Raising Awareness through Risk Communications

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Risk MAP Lead
WARNING: This session will be interactive
FEMA’s Risk MAP Flood Risk Awareness Survey

- Began in 2010
- Surveyed citizens and local officials
What our Customers are Saying…. 

Results from National Awareness Survey

▸ Personal experience
  • Most cited source of flood risk information was local media (61%) and personal experience (48%)

▸ Availability of risk information
  • Of the 23% who said they reviewed their map, 42% reviewed it in a public building or official’s office

▸ Customer Wants
  • Many expect to hear about flood risk from their mayor (47%) or floodplain manager (32%)
  • 10% expect to hear from FEMA.
Summary and Key Takeaways

**Summary**

- Risk awareness among the general population is 30%
- Respondents recognize greater risk within their broader community than individually
- Risk communication is positively associated with increased risk awareness

**Key Takeaway**

- The level of risk awareness has been consistent over the last four years
- Communication should be tailored to bridge the gap in perception between community risk and home risk
- Local officials should increase the frequency at which they communicate about flood risk
Summary

- Local media are the preferred channels and sources for flood risk information
- Moving to a new residence is the most frequently reported reason for searching for flood risk information
- Mitigation action among the general population is 76%

Key Takeaways

- Local media should be used for communicating flood risk
- Local officials should partner with realtors to target new residents with flood risk information
- Citizens are taking action across a variety of different mitigation activities
Region 6 Piloting the New Awareness Metric

- Measure 1: Number of Outreach Activities
- Measure 2: Web and Call Center Traffic
- Measure 3: Risk MAP Engagement Effectiveness
- Measure 4: Community Awareness Indicators

Community Activities as a result of Risk MAP that demonstrate progress toward raising awareness
Looking for New Risk Awareness Indicators: Outreach and Education to the Public as a result of Risk MAP

- High water mark information
- Promotion of website or tools that promote risk awareness or mitigation
- Completion of a *Program for Public Information* (a CRS activity)
- Flood and other natural hazard risk information on community’s website
- Promotion of the purchase of flood insurance to property owners
- Increasing other public officials’ awareness of community flood risk
- Community sponsorship of local workshops, presentations, and/or materials on natural hazard risk
Your Turn to Share:

What are you **currently** doing in your community to raise awareness of natural hazard risk?
Opportunities to Raise Awareness of Risk

• **Community Outreach and Public Events**
  - Community Websites and Social Media – RiskMAP6.com and FEMA.gov
  - Programs for public natural hazard awareness – HWMI, Ready.gov, others
  - Training and Education opportunities – Virtual Brown Bags

• **Discovery**

• **Risk Identification and Assessment**
  - Resilience Meetings with Flood Risk Products – Recipe Cards, VBB Webinars

• **Regulatory Update**
  - Flood Risk Open Houses – Risk Communications Guidebook & RiskMAP6.com
  - Stakeholder Workshops – FloodSmart Tools
Status of Studies
Website designed to assist local officials in communicating risk.

Project specific documents can be made available to share with citizens.

Links to Interactive Mapping Portal and Map Service Center.

Public Meeting notifications.

Community-specific materials.

Latest Resources.
http://maps.RiskMAP6.com

- Changes Since Last FIRM
- Depth Grids
- Detailed Reports
Tools from Region 6

▷ RiskMAP6.com - new website coming soon!
  • Share links to maps available online
  • Share information about upcoming meetings

▷ Risk Communication Guidebook for Local Officials
  • Includes web content to be shared

▷ The Voice News and Information
  • Share stories and information in your message platform
City of Leon Valley, TX: First HWMI Community in Region 6
Building Products to Support the HWMI

- Kick-off Webinar
- HWMI MOU
- Press Releases
- Talking Points
- HWMI Outreach Plan
- Best Practice Story
- News article for FEMA publications – In the Loop and The Voice
- Webcopy for FEMA.gov
- HWM Fact Sheet
- Overview Presentation for Local Officials
- HWMI Flyer
Social Media Toolkit includes:
- Themes
- Hashtags and Emogi
- Graphics, logos, videos & links
- Outreach materials
- Twitter & Facebook Content
- Toolkit in Spanish
Tools from FloodSmart.gov

- Social Media Messaging
  - Twitter content
  - Facebook content

https://agents.floodsmart.gov/Agents/social-media-messages
FloodSmart Graphics and Social Media

ABFE Social Media Messaging

Open House Messages

- **Facebook**: Do you know your flood risk? Join us at the **Wimberley Community Center** at 14058 Ranch Rd 12, Wimberley, Texas on Wednesday, Sept 2 from 2-8pm. If you’re not able to make it, visit RiskMAP.com to find your property’s updated flood risk. FEMA is releasing new advisory flood risk information so Texans can rebuild to create a safer, stronger future. FEMA officials and partners are hosting an Advisory Base Flood Elevation Open House to ensure that Texans impacted by recent flooding have all of the information they need in order to rebuild and recover.

