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What is Flood Factor™

Flood Factor[™] is a flood risk visualization tool from the First Street Foundation that is now accessible via an interactive experience on realtor.com[®]. It is the result of a realtor.com[®] integration with the First Street Foundation, a nonprofit research and technology group. The First Street Foundation Flood Model was developed in partnership with more than 80 world-renown scientists and flood experts, and currently includes high resolution data for more than 142 million homes and properties across the continental United States.

Flood Factor[™] provides comprehensive flood risk information for each individual property, including a score ranging from 1 (minimal risk) to 10 (extreme risk) as determined by the cumulative likelihood and potential depth of flooding over the next 15-30 years. Click <u>here</u> to learn more about how a property's risk score is calculated. This new feature, accessible during a search of realtor.com[®] (along with other filters such as school, noise, and crime), also includes steps that homeowners can take to mitigate risk, along with an estimate of the FEMA flood zone designation for the property and whether flood insurance is required. Flood insurance options are offered to realtor.com[®] users.

How does Flood Factor™ help real estate professionals?

Anywhere it rains, it can flood. Yet to date, FEMA flood maps cover only the greatest population areas along one-third of the nation's rivers and half of the coast, and do not include the pluvial (rainfall) risk inland. As a result, many people who live near a stream or nowhere near water could be buying or building a home in harm's way and not have any way of knowing. In fact, property owners located outside of the "high-risk" zones on FEMA maps receive one-third of the federal flood disaster assistance and file more than 20 percent of all claims to the National Flood Insurance Program.

Flood Factor™ can help identify more high-risk properties than FEMA maps alone. Because the tool is based on a more comprehensive and granular flood risk assessment, more property buyers and sellers can gain additional context, guidance and insights regarding the potential flood risk for properties and communities across the country.

Flood Factor™ data augments FEMA's maps, which can:

- Help reduce the number of clients who buy high-risk properties by surprise or list properties before mitigating the risk.
- Help reduce flood-related surprises at the closing table by helping their buyer and seller clients perform due diligence and increase confidence in real estate markets particularly where FEMA does not currently map.

Why should my clients be concerned about flood risk?

A home is often a family's biggest asset, so it's important to understand any potential risks and ensure that the home is properly protected. Every home in the U.S. has some flood risk; it is only a matter of degree. However, many property owners could be lulled into a false sense of security because they are not "inside" a FEMA high-risk flood zone where flood insurance is required for a mortgage.



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Flood Factor[™] helps home buyers and owners make better-informed real estate decisions as they collaborate with their real estate, insurance and lending professionals. The experience helps foster trust and confidence during the home buying and selling process. It also provides great value to homeowners, whose improved understanding of flood risk could inform and lead to protective measures that could prevent flooding and/or cost savings of tens or even hundreds of thousands of dollars in damages.

How is this information different than what FEMA provides?

FEMA flood maps are based on more detailed, on-the-ground engineering studies to support floodplain management regulations in some communities. Because FEMA studies are very expensive, labor-intensive and time-consuming, FEMA does not have the resources to provide current and detailed mapping for most of the country. As a result, FEMA maps do not cover two-thirds of U.S. stream miles, half of the coastline or inland areas where the flooding is due to pluvial risk from heavy rainfall.

Flood Factor[™] uses flood modeling that is similar to FEMA's but leverages the highest resolution data available (from FEMA and other governmental sources) to produce approximate flood maps for all of the continental U.S. The First Street model also integrates all major flood types (from tides, coastal surges, rains, and rivers) and not only uses historical flooding events to calculate risk, but also considers future environmental changes.

Here are some distinguishing features for both:

Flood Factor™

- Provides accurate, property-level flood risk information
- Incorporates current and future environmental changes
- Maps multiple flood zones and risk levels for each home
- Includes more flood sources such as heavy rainfall
- Provides nationwide coverage and is updated quarterly
- Assesses historic flood patterns and projects future risk

FEMA

- Provides detailed, community-wide flood risk information for some of the U.S.
- Maps the 100-year flood zone and indicates whether a property is "in or out" of this zone
- Does not provide information specific to individual properties
- Based on detailed, on-the-ground engineering studies for each community
- Limited geographic coverage and updated once every 5 years
- Assesses historic flood patterns
- Used by community regulators, banks and lenders



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Is Flood Factor™ reliable?

Flood Factor[™] integrates advanced modeling, data and analysis from the First Street Foundation and was developed in partnership with climatology, inland flooding, hydrology, and engineering/built-environment experts, scientists, and technologists from more than 80 top universities and research institutions, including MIT, UC Berkeley, Columbia, Cornell, and The Wharton Business School at UPenn, and includes data for more than 142 million homes and properties across the U.S.

