Professionals, and Real Estate Professionals Can Be Informed Resources

Reducing the risk of living and working behind levees is a shared responsibility, and local lending professionals, insurance professionals, and real estate professionals play an important role in informing the community about how to mitigate these risks. Here are some tips:

- **Know the facts about levees.** Flooding can and does occur in areas behind levees, and levees can fail. Because of these unique flood risks, it is important that all are aware of updates in maps and the affect this could have on properties and all properties carry flood insurance.
- **Help your clients understand their risks, requirements, and responsibilities.** Know where the levees are in the communities you service and what level of protection they provide. You may want to contact local officials to find out what areas are likely to flood if a levee fails or is overtopped. This information can help your clients determine the level of coverage they need to protect their investments. Flood insurance is required for most loans for buildings in mapped high-risk zones, and it is strongly recommended for buildings behind accredited levees. Remember: your customers' flood risk does not end at a line shown on a FIRM.
- **Be informed about the NFIP.** Flood insurance is required for most loans for buildings in SFHAs, and it is strongly recommended for buildings behind accredited levees. By requiring flood insurance as a condition of your loans, you are protecting your investment and your clients.
- **Be informed about flood insurance**. Flood insurance is not just for people who live in high-risk areas, including behind de-accredited levees. Property owners behind accredited and provisionally accredited levees are still at risk and need to protect themselves. Many of them will be eligible for Preferred Risk Policies, which provide flood insurance coverage with premiums starting as low as $129 annually. Flood insurance premium rates can vary between zones and even within zones. Explain the importance of getting all of the details, and refer them to an insurance agent.

- **Become familiar with levee-related terminology.** As with flood insurance, there are terms you should be familiar within areas where levees have been identified. A separate Glossary of Terms is available.

Additional Information for Lending Professionals

Before a loan closing, as a federally regulated and insured lender, you are required to determine whether the building is located in a mapped high-risk zone. This includes buildings behind levees that have never been accredited. If a building is in a mapped high-risk zone, borrowers are required to purchase flood insurance before the loan closes.

While borrowers are not federally required to purchase flood insurance for buildings in a moderate- or low-risk flood zone, including buildings behind levees that are currently accredited or awaiting accreditation, you should still recommend flood insurance to financially protect the loan and the borrower. You should also remind your client that *the flood risk behind the levee is just reduced, not removed*.

Additionally, it is important for lending professionals making loans in areas near levees to stay informed about impending changes to the accreditation status of a levee. If a levee status changes and the levee, for example, is newly mapped as non-accredited before a loan closes, you can notify the borrower in advance to purchase flood insurance so the closing is not delayed

For More Information

Resources for Building Owners

- For information on what to do before, during, or after a flood, visit www.fema.gov/plan-prepare-mitigate.
- For information on the NFIP, visit www.fema.gov/national-flood-insurance-program.
- For more information on levees and links to fact sheets, visit www.fema.gov/living-levees-information-homeowners-renters-business-owners-and-general-public.
- To see how levees work and how they can fail, visit floodsmart.gov/floodsmart/pages/flooding_flood_risks/levee_simulator.jsp.
- For more information on flood insurance for your home or business and to find an agent, visit www.floodsmart.gov.
- For more information on flood hazard mapping, visit http://www.fema.gov/hm-main.
- To find your property on a FIRM panel, visit www.msc.fema.gov/portal.

Resources for Insurance, Lending, and Real Estate Professionals

- The NFIP has a special website for insurance agents, which you can access at http://www.agents.floodsmart.gov.
- For more information on flood insurance, visit the FloodSmart website at: http://www.floodsmart.gov.
- For more information on the Risk MAP program, visit: http://www.fema.gov/risk-mapping-assessment-and-planning-risk-map.
- For more information on levees, visit http://www.fema.gov/living-levees-information-real-estate-lending-and-insurance-professionals.
- To see how levees work and how they can fail, visit the FloodSmart Levee Simulator.
- For more information on flood hazard mapping and related products, visit https://www.fema.gov/insurance-professionals-lenders.