





November 16, 2023



Insurance Industry Panel Discussion

Our Panelists



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Our Presenters



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MISSISSIPPI INSURANCE DEPARTMENT



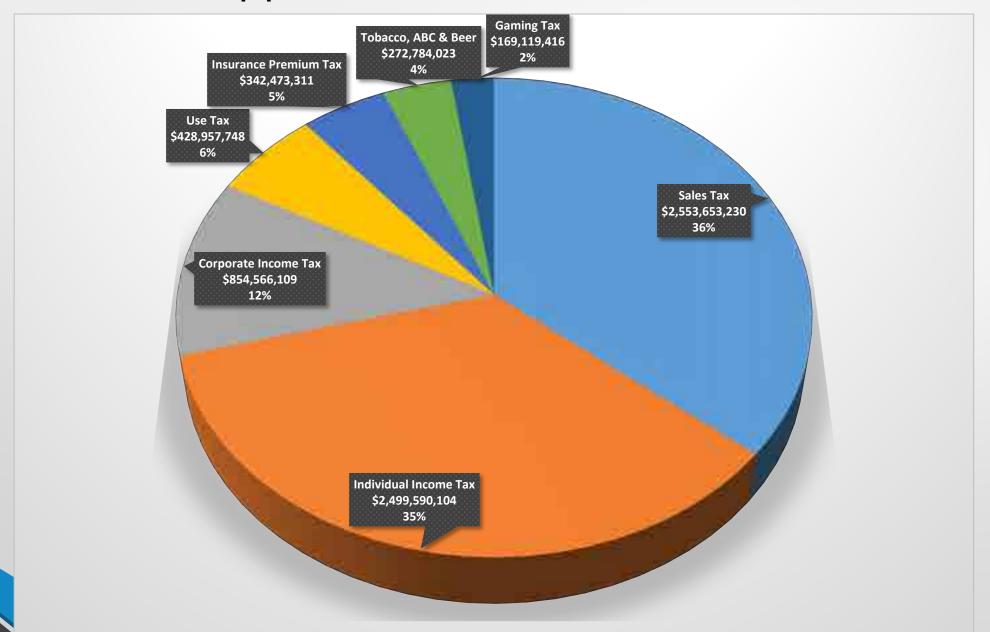
Insurance Market Overview

Gulf Coast Regional Policy Forum November 16, 2023

Overview of MID

- Over 2,300 entities that are either licensed or registered to do business in MS
- Forty-Four (44) insurers domiciled in MS
- \$15.8 billion in premium written in MS with over \$340 million in premium tax being sent to the General Fund
- Over 40,000 insurance producers licensed in MS with over 16,000 being a resident of MS
- Over 12,00 complaints received in our Consumer Services Division
- Over \$6 million in payments made back to the Consumer
- More than 1,300 Mississippians used the Life Insurance Locator in 2022 with over \$57 million in benefits distributed

Mississippi General Fund Revenue (FY 22)



Participation in Key NAIC Committees, Task Forces and Working Groups

- Climate and Resiliency (EX)Task Force
- Health Insurance and Managed Care (B) Committee
- Property and Casualty Insurance (C) Committee
 - Catastrophe Insurance (C) Working Group
 - NAIC/FEMA Advisory Group
- Anti-Fraud (D) Task Force
- Financial Condition (E) Committee
- Innovation in Technology and Regulation (H) Working Group

Topics for Discussion

- Overview of the Current Insurance Market
- Impact of Severe Weather
- Mitigation



Overview of the Current Insurance Market

12-month percentage change, Consumer Price Index, selected categories, not seasonally adjusted

— All items — Food

— Food at home — Food away from home

Gasoline (all types)

- Natural gas (piped)

Commodities less food and energy com...

- New vehicles

Services less energy services

— Medical care services



- Energy

- Apparel

- Shelter

- Electricity

- All items less food and energy

- Education and communication

- Medical care commodities





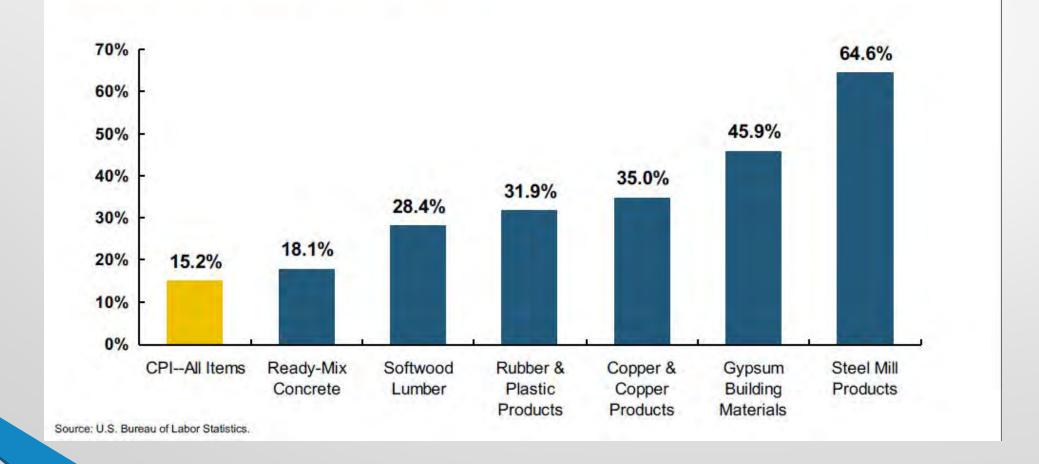
Producer Price Index: Lumber and Wood Products, Jan. 2020 – Jan. 2022

Lumber & Wood Product prices surged during the pandemic, peaking in mid-2021 and remain 62% above pre-COVID levels

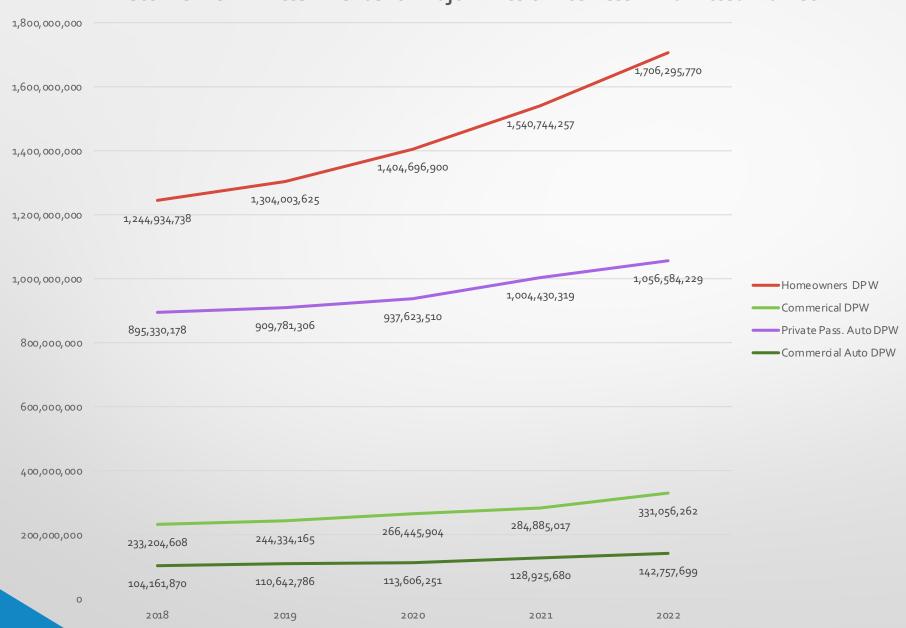


Sources: US Bureau of Labor Statistics; Risk and Uncertainty Management Center; University of South Carolina

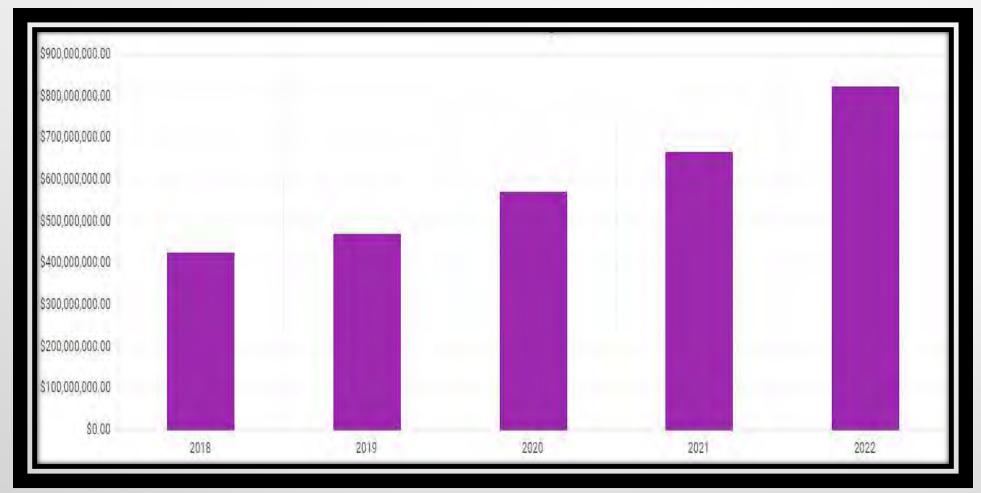
Change in Cost Indicators for Selected Construction Inputs, Jan. 2020 – Dec. 2022



Direct Premium Written Trends for Major Lines of Business in Admitted Market

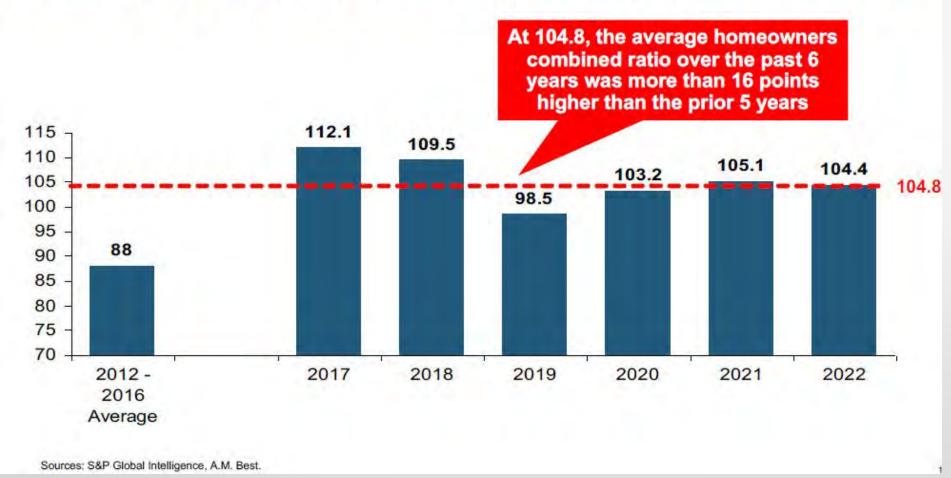


Surplus Lines Premium Written since 2018



Source: MS Surplus Lines Assn.



