What is Risk Rating 2.0 and how will it affect my flood insurance?

The National Flood Insurance Program (NFIP) is the primary source of flood insurance coverage for residential properties in the United States. The NFIP is managed by the Federal Emergency Management Agency (FEMA) and is made available to the public through a network of more than 50 insurance companies.

Previously, the NFIP rated homes and businesses (structures) using several basic characteristics to categorize properties on flood risks. Structures were evaluated based on multiple characteristics: flood zone on the Flood Insurance Rate Map (FIRM), occupancy type, and elevation of the structure relative to the Base Flood Elevation (BSE). However, FEMA decided that this older approach was not taking advantage of decades of investment in new science about flooding, nor was it able to adjust for rating disparities that unduly impacted some homeowners with lower-valued homes.

Previously, the cost of NFIP insurance was generally based on three components:

1. average annual loss or expected loss per year,
2. the risk—which depends on the variability or uncertainty in loss estimates, and
3. expenses of the NFIP, including servicing of policies.

WHAT IS RISK RATING 2.0?

FEMA updated the NFIP risk rating approach through a new pricing method called Risk Rating 2.0 (RR 2.0). This is the biggest change to the way flood insurance premiums are calculated since the inception of NFIP in 1968.

FEMA is updating rates for individual homeowners using years of flood hazard data sets, catastrophe models, and evolving actuarial science—science that uses mathematical and statistical methods to assess financial risks in the insurance and financial fields.

RR 2.0 is meant to improve ratings and give a more accurate assessment of risk by reflecting specific characteristics of an insured building or house. Understanding these characteristics helps to identify the building’s flood risk (Table 1).

WHAT CAN REDUCE YOUR PREMIUM?

The replacement cost based on the amount of coverage requested and the deductible choices influence the insurance premiums. Higher premiums result when a building has higher repair costs, higher building and contents coverage, and when a policy holder chooses a lower deductible.

Whether you are building a new home or buying an older home, under certain circumstances the NFIP gives premium credit for elevating structures and flood-proofing them. Some examples of activities that may help reduce premiums include:

- installing flood openings/vents,
- elevating a structure onto posts, piles, and piers,
– raising machinery and equipment above the lowest floor, and
– infilling a basement with sand, gravel, or other material up to ground level.1,5

HOW CAN YOUR COMMUNITY LOWER YOUR FLOOD INSURANCE RATE?

The Community Rating System (CRS) is a voluntary community program through NFIP in which a community may choose to participate in. The purpose of the program is to promote awareness of flood insurance, mitigate flood losses, and facilitate accurate insurance rates. The program provides discounts and incentives for communities to meet certain criteria related to resilience. Discounts reflect the community’s work to reduce potential flood damage to existing buildings, manage development in areas not mapped by the NFIP, protect new buildings beyond the minimum NFIP-required protection level, preserve and/or restore natural functions of

<table>
<thead>
<tr>
<th>WHERE IS IT BUILT?</th>
<th>HOW IS IT BUILT?</th>
<th>WHAT IS COVERED?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to water</td>
<td>Building occupancy — the type and use of building being insured</td>
<td>Building replacement cost value — a building that will cost more to repair will have higher premiums</td>
</tr>
<tr>
<td>Type of water (river, lake, or coast)</td>
<td>Foundation type (slab on grade or raised)</td>
<td>Building and contents coverage — policies with higher coverage limits have higher costs during a loss, leading to higher premiums</td>
</tr>
<tr>
<td>Drainage area of the river</td>
<td>First floor height</td>
<td>Building and contents deductible — policyholders with higher deductibles are assuming more of the risk during a flood, which can lead to lower premiums</td>
</tr>
<tr>
<td>Location of the building (e.g. on a barrier island or behind a levee)</td>
<td>Number of floors</td>
<td></td>
</tr>
<tr>
<td>Elevation of the building relative to the flooding source</td>
<td>Unit location — units on higher floors have less risk of flooding</td>
<td></td>
</tr>
<tr>
<td>Community where building is located</td>
<td>Construction type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machinery and equipment</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 1. Variables used to determine flood insurance rates in RR 2.0.1,4

WHERE IS IT BUILT?

• Distance to water
• Type of water (river, lake, or coast)
• Drainage area of the river
• Location of the building (e.g. on a barrier island or behind a levee)
• Elevation of the building relative to the flooding source
• Community where building is located

HOW IS IT BUILT?

• Building occupancy — the type and use of building being insured
• Foundation type (slab on grade or raised)
• First floor height
• Number of floors
• Unit location — units on higher floors have less risk of flooding
• Construction type
• Machinery and equipment

WHAT IS COVERED?