First Street uses scientifically accepted flood models and the highest resolution data available for each community. In addition, all modeling techniques have been extensively documented, peer-reviewed and validated in leading academic journals and First Street is constantly working to build on and update its datasets and modeling. <u>Read more</u> about the full methodology including its limitations.

Does a property's Flood Factor™ impact the buyer's mortgage requirements?

No. Flood Factor[™] provides home buyers and owners with additional flood risk information to make better-informed real estate decisions. Neither lenders nor communities are required to use this information in order to meet federal flood insurance program requirements. However, just because a property is not currently located in a FEMA high-risk zone (where flood insurance is required for a mortgage) does not mean it is low risk. Property owners located in "low-risk" areas receive more than one-third of federal disaster aid payments and file 20 percent of the flood insurance claims.

The First Street Foundation has built upon the work of FEMA and other government agencies, but First Street's flood tool focuses on educating consumers based on a more comprehensive and granular risk assessment of all homes in the 48 U.S. states and defining risk for individual properties rather than communitywide floodplain management.

My buyers don't understand whether a property's Flood Factor™ means they should get flood insurance. What should I tell them?

All homes have some flood risk, and Flood Factor[™] is a credible diagnostic tool that can detect more high-risk properties than FEMA maps alone. While the tool does not definitively prove a flood problem, it can provide a strong indication that your client should consult qualified flood professionals, such as the local floodplain manager as well as their insurance agent to learn more about the property's flood risk and whether flood insurance makes sense for them.

Real estate professionals are an information source, not flood experts. Please share the facts that floods can occur anywhere and many flood insurance claims and disaster payments are related to properties located in "low-risk" zones on FEMA maps. As always, avoid making statements beyond your license and training or discouraging clients from considering credible flood risk tools or flood insurance. You may also hand the client this <u>brochure</u>, which NAR developed in collaboration with FEMA.



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What if my client asks about home improvement projects to mitigate flood risk?

Flood FactorTM outlines a number of steps that homeowners can take to mitigate risk, particularly for properties in lower risk areas with no serious flood history. However, in FEMA high risk zones, many of the outlined steps could require a permit and the help of a trained, licensed professional who must be authorized to perform the work. As a real estate professional, the best way to help in this situation is to be ready with a list of qualified risk mitigation experts and also identify the local floodplain manager who administers FEMA's building standards and ordinances for the community. You can also check with FEMA or your REALTOR[®] association to help identify experienced flood risk mitigation professionals.

What other resources should I provide to my clients who ask me about flood risk?

In addition to Flood Factor[™], you and your clients can access the following resources – and they're all free-of-charge:

- <u>FEMA</u>
- Floodsmart.gov
- Firststreet.org
- Your local floodplain manager
- NAR FEMA toolkit for real estate professionals

What if the Flood Factor[™] shows a higher or lower risk than FEMA's map?

If either Flood Factor[™] or FEMA's map indicates a high flood risk, further investigation and possibly a home inspection is advisable. Where there is agreement between the tools, that is an even stronger signal to your client to follow up with qualified flood risk professionals such as the local floodplain manager.

If at the other end of the spectrum, both tools indicate a low risk, please keep in mind that "low risk" does not mean "no risk." Even the lowest risk properties can flood under extreme circumstances and it may be that the peace-of-mind benefit alone could justify the flood insurance expense for some owners or buyers.

In the few rare instances where the Flood Factor[™] is lower than the FEMA zone, it could be an indication that the home would qualify for an official FEMA Letter of Map Amendment or LOMA which involves hiring a licensed surveyor or professional engineer to apply. <u>Learn more</u> <u>about LOMAs</u>.



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My seller client's home is not in a FEMA-designated special flood hazard area and the lender does not require flood insurance. Why does Flood FactorTM show a flood risk for that property?

Just because a property is not currently located in a FEMA high-risk zone or does not require flood insurance does not mean it is low risk. FEMA flood insurance rate maps were not created to define risk for individual properties and do not account for inland pluvial flooding or future conditions.

Flood Factor[™] was developed specifically to provide consumers accurate, property-level, publicly available flood risk information and displays not only the current risk of property flooding, but also the likelihood of that property experiencing a flood event over the next 30 years.

Based on this more comprehensive risk assessment methodology, more property owners could have a high-to-moderate risk than is indicated on the current FEMA map and could benefit from considering flood insurance. FEMA is always in the process of updating and improving upon their maps but at this time, Flood Factor[™] offers an additional, complimentary flood risk tool for your clients.

Why does the information from my lender or other sources contradict First Street's estimate of FEMA's flood risk zones?