- **Photo**: [Image]

DO YOU KNOW YOUR FLOOD RISK?

Learn More:

Attend the Upcoming Flood Risk Open House

Join Willacy County for an opportunity to view the newly updated Flood Maps

- Find your property on new flood maps and learn your flood risk
- Get Answers to your question from Community, County, State and FEMA Representatives
- Learn about Flood Insurance from the experts

**November 18, 2-7 pm**
Tourist Center
700 FM 3168
Raymondville, TX

For more information, visit [www.riskmap6.com](http://www.riskmap6.com)
What are you currently doing in your community to raise awareness of natural hazard risk?
Your Turn to Share:

What is the most common question you receive about flood risk in your community?
This approach teams:

- High resolution ground elevation data
- Automated hydrologic and hydraulic modeling
- Lessons learned in Map Modernization and Risk MAP
- Cross-section location and orientation review
- Recommendations from Congress and TMAC

To create:

- Baseline modeling equivalent to Zone A floodplains
- Scalable models that can be further refined
- Refined data delivery to support immediate data availability and customer centric data release
- Initiates national model framework to build upon
Base Level Engineering
Estimated BFE Viewer

ABOUT THIS TOOL

LEGEND

Base Flood Elevation
Base Level Engineering (BLE) Information
Stream Centerlines
Detailed Study Areas
Detailed Study Stream (see FIRM)
Detailed Study Available (see FIRM)
Estimated Flood Extent (BLE)
Moderate Flood Risk
High Flood Risk
Low to Moderate Flood Risk
Study Watershed

Find address or place

FEMA
RiskMAP
Increasing Resilience Together
Estimated BFE Viewer

FEMA is providing a look at flood data availability and relative Base Level Engineering analyses through the Estimated Base Flood Elevation Viewer (Estimated BFE Viewer). Base Level Engineering uses high resolution ground elevation data, flood flow calculations, and fundamental engineering modeling techniques to define flood extents for streams. The viewer is an effective tool for property owners, community officials, and land developers to identify flood risk, estimated flood elevations, and flood depths for watersheds where Base Level Engineering has been prepared.

The Estimated BFE Viewer and the information generated are not for flood insurance rating purposes. Users should always consult community officials to discuss the flood risk for their area, obtain information on local building requirements and permits, or to view an official copy of the affected Flood Insurance Rate Map (FIRM). For National Flood Insurance Program insurance rating purposes, visit the FEMA Flood Map Service Center (https://msc.fema.gov) to view the FIRM online.

Estimated Base Flood Elevation (BFE) Viewer
Flood Risk Information Report

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Texas</td>
</tr>
<tr>
<td>County/PMS</td>
<td>Harris</td>
</tr>
<tr>
<td>Longitude/Latitude</td>
<td>+96.412564,-31.355745</td>
</tr>
<tr>
<td>Estimated Flood Risk</td>
<td>High</td>
</tr>
<tr>
<td>Estimated Base Flood Elevation</td>
<td>215.7</td>
</tr>
<tr>
<td>Estimated depth /spanning</td>
<td>3</td>
</tr>
</tbody>
</table>

*The information for each report is dependent on the location of the inquiry marker placed by the user. Address locators are not 100 percent accurate in identifying addresses, and results are not considered an official determination. Users should zoom in and verify the location of the marker prior to printing.*

Using the Estimated BFE Viewer

As part of the Risk Mapping, Assessment, and Planning (Risk MAP) process, FEMA is required to review the validity of the flood hazard information every five years. FEMA is currently preparing casualty flood hazard analysis at a watershed basis to support the assessment of the flood hazard data shown on their Flood Insurance Rate Maps (FIRM). The flood hazard uses high resolution ground elevation data, calculates high level flood flow estimations, and prepares hydraulic modeling to determine how natural water courses convey the predicted flood and defines estimated flood extents. The analysis is also being made available to local communities and state entities who assist FEMA in the administration of the National Flood Insurance Program (NFIP).

This analysis is based on current conditions in the near available land use data, providing valuable flood risk information for a number of streams that are currently not included in FEMA’s flood inventory. This effort provides flood hazard data for the 100-year annual chance flood event, providing data that can be used for local planning and development and in advance of a FIRM update.

To allow individual communities, states and residents entries an opportunity to engage with the results, FEMA developed the Estimated Base Flood Elevation (BFE) Viewer. The viewer provides an estimated flood risk (high, moderate, low), returns site-specific estimated flood elevations and flood depths. The interactive viewer can be accessed at https://gpm.floodplains.gov/certfle.