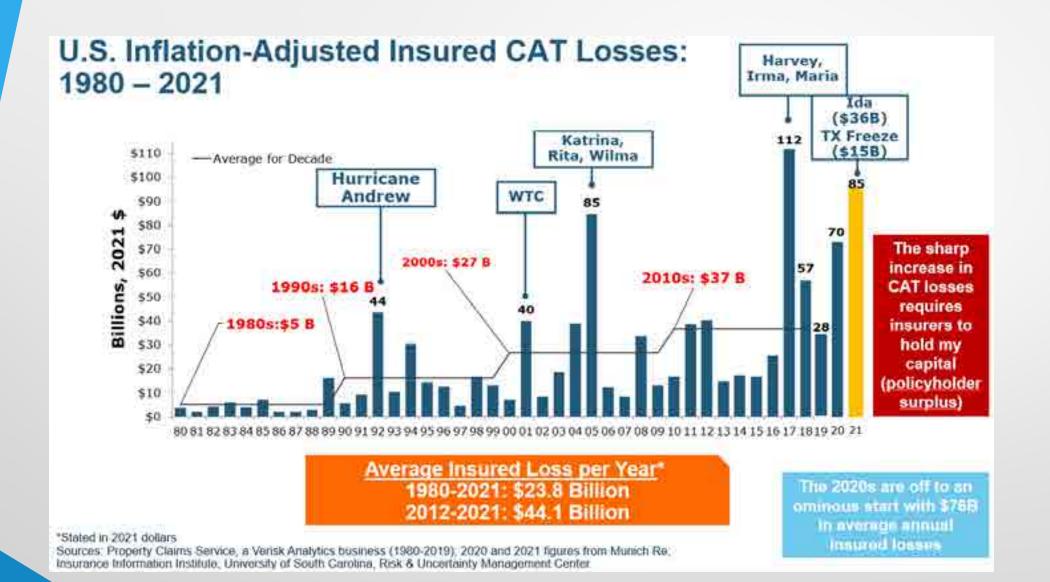


SUMMARY

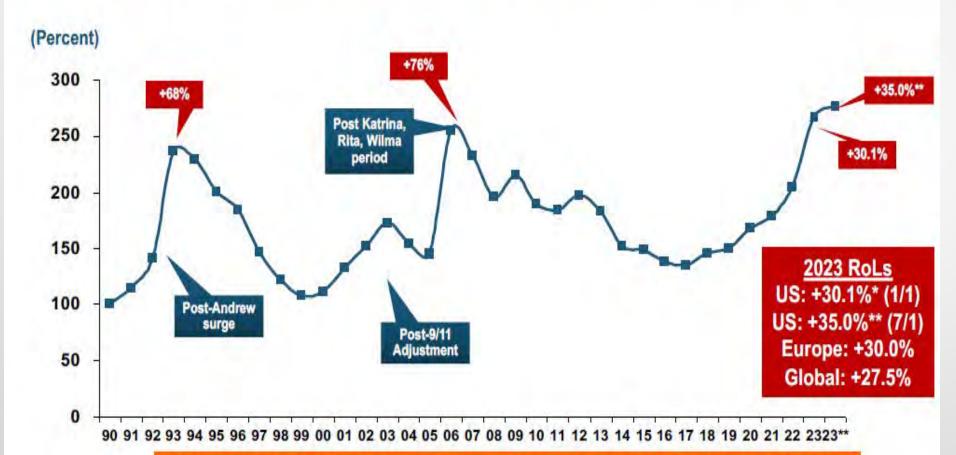
- P&C insurance industry is experiencing a sharp increase in claim severities affecting property, liability and auto coverages
- Loss ratios are increasing rapidly
- Inflation, record/near-record catastrophe losses, demand surge and the increased dangerous driving behaviors are all contributing to the increase in severities and loss ratios
- Investment income has been falling in recent years
- Given current trends, rate adequacy is a concern
- Insurers use current trend data to develop rates prospectively, hence the pressure adjust rates accordingly



Severe Weather and Homeowners Insurance



US Property Catastrophe Rate-on-Line Index: 1990 - 2023*



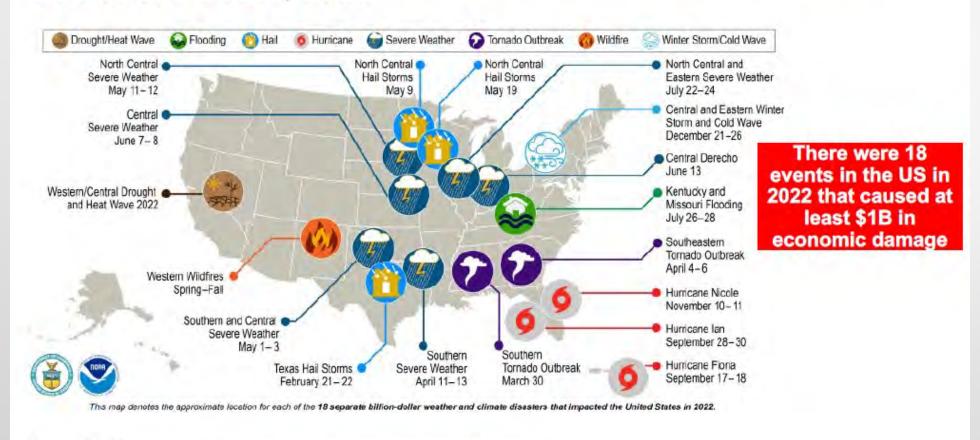
US Property-CAT Reinsurance Pricing Is Sensitive to CAT Activity and Ultimately Impacts Primary Insurance Pricing, Terms and Conditions.

Source: Guy Carpenter; Artemis.bm accessed at: http://www.artemis.bm/us-property-cat-rate-on-line-index

^{*}As of January 1 each year.

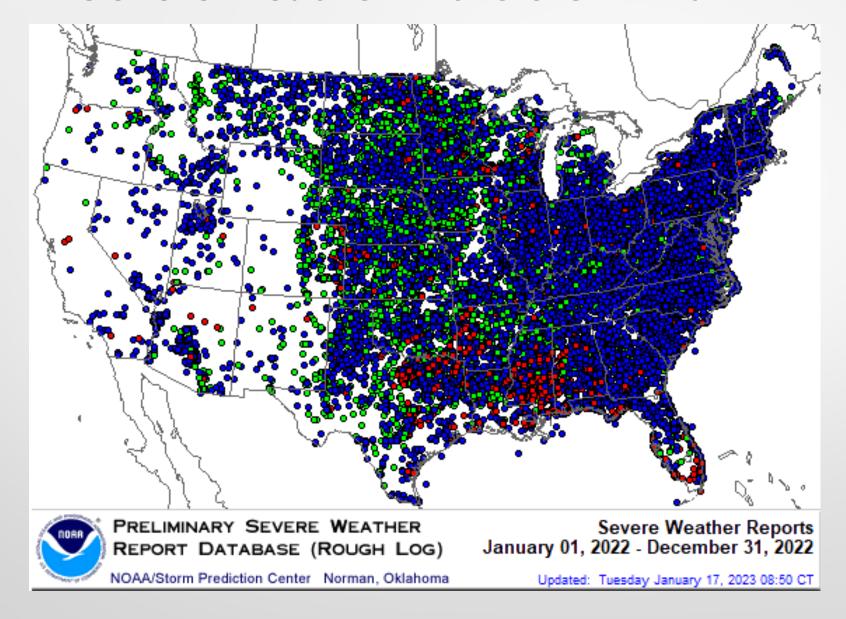
^{**35.0%} figure is the change in reinsurance rate for period from January through July 2023 relative to Jan. 1, 2022.

US Billion-Dollar Weather and Climate Disaster Events, Economic Costs, 2022

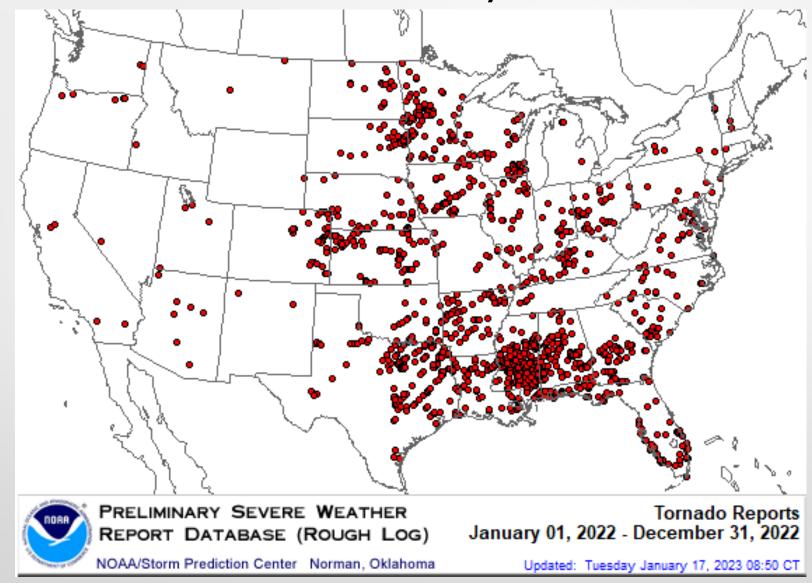


Source: NOAA, accessed at: https://www.ncei.noaa.gov/access/billions/time-series.

Severe Weather in the U.S. in 2022



Tornado Activity in 2022



Severe Weather in MS in 2020

Total Reports = 755

Tornadoes = 127

Hail Reports = 95

Wind Reports = 533

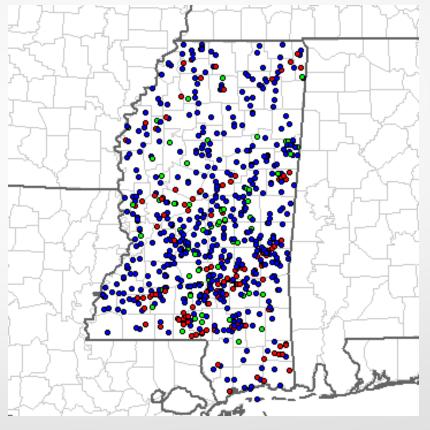


Chart and data obtained from NOAA/National Weather Service

Severe Weather in MS in 2021

Total Reports = 544

Tornadoes = 92

Hail Reports = 71

Wind Reports = 381

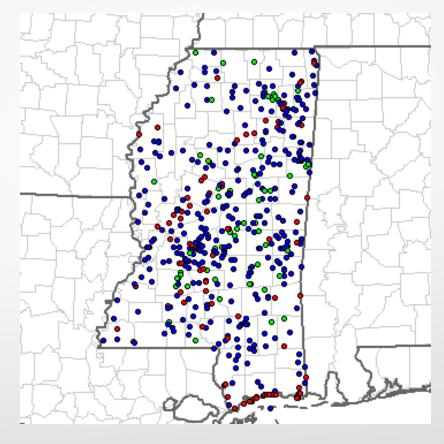


Chart and data obtained from NOAA/National Weather Service

Severe Weather in MS in 2022

- Total Reports = 843
- Tornadoes = 184
- Hail Reports = 108
- Wind Reports = 551

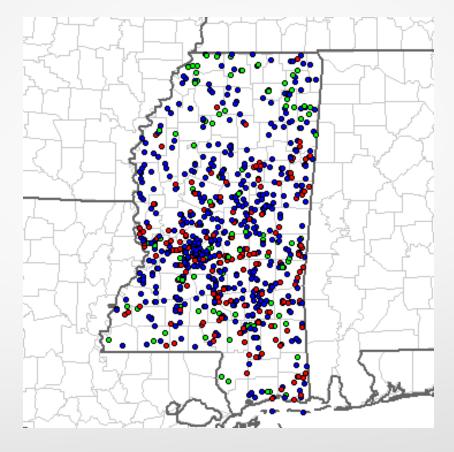


Chart and data obtained from NOAA/National Weather Service

Gulf Coast states, including Mississippi, are among the most expensive U.S. states for homeowners' insurance

Ten Most Expensive U.S. States for Homeowners' Insurance in 2018(1)



- · States with coastal exposure along the Gulf of Mexico are four of the ten most expensive states for homeowners' insurance
- . All of the Gulf Coast states are at risk from large hurricanes, as well as from hallstorms and tomados

(1) Undersorp data includes posces within by Centers Property insurance Corp. (Figure Property Insu Association, Mississippi Windstorm Underwriting Association, North Carolina Joint Uniderwriting Association and South Carolina Wind and Hall Underwriting Association, Other southwestern states have wind poors in operation and their data may not be included in this chart. Second on the HC-3 homeowner package policy for owner-occasied direllings, if to 4 family units: Provides "all risks" coverage (except those blandifically excitable in the policy) on beliatings and broad nutries peril coverage on personal property and is the most common package written

(2) The Texas Department of Insurance developed home insurance policy forms that are straine but not disminal to the strained forms. In addition, doe to the Texas Windows toturance Association (which writes wind-only policies) classifying PIO-1, 2 and 5 premiums as PIO-5, the average premium for homeometric inscrance in TX may be overstailed.