• Building replacement cost value — a building that will cost more to repair will have higher premiums
• Building and contents coverage — policies with higher coverage limits have higher costs during a loss, leading to higher premiums
• Building and contents deductible — policyholders with higher deductibles are assuming more of the risk during a flood, which can lead to lower premiums

Vents installed to let floodwater enter. (FEMA)

Raising machinery, building utilities and equipment above the lowest floor. (FEMA)

Structures elevated on posts, piles or piers as well as infilling basement up to ground level. (FEMA)
TABLE 2. Three possible scenarios for flood insurance changes under RR 2.0. It is possible that there will be other causes of increases in rates regardless of the full risk premium.

<table>
<thead>
<tr>
<th>SCENARIO</th>
<th>RATE IN 2021 (BEFORE RR 2.0)</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flood insurance decreases under RR 2.0 and homeowner renews each year</td>
<td>$567</td>
<td>$498</td>
<td>$498</td>
<td>$498</td>
<td>$498</td>
<td>$498</td>
<td>$498</td>
</tr>
<tr>
<td>Flood insurance increases under 2.0 and homeowner renews each year</td>
<td>$567</td>
<td>$669</td>
<td>$789</td>
<td>$932</td>
<td>$1,099</td>
<td>$1,297</td>
<td>$7,025</td>
</tr>
<tr>
<td>Flood insurance increases under 2.0 and homeowner discontinues renewal in 2022 and decides to purchase again in 2023</td>
<td>$567</td>
<td>no renewal</td>
<td>$7,568</td>
<td>$7,568</td>
<td>$7,568</td>
<td>$7,568</td>
<td>$7,568</td>
</tr>
</tbody>
</table>

STILL HAVE QUESTIONS?
To get a better understanding of the changes that will occur to your rates under the new Risk Rating 2.0, contact your insurance company or for more information visit the following websites:


WHAT’S NOT CHANGING?
Though flood zones will no longer be used to calculate a property’s insurance premium, they will still be used to determine if flood insurance will be mandatory if you have a federally backed mortgage, also known as mandatory purchase requirement. The Special Flood Hazard Area (SFHA) will identify those locations that require flood insurance for properties with these types of mortgages.

To simplify the transition to RR 2.0, features will be maintained by offering discounts to eligible policyholders. Policyholders are still able to transfer their discount to a new owner by assigning their flood insurance policy when the property changes ownership. Any discount to policyholders in communities who participate in CRS will continue.³

GLOSSARY
- **Base Flood Elevation (BFE)** – The computed elevation to which floodwater is anticipated to rise during the base flood.
- **Community Rating System (CRS)** – Provides discounts for communities that voluntarily encourage floodplain management practices that exceed the minimum requirements of the NFIP.
- **Flood Insurance Rate Map (FIRM)** – Official map of a community where FEMA has defined the Special Flood Hazard Areas, the Base Flood Elevations and the risk premium zones appropriate to a community.
WHY SHOULD YOU CONSIDER BOTH HOMEOWNERS AND FLOOD INSURANCE?

Most homeowners’ insurance policies cover water damage. However, this often only covers water damage due to broken pipes, toilet overflows, or rain that comes through a leaking roof, but not flood damage. By contrast, flood insurance covers damages caused by water that overruns two or more acres of normally dry land, for example from heavy rains or storm surge. Major storms often include high winds and heavy rain, both of which can damage your property. Wind damage is often covered by homeowners’ insurance policies or a separate windpool policy. Distinguishing the cause of damage, wind or flood, will determine which insurance policy will cover costs, or if the costs will be covered at all (Table 3). 

TABLE 3. Examples of which policy would cover various types of damage.

<table>
<thead>
<tr>
<th>EXAMPLE</th>
<th>FLOOD INSURANCE</th>
<th>HOMEOWNERS’ INSURANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A river overflows, causes flooding that enters the home</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Rain is propelled into a covered structure by wind</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Roof is damaged and water enters through the ceiling</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Heavy rain causes flooding in the neighborhood that</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>enters the home</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES


ACKNOWLEDGMENT

This publication was prepared by Florida Sea Grant, Louisiana Sea Grant, and the Mississippi-Alabama Sea Grant Consortium using federal funds under award NA18OAR4170438 from the National Sea Grant Office, NOAA, U.S. Department of Commerce. The statements, findings, conclusions and recommendations are those of the authors and do not necessarily reflect the views of the National Sea Grant Office, NOAA, U.S. Department of Commerce.

Special thanks to the external reviewers who contributed to the betterment of this publication.

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