In addition to the Flood Factor[™], First Street hires independent flood determination companies -- the same companies hired by lenders -- to provide an estimate of FEMA's flood zone designation for the property. This is an added consumer service and not part of the Flood Factor[™] calculation.

It is not uncommon for two flood determination companies to disagree over the FEMA designation for one property. FEMA has developed the Letter of Determination Review process to referee such disputes. <u>Read this blog</u> by one company hired by First Street to estimate the FEMA zone.

First Street also recognizes that some property owners may have obtained an official FEMA Letter of Map Amendment (LOMA), which is required by lenders in order to remove a property from the special flood hazard area (where flood insurance is required). First Street will accept the LOMA to revise the map estimate for a property. Read <u>more</u> about letters of map change.

What's the difference between Flood Factor[™] and <u>MyFloodStatus.com</u>?

Property owners use <u>MyFloodStatus.com</u> when they want to dispute the lender's requirement to purchase flood insurance based on an assessment of FEMA's flood risk maps.

First Street's Flood Factor[™] is not calculated based on FEMA's maps; a property's Flood Factor[™] is determined using a methodology that is completely separate and independent from FEMA.

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As an added service to consumers, First Street hires independent companies -- the same companies hired by lenders -- to provide an estimate of FEMA's flood zone designation for each property. But this is not part of the Flood Factor[™] calculation.

First Street will revise its map estimate if a LOMA is provided by <u>MyFloodStatus.com</u>.

I think the flood data for a home on realtor.com[®] is wrong. Can you correct it?

If any user has an issue or question about their property, neighborhood, city, county, or state, he or she can submit a question through realtor.com[®]'s Customer Care team at 877-909-6640, and the Customer Care staff will submit a ticket to the Flood Factor™ helpdesk.

Should I look up the Flood Factor[™] on my seller's property on realtor.com[®]?

Flood Factor[™] is designed to provide homeowners and buyers with information about a property's flood risk, including steps they can take to mitigate that risk. As a real estate professional, it may be tempting to look up a property. However, keep in mind the disclosure requirements in your state and, if you are a REALTOR[®], your duties under the National Association of REALTORS[®] Code of Ethics. Watch this <u>video</u> to learn more about flood disclosures.

Do flood risk tools impact property values?

In theory, but there is also significant evidence of a market failure so buyers and sellers do not have the information they need to make informed decisions (e.g., <u>Chivers and Flores</u> [2002]). As a result, applied economic research on the subject is mixed, with some studies finding statistical evidence of a property value impact -- in one direction or the other -- while others find no relationship at all.

According to the most comprehensive, nationwide study to date (<u>Hino and Burke [2020]</u>), "Using multiple empirical approaches and two decades of sales data covering the universe of homes in the US, we find little evidence that housing markets fully price information about flood risk in aggregate." Regarding the validity of studies finding an impact on similar homes on higher versus lower ground, Hino and Burke add: "This latter method, while common in the historical literature on flood risk, is no longer considered a reliable approach for causal inference in the applied econometrics literature, given the near impossibility of controlling for all characteristics that might be different across properties but correlated with flood risk."

Does providing more sources of flood risk information increase my

exposure legally?

Identifying credible flood risk information would generally improve the transparency of home sales, provided that the real estate professional includes multiple sources such as FEMA maps and does not warrant or endorse any particular tool or results.

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NAR recently commissioned the Legal Research Center to investigate <u>flood-related lawsuits</u> over the past two decades and the potential implications for real estate professionals and brokerages. Of the more than 4,500 cases reviewed, the Center found 61 specifically involved a real estate professional or brokerage. The majority of those cases were brought by buyers against sellers' agents/brokerages alleging fraud, breach of fiduciary duty, negligence, and intentional misrepresentation or omission. Six resulted in significant verdicts and awards against the real estate defendants for not taking more steps to disclose flood risk.

The Center's study finds that litigation was far more likely when buyers learned about flooding problems only after they purchased the home. The research also suggests that litigation was less likely to succeed when buyers had access to more flood risk information sources upfront to provide additional context to the seller's disclosure and representation of the property's condition.

Arming clients with more flood risk tools and data can not only help avoid surprise purchases of high-risk properties but also better manage client expectations and avoid buyer remorse or even litigation. For example, you can point buyers to an arsenal of information from FEMA, Flood Factor™, floodplain managers, insurance agents, home inspectors, licensed surveyors, professional engineers, flood risk mitigation experts, and seller disclosure forms to help them better assess the risk. The buyer can also request that the seller obtain and provide the home's flood claims history from the National Flood Insurance Program. Buyers can then see if any claims related to flooding have been filed—an added layer in assessing risk.