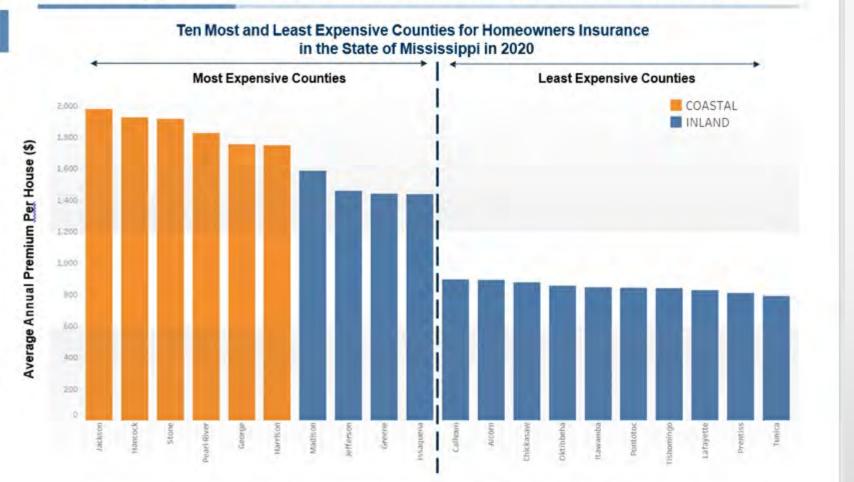
Note: Average previous - Premiums per house year. A house year is equal to 365 days of incured coverage for a single dwelling. The NAIC docs not raim state asserted expenditure and does not endure any constitutions share from the duta.

Source, © 2018 National Association of Insurance Commissioners (NA/C). Reprinted with permission, Fulfiller reprint or distribution strictly prohibited without written permission of

April 45 JULY

ALVARIEZ & MARSAL

Homeowners' insurance premiums are higher in Mississippi's Coastal counties than its Inland counties



Source: Data provided by Participating Insurers and A&M analysis. Note these results are averages that include renters (HO4) and condominium (HO6) insurance policies, whose Direct Earned Premiums are substantially lower than those for policies that cover structural damage to the property as well as to contents.

Actual premiums are lower than costs, while trended / modeled premiums are higher than costs, both on the Coast and Inland



Source: Participating Insurers' Annual Statements, data submitted to the Department by Participating Insurers in response to the Data Call, and A&M analysis

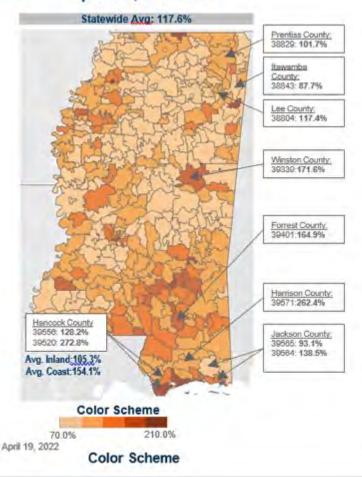
^{1 &}quot;Actual" Avg. Prevalunt represents the appreções Oracl Earned Prevalun ("OFF") over the pact if? years covered by the Date Cell, divided by the appreções Adjusted Earned Provide Years during the same period. "Fronded" OEP is adjusted to inflect transis over the past if years as further described elsewhere in the resort.

^{2 &}quot;Actual" Avg. Coal represents the aggregate Combined Coats over the past 17 years covered by the Data Call, divided by the aggregate Adjusted Elemed House Years during the same penal. Certain components of "Modeled" Combined Costs are adjusted to reflect trends over the past 5 years as further described in the section of time report, and to replace actual wind catastrophe losses and ALAE with the Modeled amounts. Unjufficiented costs and the net cost of remainspose are estimated both in the "Actual" and "Modeled" approaches. The above results are averages that include renews (HOR) and condominium (HOR) insurance policies, whose premiums are substantially lower than those for policies that cover structural dynage to the property as well as to community.

Actual Combined Ratio:

Mapping the raw data by zip code for 17 years illustrates higher combined ratios near the coast as well as the level of variation within narrower regions

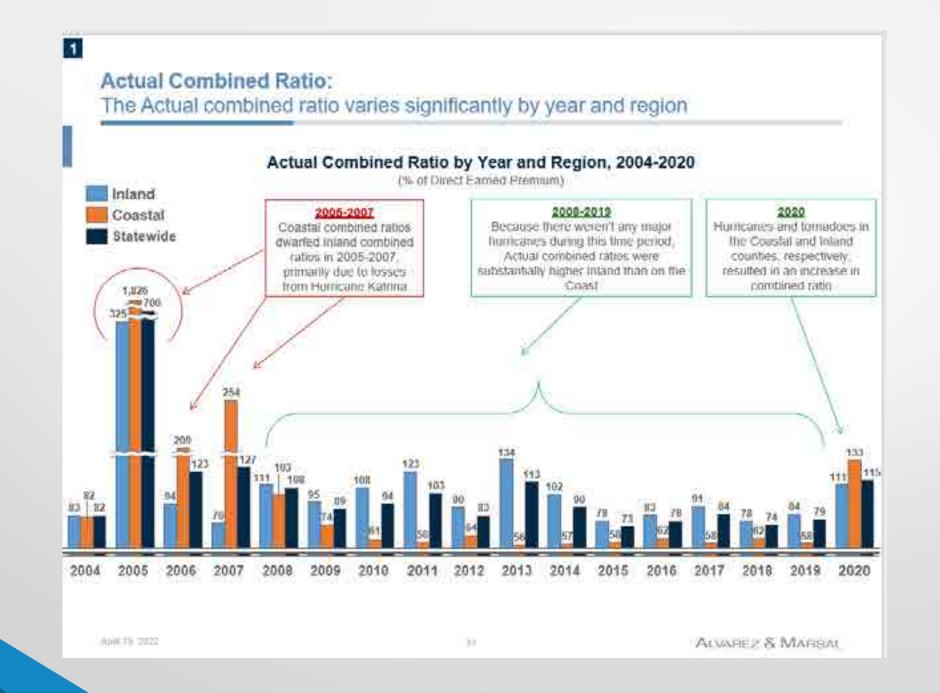
Actual Combined Ratio by MS Zip Code, 2004-2020



Key Observations:

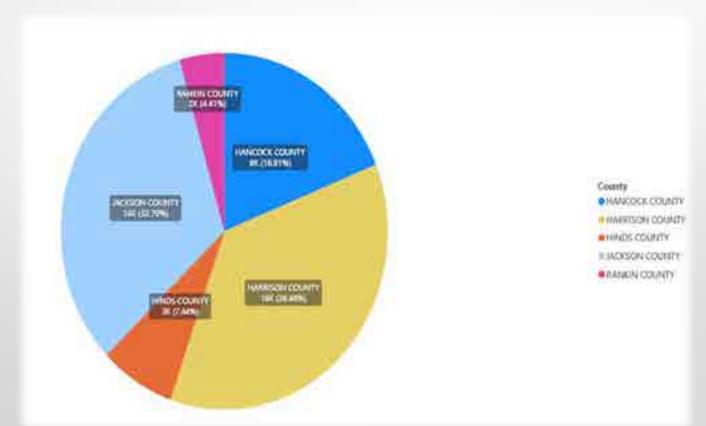
- The "Actual" combined ratios are much higher in the Coastal region than Inland
- A combined ratio of more than 100% means the insurers' premiums don't cover their costs
- In Mississippi, nearly half of all zip codes have a combined ratio of greater than 100%
- The statewide average combined ratio is greater than 100%

ALVAREZ & MARSAL

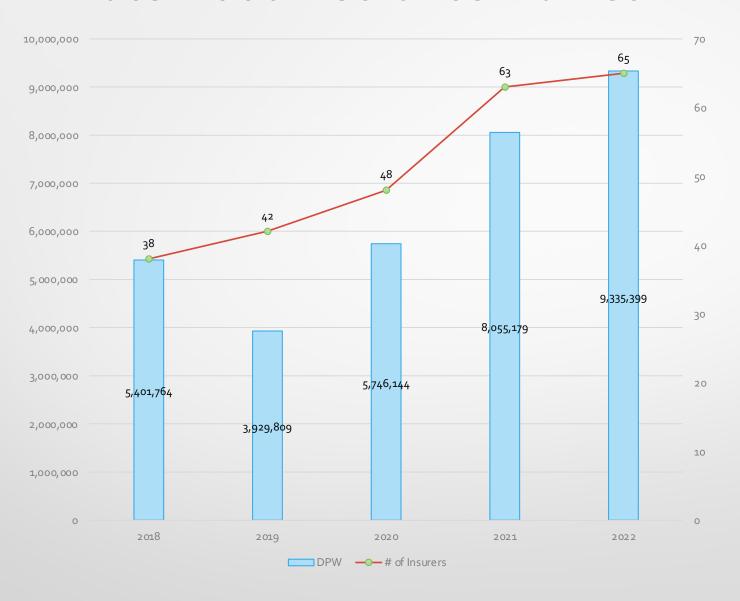


National Flood Insurance Program

- The vast majority of property protection for flood is offered through the NFIP.
- There are in excess of 57,000 policies in force in Mississippi with a TIV of roughly \$15.3 Billion.



Private Flood Insurance Market in MS



Mississippi — Risk Rating 2.0

With the implementation of Risk Rating 2.0, FEMA delivers rates that more accurately reflect flood risk and ensure the National Flood Insurance Program will be here for this generation and generations to come.

National Flood Insurance Program in Mississippi



NFIP Policies in Force by County in Mississippi A significant part of FEMA's NFIP Transformation is Risk Rating 2.0, which will fundamentally change the way FEMA prices insurance and determines an individual property's flood risk.

> Risk Rating 2.0 is equity in action. With Risk Rating 2.0, individuals will no longer pay more than their share in flood insurance premiums based on the value of their homes. Roughly two-thirds of policyholders with older pre-FIRM homes will see a premium decrease.

FEMA will reduce disaster-related suffering and disaster-related costs in Mississippi through insurance and the mitigation of flood risks by leveraging advances in industry best practices, technology, and flood risk modeling.