Steps for Viewing the Estimated BFE
After accessing the Estimated BFE Viewer at https://gpm.floodplains.gov/certfle, users must first click "On" to agree to the privacy and security terms of the site in order to use the application.

Step 1: A welcome window will provide an address search window, or users may click "continue" and type the address of interest on the search window above the map. Enter a street address or place either of these search tools.

Step 2: Verify the location of interest. Select the Drop Pin feature from the top tool bar and place the pin at the point of interest. If the pin is red, the users should zoom in to the area of interest. Users should locate the structure and place the "pin" at the farthest upstream edge of the building or property of interest.
HAYS COUNTY

KNOW YOUR RISK

- 257.9 sq. miles of the county is in the PMR study area
- 68,834 population based on 2010 census
- 55.1% expected population growth from 2010-2021
- 91 claims for structures repeatedly damaged by flood
- $4.7M in severe repetitive loss

9.5% of the area being studied is flood-prone during a 1% annual chance storm event

Participating in the National Flood Insurance Program: 597.3 CNMS stream miles

Stream Miles Detail Studied: 34.7%

Flood-related presidential disaster declarations in your county

KEEPING COMMUNITIES INFORMED: Your Risk MAP Timeline

- Discovery
- Project Kickoff
- Flood Risk Review
- Preliminary Map Release
- COC Meeting
- Open House
- Appeal Period
- Letter of Final Determination
- Effective Maps
Flood Risk Report: Potential Next Steps

**TAKE ACTION: Potential Next Steps**

Localized flood-risk reduction structures and the acquisition of flood-prone properties are eligible projects under FEMA's Hazard Mitigation Grant Program, Pre-Disaster Mitigation, and Flood Mitigation Assistance grants. Read more about the FEMA Hazard Mitigation Assistance grant programs on the Texas Division of Emergency Management (TDEM) fact sheet. Opportunities can be discussed with the TDEM mitigation team.

Monitoring river flows is a matter of public safety, environmental protection and wise economic development. WaterWatch is a U.S. Geological Survey (USGS) website that displays maps, graphs, and tables describing real-time, recent, and past streamflow conditions for local, State, and Federal needs. The USGS streamgageing network reports consistent results using standard techniques and technology. Visit the WaterWatch website to learn more.

Issued by the Association of State Floodplain Managers, the Guide to Higher Regulator Standards in Floodplain Management describes stricter measures to minimize flooding impacts. Implementing higher development standards reduces the risk to life and displacement of residents, property and environment damage, and the burden on community infrastructure and services.

The Texas Floodplain Management Association (TFMA) is currently revisiting higher regulatory standards to transform the national guidance into a document applicable for communities in Texas. Stay informed of the progress by visiting their website, or by reading the TFMA newsletter.

The National Weather Service (NWS) StormReady program uses a grassroots approach to recognize communities who demonstrate severe weather readiness and are better prepared for increasing vulnerability to extreme weather events. Visit the StormReady website to learn more.

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1. [https://www.tdps.state.tx.us/deep/Mitigation/hmgp_fact_sheet.pdf](https://www.tdps.state.tx.us/deep/Mitigation/hmgp_fact_sheet.pdf)
Flood Risk Datasets

- Describes variability of risk within (and around) of the Special Flood Hazard Area (SHFA)
  - Water Surface Elevation Grids
  - Flood Depth Grids
  - Changes Since Last FIRM
  - Annual Percent Chance Grids
  - 30 Year Percent Grids
  - Areas of Mitigation Interest
  - Others as identified

- May be produced for other natural hazards
Provide a Recipe for Resilience

- **Recipe Cards**
  - Show community officials **how to pair our flood risk products with their local data**
  - Include **step-by-step procedures** for spatial analysis
  - Build local knowledge, stimulates awareness, **increases capability and capacity**
Resilience Toolkit

- **FEMA Flood Risk Products with FloodSmart Tools**
  - Depth Grids ➔ **Cost of Flooding Tool**
  - Percent Annual Chance Grids ➔ **What is your Flood Risk?**
  - Changes Since Last FIRM ➔ **Agent Referral Service/Targeted Outreach**
Monthly Virtual Brown Bag Trainings

Suite of monthly trainings to help communities become more flood-resilient by using flood risk data for future development, emergency planning, and risk communications.

- Live tutorials on pairing local data with FEMA data to develop flood risk assessments;
- Understanding the LOMA process
- Tracking community progress toward resilience through mitigation action; and
- Enhancing risk communication through social media and other tools.

https://r6virtualbrownbag.eventbrite.com
What is the most common question you receive about flood risk in your community?
Get the Word Out About Your Event

- Invite: Insurance Agents, Real Estate Professionals, Lenders, Surveyors, Local officials
  - Register through EventBrite—free online tool, reminders, follow-up emails
- Announced through FloodSmart’s Agent Database, GovDelivery, Floodplain Management Association, Local Officials, and Community Contacts
- Utilize State Contacts – Insurance, Real Estate, NFIP
Get the Word Out About Your Event

DO YOU KNOW YOUR FLOOD RISK?