FEMA's core mission and programs continue to emphasize purchasing flood insurance and pursuing mitigation options to achieve resiliency. While there are many policies in force in Mississippi, there are still opportunities to increase participation in the program to improve resilience, as shown in the table below.

NFIP Policies in	Properties in MS Not	Average NFIP Claim Payout in MS in the Past 10 Years	Average Individual Assistance Claim
Force in MS	Covered by NFIP Policy		Payout in MS in the Past 10 Years
61,300	1.0 million	\$24,700	\$6,900

Risk Rating 2.0 in Mississippi



Property Market Activity - Withdrawals

- Palomar Specialty Insurance Company (Homeowner)
 - 4,235 policies in force
 - \$8,135,703 Annual Premium
 - Rolling non-renewals began May, 2022
- AIG Property Casualty Company (Multi-line)
 - 816 Policies in force
 - \$3,167,345 Annual Premium
 - Rolling non-renewals began April, 2022

Property Market Activity - Withdrawals

- QBE Insurance Corporation
 - 193 polies affected
 - \$391,510 annual premium
 - Rolling non-renewal began June, 2022
- Trisura Insurance Company
 - 14,832 policies affected
 - \$32,182,997 annual premium
 - Rolling non-renewal beginning May, 2023

Property Market Activity - Withdrawals

- Nationwide
 - 3,400 Policies
 - Non-renewed
 - Re-written subject to new underwriting guidelines

Property Market Activity – Liquidations

- Fed-Nat Insurance Company (Florida Domestic)
 - Placed into liquidation September 27, 2022
 - 1,159 policies in MS as of July 15, 2022
- Southern Fidelity Insurance Company (Florida Domestic)
 - Placed into liquidation June 15, 2022
 - Number of policies affected in MS (unknown)
 - Annual premium for HO policies was \$794,952

Property Market Activity – Liquidations

- Weston Property & Casualty Insurance Company (Florida Domestic)
 - Placed in liquidation August 8, 2022
 - 93 policies in MS as of June 30, 2022
- United Property & Casualty Insurance Company (Florida Domestic)
 - Placed in liquidation February 27, 2023
 - No MS business reported
- Americas Insurance Company (LA Domestic)
 - Placed in liquidation June 23, 2022
 - No MS business reported

New Companies in the Market

- To increase competition, the MID is actively recruiting companies.
- So far in 2023, we have licensed 21 new companies.
- Six of those sell homeowners insurance.
- MID has also added 10 carriers to our eligible non-admitted list who sell homeowners insurance.
- MID is currently working with a group out of Texas to form a new Mississippi-based insurance company that has expressed interest in writing homeowners insurance in the coastal counties.

MITIGATION

- Alabama Safe Home
 - 50K Homes retrofitted IBHS Fortified
 - State Funded up to 100%, Matching Grants for Gold Level
- Louisiana Fortified Homes Program
 - Enacted 2022 Regular Legislative Session
 - State Funded Grants for Retrofit of Existing Homes
 - Must to be IBHS Standards
 - Home must be insured for wind and flood (if located in SFA)
 - Initial Funding of \$30M

U.S. CLIMATE'S ENVIRONMENT

The Coastal State Where Home Insurance Is Relatively Affordable

Homeowners in Alabama have a stable market thanks in part to the way some homes are built there

The couple decided to take out a different policy from a little-known insurer that included reduced coverage of an aging roof, which made the house vulnerable to hurricanes and other fierce weather that batter the Gulf Coast. At about \$4,500 a year, it was cheaper than a comprehensive policy, but they could still barely swing it.

Now they are poised to secure a comprehensive policy from an established carrier, along with a roughly \$1,000 discount on their premium, thanks to a new storm-resistant roof they had installed in September with the help of a \$10,000 grant from a state program. Financially, "it lets us breathe more," said Kelly Francis, 34 years old.

The average premium was \$1,243 in 2021, the most recent year for which data is available, compared with \$1,396 in 2015.

Though some insurers have retrenched, most large national carriers continue to write policies for homes built to Fortified standards in coastal Alabama.

In 2020, Hurricane Sally put Alabama's Fortified constructions to the test when it made landfall in Baldwin County as a Category 2 storm, with 105-mile-an-hour winds.

Warren Hopper rode out the storm at his home in a <u>subdivision with 84 Fortified Gold houses</u>. The structures <u>suffered minimal damage and none had water intrusion</u>, he said.

Meanwhile, a nearby neighborhood with non-Fortified homes fared far worse, he said. Roughly three-quarters of the houses sustained roof damage and wound up covered in the familiar post-hurricane blue tarps.

Source: The Wall Street Journal

Hurricane Ian – Cutlass Drive vs. Deep Passage Lane

Cutlass Drive

Year Built	Buildings	Insured	Average Building Claim		
Pre- 1980	46	26	\$210,476		
1980s	3	3	\$209,877		
19905	1	1	\$250,000		
20005	7	5	\$160,608		
Post- 2010	1	0	N/A		
Total	58	35	\$200,609		

Deep Passage Lane

Year Built	Buildings	Insured	Average Building Claim		
Pre- 1980	19	11	\$131,164		
1980s	30	24	\$65,353		
1990s	3	0	N/A		
20005	2	2	\$76,164		
Post- 2010	2	1	\$173,928		
Total	56	38	\$87,830		

Construction & Demolition Debris - Cutlass Drive versus Deep Passage Lane

- Cutlass Drive
 - 58 houses / 133,500 SF
 - 282 debris loads
 - 4.9 loads per house / 2.1 loads per 1,000 SF
- Deep Passage
 - 56 houses /127,800 SF
 - 125 debris loads
 - 2.2 loads per house / 0.98 loads per 1,000 SF





MISSISSIPPI INSURANCE DEPARTMENT

www.mid.ms.gov

(601) 359-3569 • (800) 562-2957

Mississippi Wind Underwriting Association

Our Presenters



Lee Harrell Chief Executive Officer Mississippi State Rating Bureau



Reg Ott
MSRB Coastal Services
Marketing Director



A Brief History and status of the Mississippi Windstorm Underwriting Association

> Lee Harrell Reg Ott



Year End 2022

State	Policies	TIV (Billions)
Florida	1,220,897	422.9
Massachusetts	197,177	90.5
North Carolina (Wind)	228,971	96.4
Texas	32,736	76.6
North Carolina (FAIR Plan)	198,827	24.7
Louisiana	154,507	40.9
New York	24,697	6.89
South Carolina	15,442	5.4
Alabama	18,024	6,36
Mississippi	12,265	2.45
Georgia	9,543	1.4

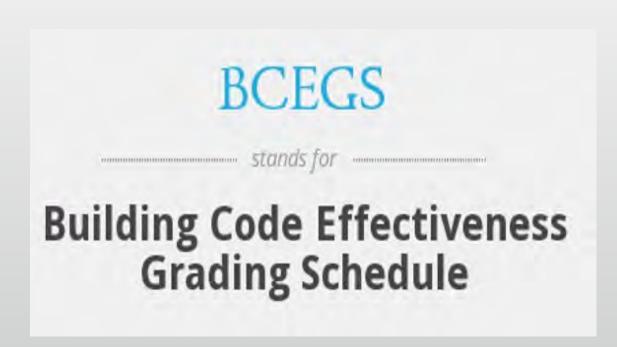
33 States have at least 1 residual plan

36 Total Residual Plans Nationwide

MS COASTAL PLAN CREATION

- Hurricane Camille in 1969
- First Mississippi Residual Plan (MIUA) 1972
- Counties Hancock, Harrison, Jackson Pearl River, Stone,
 George
- MSRB chosen to administer the Plan

MWUA WIND MITIGATION PROGRAMS





WHAT IS BCEGS?



This is a community building code enforcement rating not a specific dwelling wind mitigation rating.



BCEGS assigns each Jurisdiction a BCEGS grade ranging from 1 – 10



The lower the number the better the enforcement

WHAT IS NEEDED TO RECEIVE CREDIT?

- A valid Certificate of Occupancy (CO) from the Building Code
 Jurisdiction related to the covered location address at the original time
 of construction.
- The entire home must be constructed to the code enforced the date the CO is issued
- Certificate of Completions will not qualify, a C/O for repairs, remodeling, renovation, or an addition will not qualify for BCEGS Credit

DWELLING BCEGS CREDITS

CLASS	1	2	3	4	5	6	7	8	9
COUNTIES									
HANCOCK HARRISON JACKSON	.25	.20	.20	.17	.17	.12	.12	.07	.07
PEARL RIVER STONE GEORGE	.15	.10	.10	.08	.08	.06	.06	.03	.03

• Credits are based on the classification of the Jurisdiction at the time the C/O was issued for entire structure new construction.

IBHS.ORG



FORTIFIED Home Features & MWUA Credits

FORTIFIED Roof- 20%



Improved roof sheathing attachment, sealed roof deck, wind-rated roof cover, water-resistant attic vents (ridge and off-ridge) Protect gable end wall vents (if used to vent attic)

Silver- 25%



Impact-rated protection of windows & doors, pressure-rated garage doors, reinforced gable end walls, metal connectors to secure attached, structures, ensure that each gable end is sheathed with plywood/OSB or has fiber-cement/wood siding, if applicable, for each gable roof, improve framing of rake overhangs 18-in or greater or design professional (PE) retrofit, if damaged

Gold- 30%



Well-engineered continuous load path, reinforced/anchored wood frame chimneys

Additional Roof Coverage- Post Event

- Applies only to MWUA dwelling and mobile home policies issued on a replacement cost coverage basis.
- The coverage trigger requires 50% or more damage at time of loss to the roof.
- Re-imburse up to \$1,500 for additional expenses incurred for materials/labor and up to \$500 for IBHS Evaluator.
- The insured is responsible for arranging and coordinating the roof replacement along with finding an IBHS certified Evaluator to make recommendations and document the process.

MWUA CREATION

- MWUA Created by HB 274 in 1987 (changed MIUA to wind/hail only)
- Prior to Hurricane Katrina we were completely funded by MS Licensed Carriers (no surplus lines companies)
- Unlimited admitted carrier assessments (Katrina resulted in a \$545M)
 Surplus lines carriers not assessed.
- Revised by HB 1500 (2007)
- MWUA is incorporated and shall be a separate and independent entity and operate as a private enterprise as authorized in MS Code 83-34-3.

MWUA's Mission

- "Assure an adequate market for windstorm and hail insurance in the coast area of Mississippi."
- Protect policyholders state-wide from unreasonable Windpool surcharges.
- Avoid damaging the state-wide market for property insurance.
- Encourage better building standards and land use in the coast area in order to mitigate wind losses and depopulate the Windpool.
- While accomplishing these goals, try to avoid high rates thus helping the Coast economy revive.



MWUA KATRINA LOSSES

- □ 16,155 policies in force
- □ 18,154 claims
- □ \$1.8 billion insurance in place
- □ \$720 million losses (40% Limits in force)
- \$12M Gross annual premium
- 60 years of premium spent on Katrina losses
- \$175 million 2005 reinsurance in place250 year PML
- The remaining \$545 million in MWUA losses were assessed to and paid by admitted insurance companies.
- Non Admitted Carriers were not assessed

KATRINA LITIGATION ISSUES

- Claims Disputes
- 18,154 claims / All Disputes settled out of court
- MWUA Board sued by group of Member Companies. (insufficient reinsurance)
- Judge dismisses case during trial
 - Over \$6M spent in legal costs
- Group of Member Companies challenge assessment process.
- Commissioner upholds MWUA process to assess
- Appeals filed through courts all the way to Supreme court

Pre HB 1500 (3/07) Motivation For Leaving Mississippi

- ☐ Fear of Catastrophic losses on the coast
- Shared percentage of MWUA losses
- □ Percentage of Participation determined by state wide writings

Post Katrina Accomplishments

- HB 1500 stabilized the statewide property insurance marketplace
- MWUA Absorbed 300% growth due to a HUD Grant
- Maintained surcharge protection (reinsurance) while managing rates
- Built reserves to fund retentions and losses of future storms
- Geographic rating tiers
- Updated and modernized coverage forms
- Enhanced exposure data gathering to improve modeling data
- Administrative upgrades policy management, added staff for claims/ accounting
- Optional Named Storm Deductible Credits
- Flood requirement for A and V zones
- Mitigation Discounts validated by IBHS
- BCEGS (Code enforcement) Discounts
- Commercial Deductible revisions successfully depopulating large blanket policies
- Aggressive Re-Inspection program for proper Insurance to Values

MWUA growth since 2005

• AUGUST 29 2005

Peaked 2011

• October 31, 2023

• 16,155 polices

• 46,406 policies

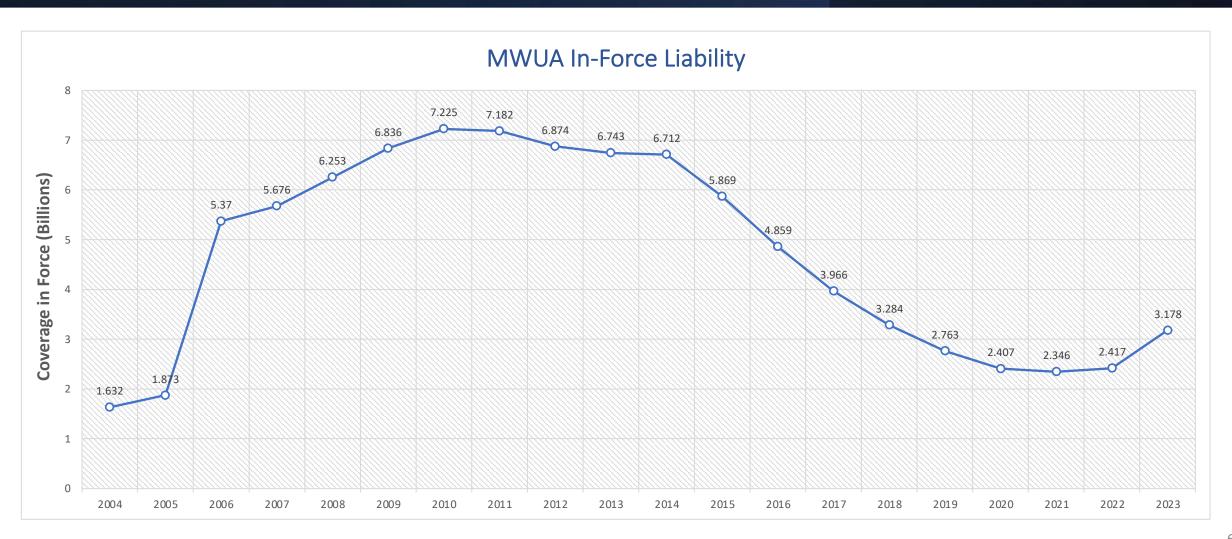
• 13,728 policies

• \$1.8 billion insured

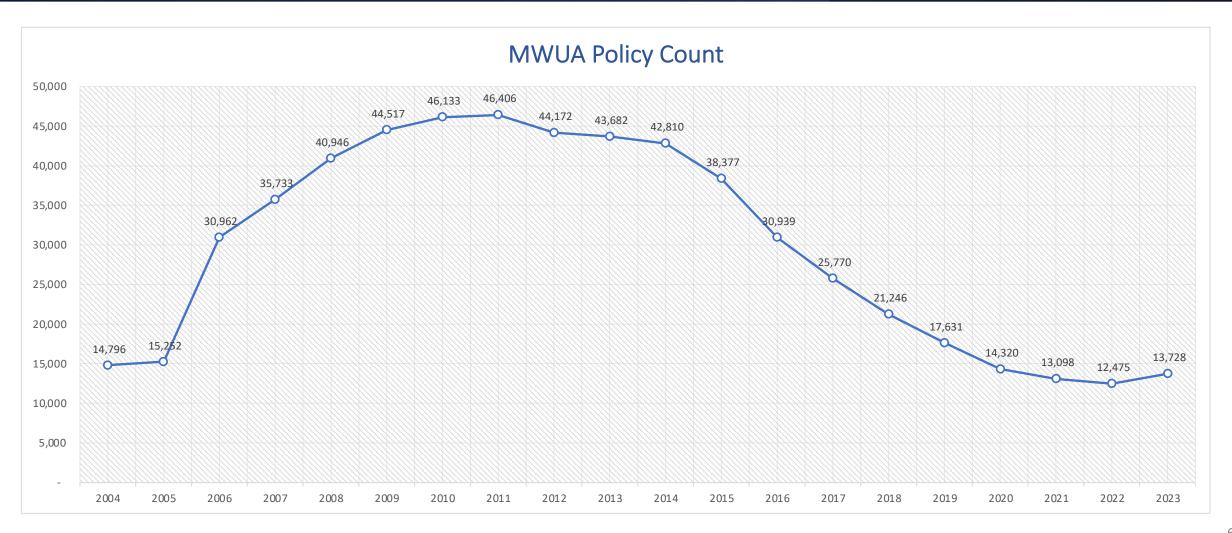
• \$7.24 billion insured

• \$3.178 billion insured

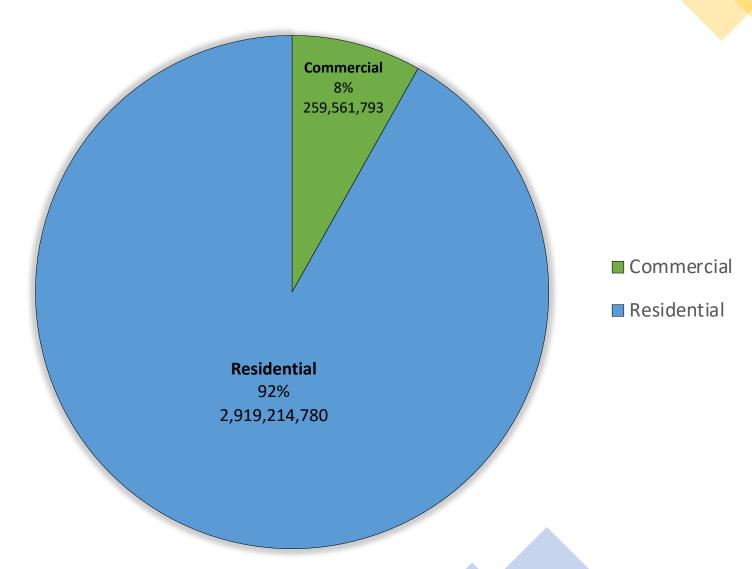
Windpool Limits in Force Trend Since Katrina



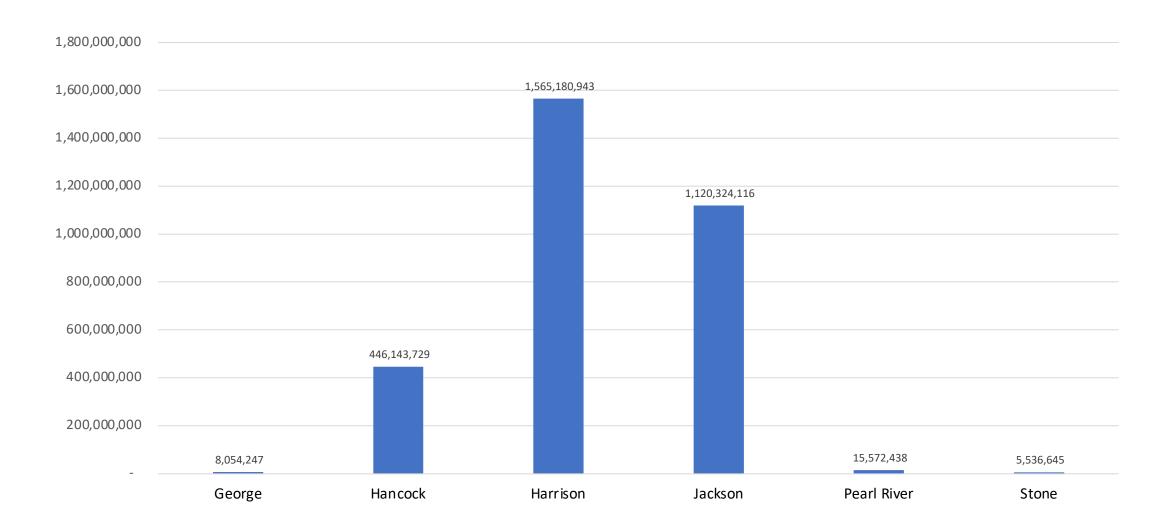
Windpool Policies in Force Since Katrina