TUE, MAR 29 AT 16:00 AM, GRENA, LA

Flood Risks Are Changing in Jefferson Parish- Insurance Workshop (WB)

By: FEMA Region 6 - Mitigation

To help you better understand where the changes are occurring on the new flood maps, more about the Newly Mapped Procedure and Grandfather rating options, Policy Conversion and retaining customers whose risk is reduced, impacts of reform legislation and upcoming changes to the NFIP, and using new tools and resources to assist you, Jefferson Parish has partnered with FEMA to hold two Insurance Workshops. This information is also valuable to Real Estate professionals, lenders, builders, and surveyors.

There is no charge for these workshops and we encourage you to share information about this event with other flood insurance agents, lenders, surveyors, builders and real estate professionals. An earlier Insurance Workshop is offered on March 14. Register for this event at: http://floodinsuranceworkshop.eventbrite.com

Your clients will view you as an important resource to accurately explain their changing flood risks. So, plan to attend one of these important Workshops to become better prepared when your clients call. For more information about flood insurance, visit Agents.FloodSmart.gov.

WHEN
Tuesday, March 29, 2016 from 10:00 AM to 12:00 PM (CDT) - Add to Calendar

WHERE
West Bank Council Chambers - General Government Bldg - 2nd floor 200 Derbigny St., Gretna, LA 70053 - View Map
FloodSmart Resources for Public Meetings

• Fact Sheets
• Pamphlets
Insurance Workshops

- Coordinated with local communities, often with Flood Risk Open Houses
- Focused on Communities where new maps indicate risk is changing for significant numbers of structures
- Aimed at reaching Insurance Agents, Real Estate Professionals, Lenders, Surveyor, Community officials
- 2-Hour Workshop – Course approved for 2-CEUs through TX Dept of Insurance, ASFPM and TFMA
Insurance Workshops

- Announced through: FloodSmart’s Agent Database, Local Officials, Community Contacts

- Invite: Insurance Agents, Real Estate Professionals, Lenders, Surveyors, Local officials
  - EventBrite – Free online tool, follow-up emails

- 2-Hr Workshop on Flood Study background, Flood Insurance, Resources, Preview of Maps (online)
  - Prior to each Flood Risk Open House
  - Covers the Effects of Map Changes on Insurance
  - Encourages use of FloodSmart Tools with customers
  - Hands-on digital map support
  - Follow up Resources and PPT emailed to attendees
Make it Relevant

- FloodSmart tools application
- Useful to starting conversations around risk
- Meaningful to residents/clients
Community-Led/ FEMA-Supported Outreach
Setting up the Open House Event

- Coordination with FEMA: Mitigation staff (Risk Analysis/ Floodplain Management/ Insurance), External Affairs
- State: NFIP Coordinator
- Communities: Local Floodplain Administrators, Public Works, County/Parish officials
- FEMA’s Mapping Partners
- Maps available for Citizens
- Location for event
- Publicity
Provided to Communities at the CCO Meeting

FEMA FLOOD INSURANCE RATE MAP OPEN HOUSE

2 PM - 7 PM March 25
R.K. Smith Middle School Cafetorium
281 Judge Edward Dufrasne Parkway, Luling

Find your property on new maps and learn your flood risk
Get answers to your questions from parish and FEMA reps
Learn about how flood insurance decreases or increases

DO YOU KNOW YOUR FLOOD RISK?

Attend the Upcoming Flood Risk Open House

FLOOD RISK OPEN HOUSE
Thursday, Nov 6, 2014 2-7 pm
City of Rockport Public Works
2751 SH 35 Bypass
Rockport, TX 78382

Join Aransas County for an opportunity to view the newly updated Flood Maps
- Find your property on new flood maps, and learn your current flood risk.
- Get answers to your questions from State NFIP and TDI Reps, Community Officials, and FEMA representatives.
- Learn about flood insurance from the experts.
- Get information on how the newly updated maps may impact flood insurance rates and requirements.
- Hear about potential cost savings.

For more information, visit www.txchart.com
Resources for Communities

- Infographic - [http://www.fema.gov/media-library/assets/images/92188](http://www.fema.gov/media-library/assets/images/92188)
- FloodSmart.gov – Community Resources - [https://www.floodsmart.gov/floodsmart/pages/partner/partner_index.jsp](https://www.floodsmart.gov/floodsmart/pages/partner/partner_index.jsp)
Your Turn to Share:

If you could develop a Risk Communication product, what would it be about?
QUESTIONS?

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We’re Listening!

If you could develop a Risk Communication product, what would it be about?