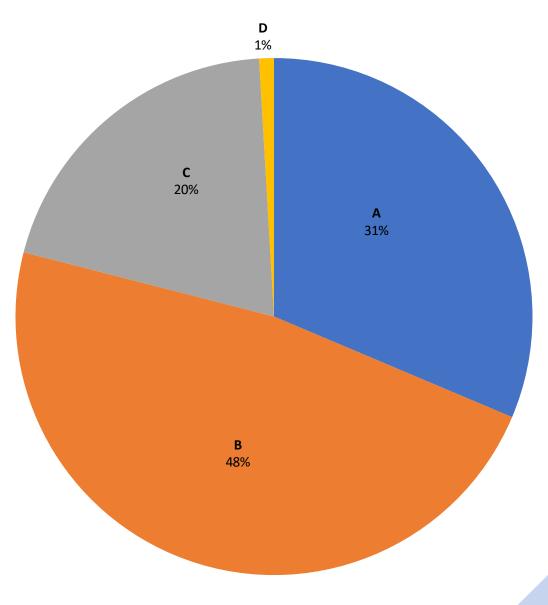
Limits by Occupancy



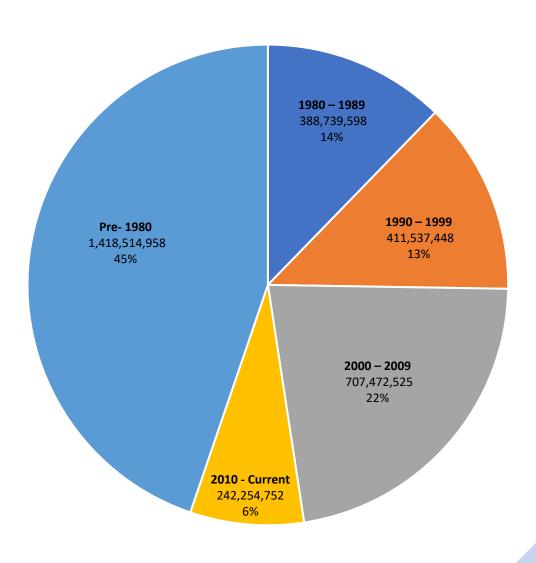
Limits by County



Limits by Rating Zone



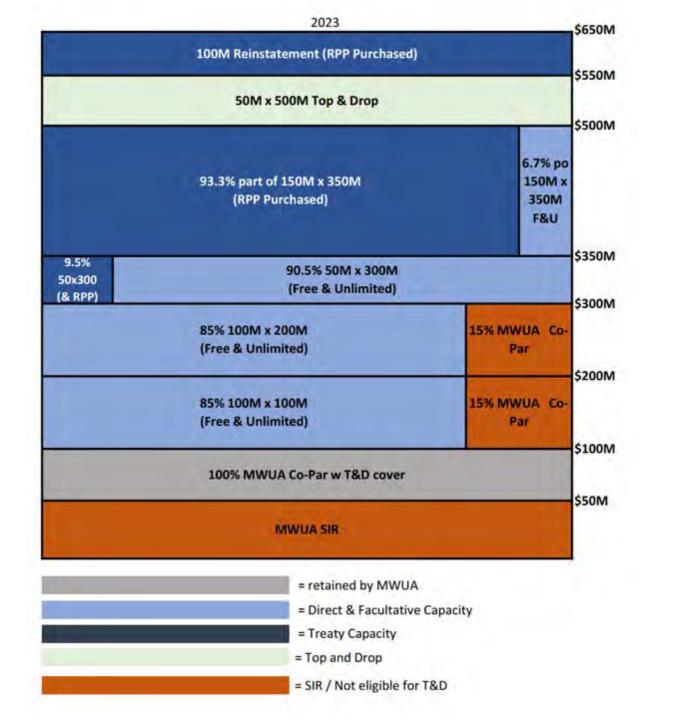
Limits by Year Built



2023 MWUA Catastrophe Funding

Hurricane Katrina Funding Chart





Wind Mitigation Program

Our Presenters



Janson D. "Durr" Boyles
Director, Secretary and Treasurer,
MississippiMitigationGrants.com
Major General/Adjutant General,
Mississippi



Thomas G. Quaka
Director and President,
MississippiMitigationGrants.com
Principal, Southern Insurance
Consulting

MISSISSIPPIMITIGATIONGRANTS.COM RESIDENTIAL WIND MITIGATION GRANT PROGRAM

Gulf Coast Regional Policy Forum Gulfport, Mississippi November 16, 2023

INTRODUCTIONS AND OVERVIEW

- WHAT IS MississippiMitigationGrants.com
- MITIGATION: A WIN-WIN-WIN FOR INSURERS, POLICYHOLDERS AND THE STATE
- WHAT IS THE REAL-WORLD WIND MITIGATION CLAIMS DATA EXPERIENCE
- WHAT IS MMG's PROPOSED RESIDENTIAL WIND MITIGATION GRANT ROGRAM

MississippiMitigationGrants.com Team

- Board of Directors
 - >Janson D. Boyles
 - **►**Thomas G. Quaka
 - >Julie A. Rochman
- Advisory Board
 - Andy E. Case, Director of Consumer Affairs, Mississippi Insurance Department
 - ➤ Karen Collins, VP, Property & Environmental, American Property Casualty Insurance Association, Sacramento, CA

Interested Parties

OVERVIEW

Historical perspective

MississippiMitigationGrants.com

- Mitigation Assistance and Grant Authority of Mississippi, Inc.
- Mississippi Nonprofit Corporation
- Registered Trade Name: MississippiMitigationGrants.com

MITIGATION IS A WIN-WIN-WIN FOR INSURERS, POLICYHOLDERS AND THE STATE

- Construction, repair and retrofitting methods strengthen structures against high winds and wind-driven rain
- Saves lives and reduces injuries
- Results in lower severity and lower frequency insurance claims
- Successful, broadly implemented mitigation has been proven to make insurance more available and affordable
- Increases resale value of home by 7% 13%
- Industry and local/state/federal government accepted standards = Insurance Institute for Business & Home Safety (IBHS) FORTIFIED standards

REAL-WORLD WIND MITIGATION CLAIMS DATA

- Experience from 2020 Hurricane Season (Hurricanes Laura, Sally, Delta and Zeta)
- Approximately 95% of the nearly 17,000 FORTIFIED homes impacted by hurricanes experienced little to no damage and had no insurance claims

PROPOSED RESIDENTIAL WIND MITIGATION GRANT PROGRAM

- Grants will pay 100% of the cost of mitigation up to \$15,000
- Grant award amount may not cover the entire cost of the work needed
- Work completed must meet IBHS FORTIFIED™ Roof or Silver standard
- Homeowners will pay for FORTIFIED™ Evaluation
 - Pilot program
- Grant award amount determined after three bids are received

SMPDD Flood Map Revision Project

Our Presenter



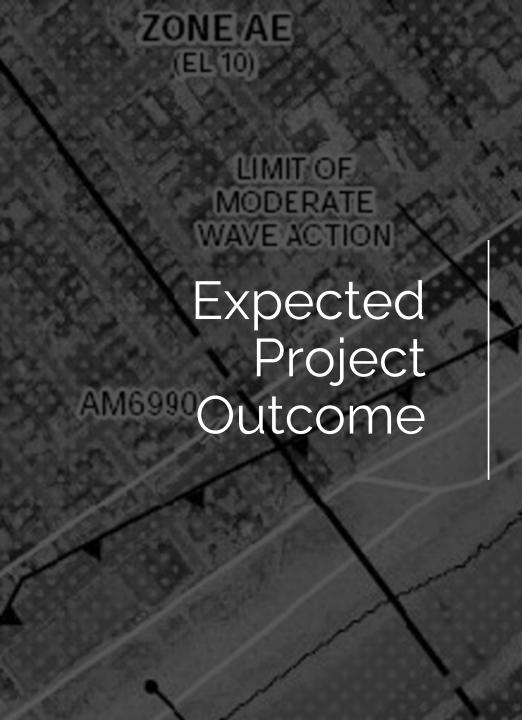
Kristyn Gunter
Director, Special
Projects Division
Southern Mississippi
Planning &
Development District





Mississippi Coastal Map Revision Project

A project to update the Flood Insurance Rate Maps for the Coastal Areas of Hancock, Harrison, and Jackson Counties



JU0472 (EL11)

- Revised coastal Base Flood Elevations (BFEs) and flood inundation boundaries for 1% (and 0.2%) annual-chance flood water levels
- Still Water Elevation data at multiple return periods (2%, 0.5% etc.)
- Revised Flood Insurance Rate Map (FIRM) panels and Flood Insurance Study (FIS) reports in Hancock, Harrison, and Jackson Counties
- Focused on Coastal Inundation area will include transition areas to merge with riverine flooding

ZONE VE (EL15)

Hancock, Harrison & Jackson Counties

Michael Baker INTERNATIONAL





Hancock, Harrison & Jackson County Boards of Supervisors Cities of Bay St. Louis, Biloxi, Diamondhead, D'Iberville, Gautier, Gulfport, Long Beach, Moss Point, Ocean Springs, Pascagoula, Pass Christian, and Waveland

Leveraging Expertise & Partnerships

















Hancock, Harrison & Jackson Counties

The Coastal landscape has changed

- Restoration Projects MSCIP/RESTORE/NFWF
- Flood Control Projects by Cities and Counties

Updated Bathymetry

Built Environment

Vegetation



MSCIP Projects

COE Seawall, Bay St. Louis, MS



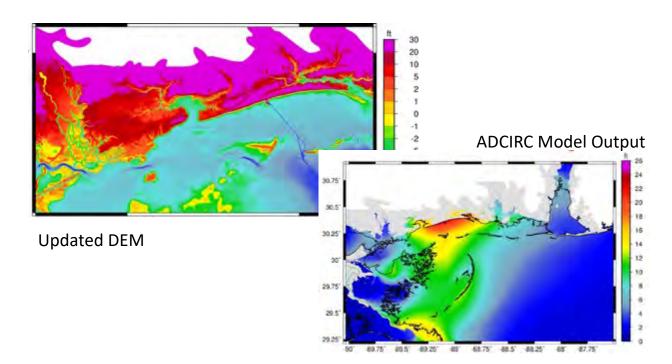
Ship Island Restoration

Changes Since 2007

This is not an appeal or challenge to the current maps, simply an update based on 15 years of new data and improved technology

We have **better data and modeling capabilities** now

- Newer, more detailed ground elevation information
- 10+ additional years of storm climatology data for the Gulf region
- Models better at replicating natural process of storm surge
- Faster computers allows for more model runs to better represent the range of possible future storms



Hancock, Harrison & Jackson Counties

Following FEMA Risk MAP Standards & Guidance

- FEMA Guidance for Flood Risk Analysis and Mapping Coastal Study Documentation and Intermediate Data Submittals - May 2014
- FEMA Guidance for Flood Risk Analysis and Mapping *Physical Map Revision (PMR) - November 2016*

From Discovery to Draft Work Maps





Defining Base Topography

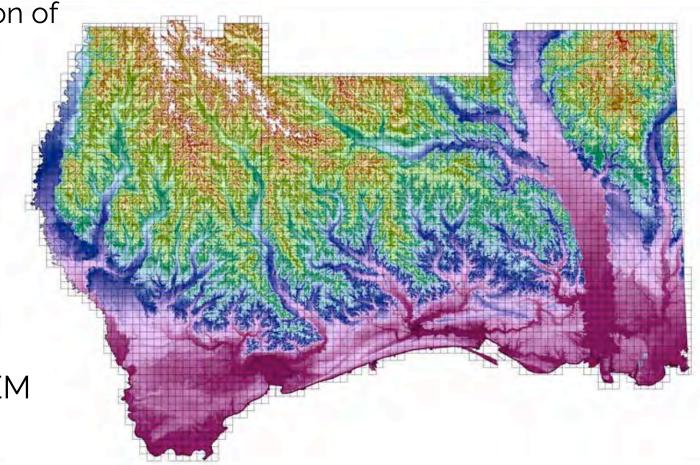
Hancock, Harrison & Jackson Counties

<u>Digital Elevation Model (DEM) Development</u>

Process is detailed and methodical. The DEM is crucial to accurate representation of flooding across the landscape.

1. Data collection

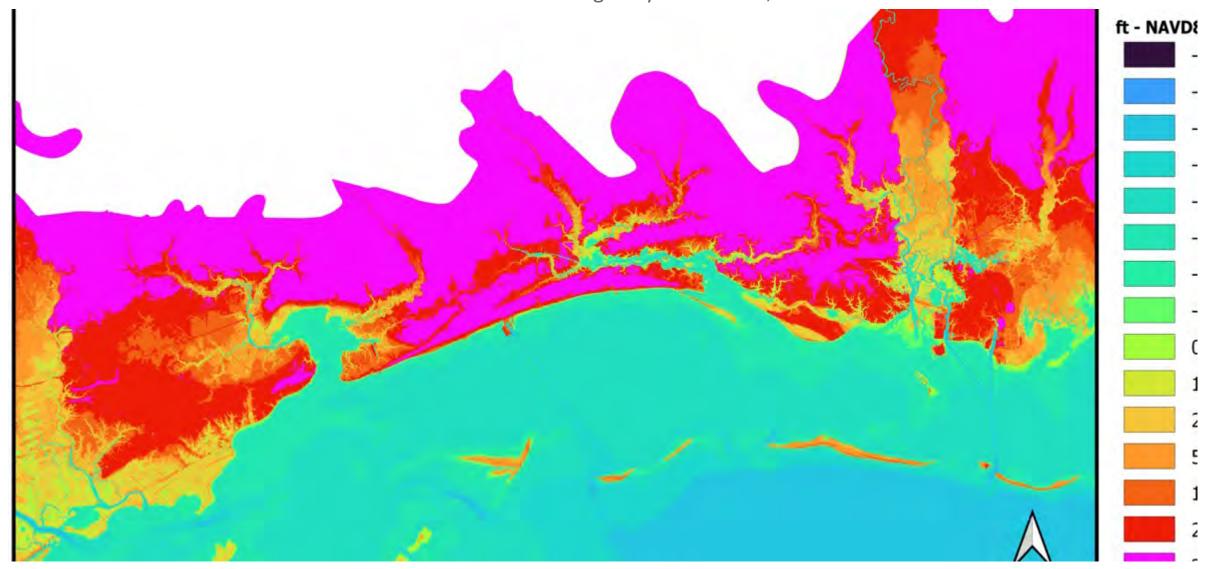
- a) Resources such as MARIS, NOAA, USACE, USGS, etc.
- b) Local coordination—obtained data from communities on recent construction projects
- 2. External technical review by MS geodetic experts
- 3. Combine datasets into single DEM



Hancock, Harrison & Jackson Counties

Digital Elevation Model

Example of the detail resolved in the model: rivers, barrier islands, dredged shipping lanes, seawalls, levees, crown elevation of highways and roads, etc.

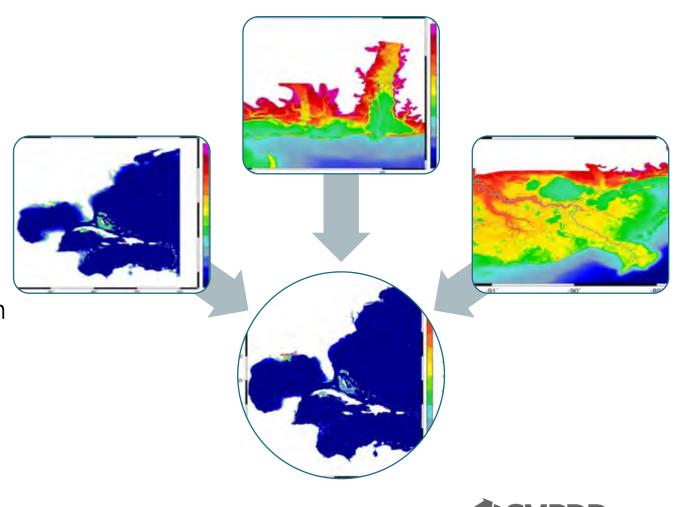


Hancock, Harrison & Jackson Counties

- Western North Atlantic/Gulf of Mexico Developed by Louisiana State University
- 2011 Northern Gulf of Mexico
 Developed by Louisiana State University
 Detailed representation of Mississippi
- 2017 Coastal Protection and Restoration
 Authority of LA (CPRA) Coastal Master Plan
 Developed by State of LA
 Best available representation of levee
 configuration and crest heights

Best Available Mesh for MS

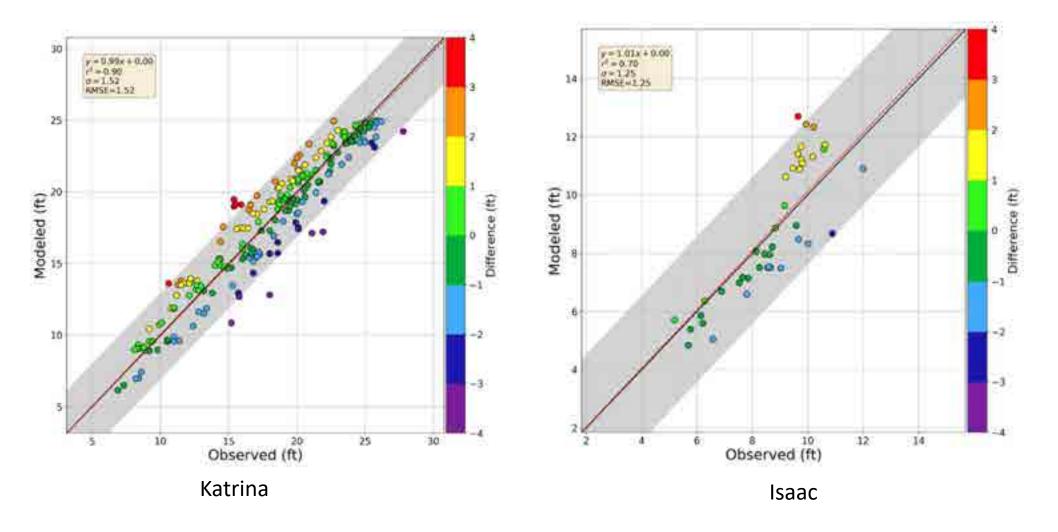
Leveraged 3 Existing Model Meshes developed by experts in Academia and Industry



Hancock, Harrison & Jackson Counties

ADCIRC+SWAN Setup and Validation

Model Testing and Performance - Water Levels





Statistical Framework

- Joint Probability Method Optimal Sampling (JPM-OS) framework was not fully mature during previous study
- Optimal Sampling allows to develop reliable Annual Exceedance Probability curves using limited (optimized) set of ADCIRC+SWAN runs. Efficiency without sacrificing accuracy.
- USACE Engineer Research and Development Center (ERDC) developed the JPM-OS, optimized storm suite, and the AEP curves from the ADCIRC+SWAN model runs.
- Sophisticated framework using a combination of ADCIRC+SWAN modeling and surrogate modeling approaches.
- Optimized storm set similar to the storms used in the USACE South Atlantic Coastal Study (SACS).



Hancock, Harrison & Jackson Counties

- Storm surge study uses a set of hypothetical storms that may affect coastal Mississippi
- Storms based upon local historical storm data and most up-to-date climate science
- New study modeled storm surge from 288 synthetic storms
- Synthetic storm suite and statistical postprocessing carried out by USACE-ERDC
- Utilized a tightly coupled ADCIRC+SWAN model.
- 2007 study utilized separate ADCIRC and SWAN simulations.





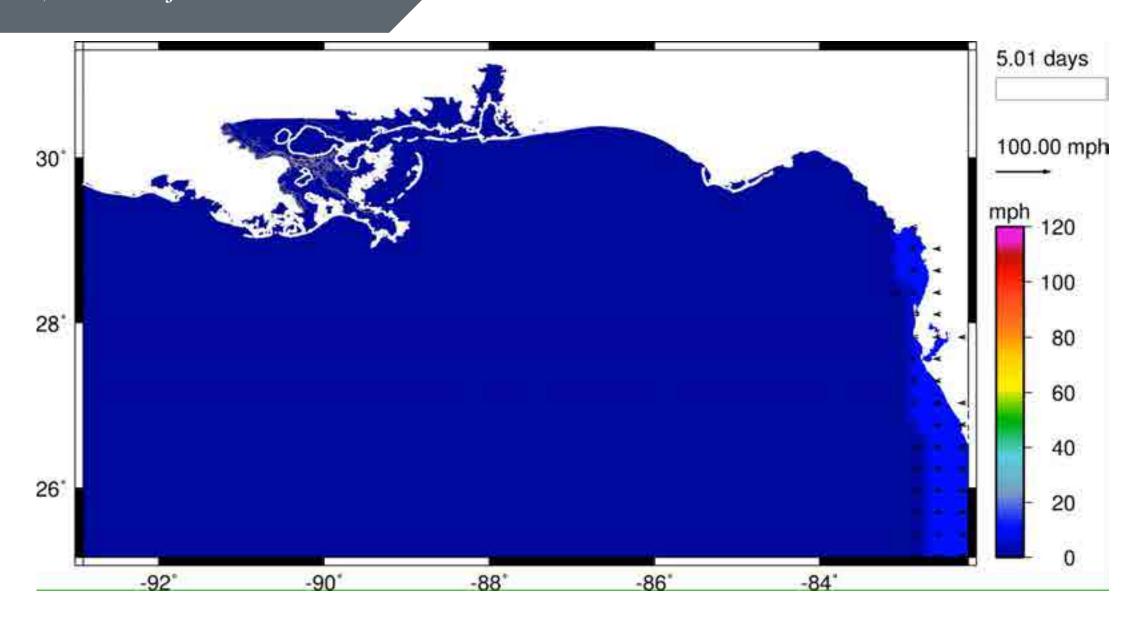
The amount of storm surge in an area depends on:

- size and strength of the storm
- · where it is going
- · how fast it is moving
- the shape of the coastline

The same storm can cause different levels of storm surge along the same coastline.

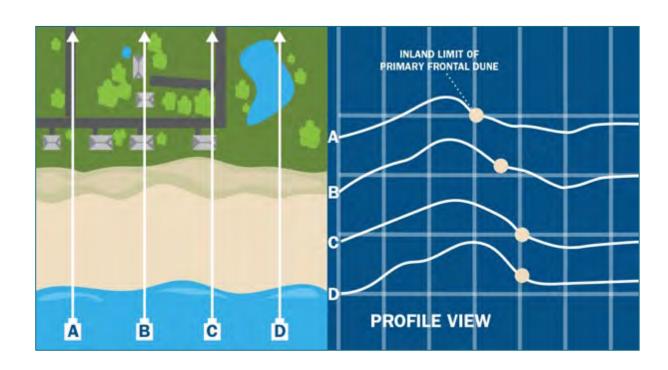
Synthetic Storm – Wind Speeds

Hancock, Harrison & Jackson Counties



Overland Wave Modeling Transects

Hancock, Harrison & Jackson Counties

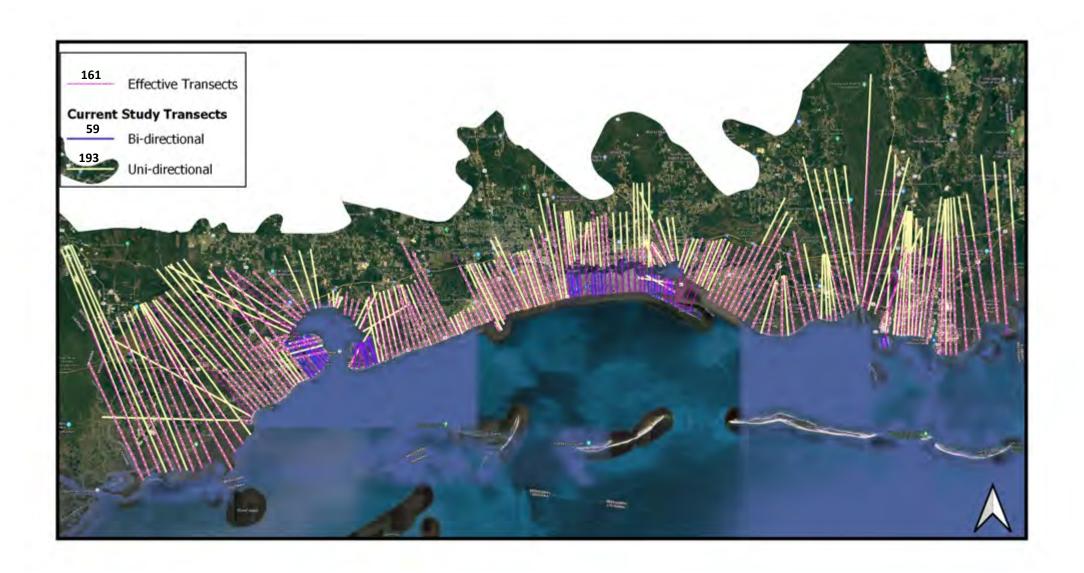


Stakeholder Engagement Point –
Transect Layout Meetings with local floodplain managers

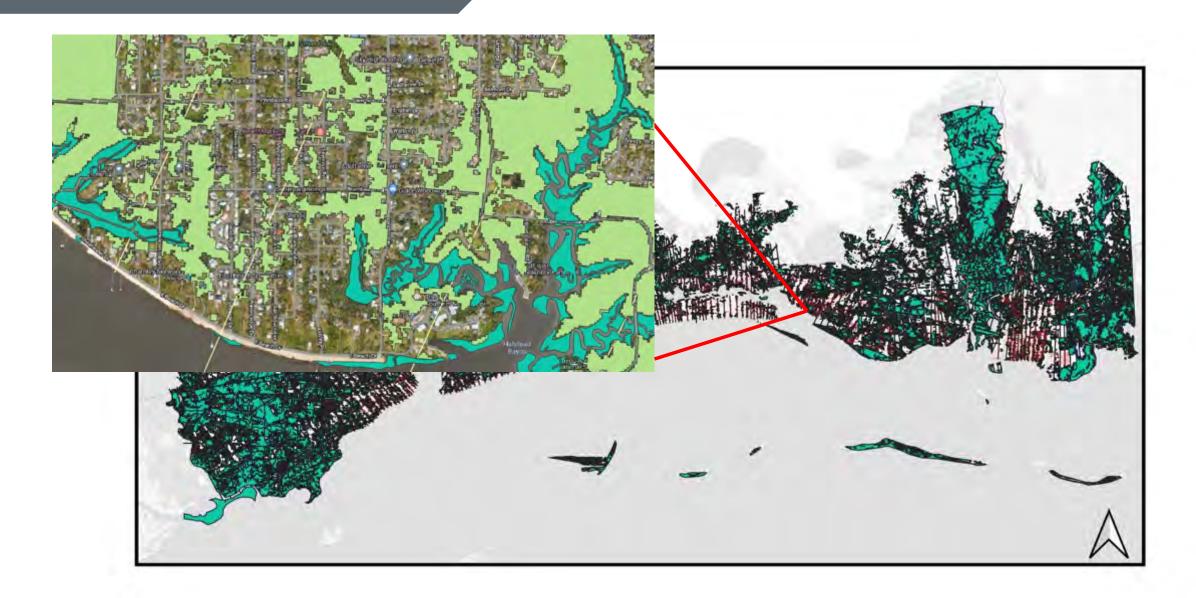
- Use 1-D transects to characterize topography, development, and land cover for segments of shoreline
- Utilized reversible/bi-directional transects to incorporate impacts of waves from Bay of St. Louis, Back Bay of Biloxi, etc.
- Better and granular land cover datasets when compared to 2007 study
- Improvements to WHAFIS carding for all transects.
- Leveraged GIS and Python to scale and accelerate transect computations and post processing.



Transects



Land Use Carding

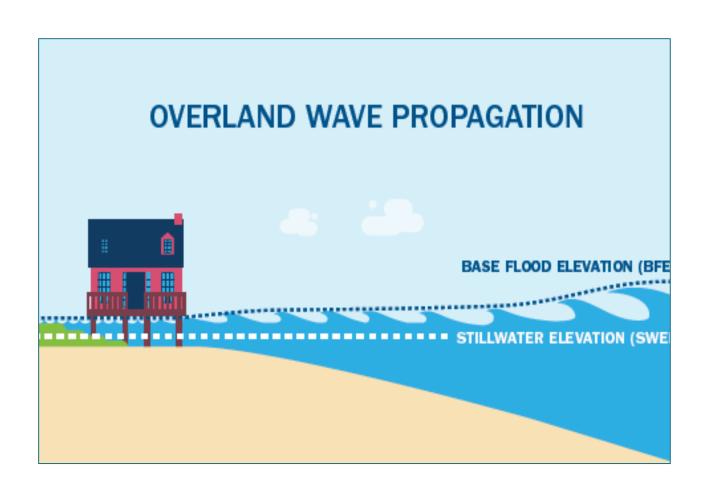


Land Use Carding



Wave Hazard Modeling

Hancock, Harrison & Jackson Counties



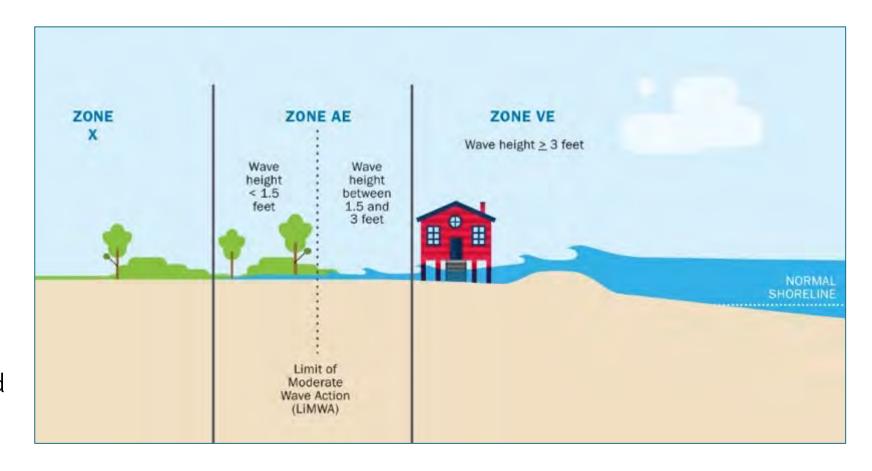
Waves riding on top of storm surge pose additional hazards during a coastal flood—overland wave propagation, wave runup, and overtopping processes are modeled along transects to determine flood elevations



Draft Work Map Creation

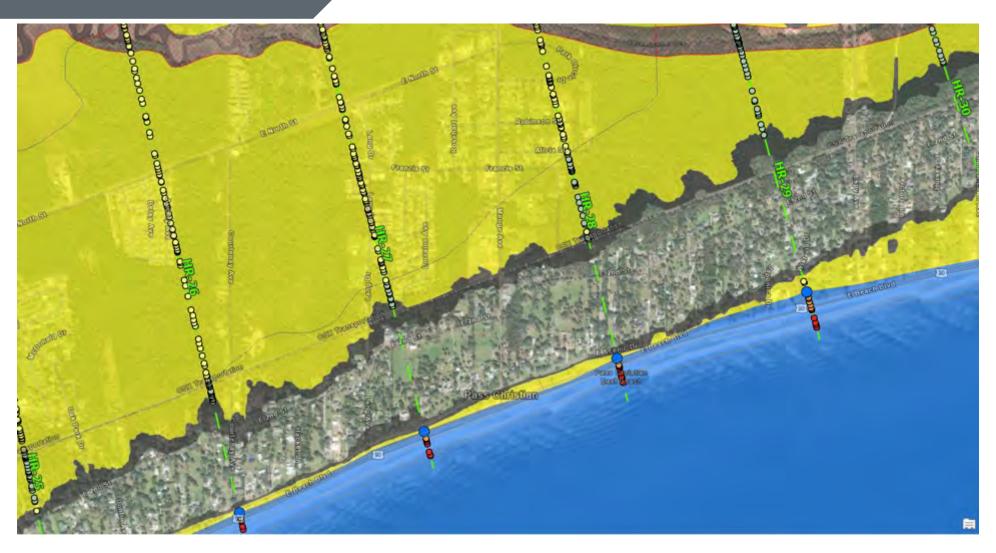
Hancock, Harrison & Jackson Counties

- Results from storm surge inundation modeling are used to map floodplain extent
- Wave hazard modeling informs flood zone designations (VE and AE) and flood elevations
- SMPDD Team is creating work maps, FEMA will lead final mapping efforts





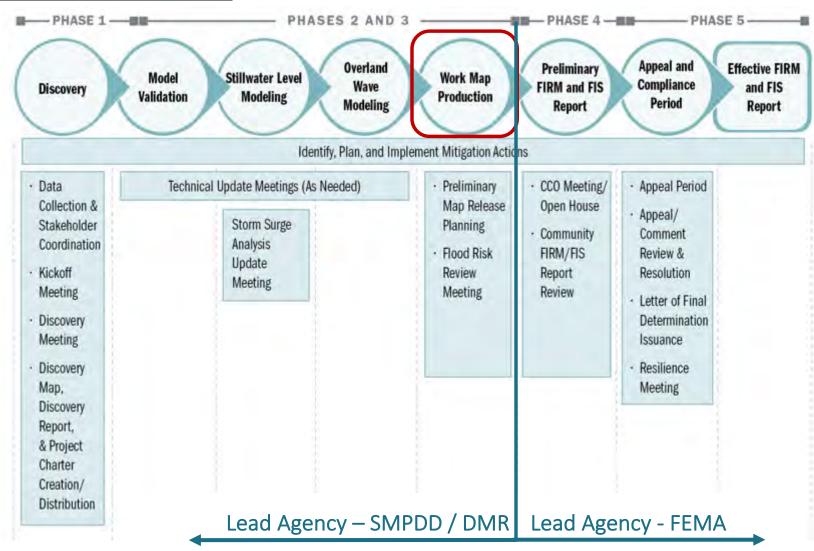
Work Map Creation





Coastal Flood Risk Study Lifecycle

Hancock, Harrison & Jackson Counties





National Flood Insurance Program 2.0

Our Presenter



Peter Waggoner
Public Policy
Director
Greater New Orleans
Inc

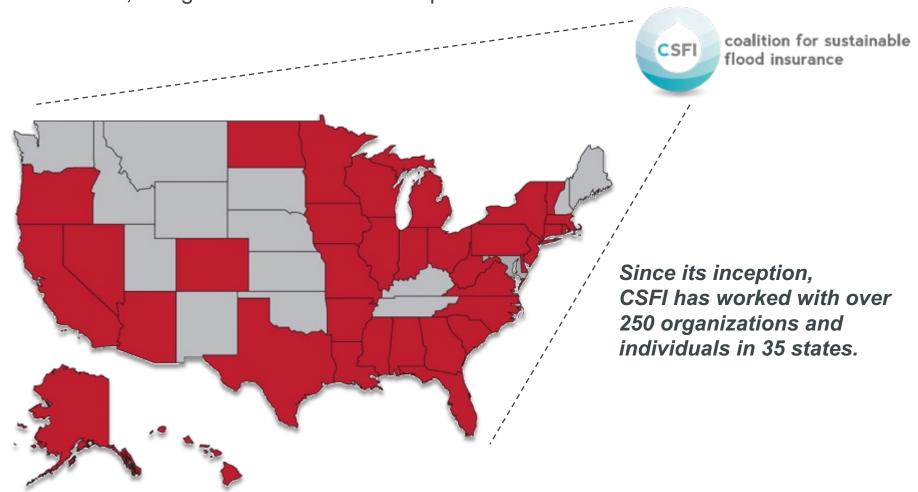






The Coalition for Sustainable Flood Insurance

The **Coalition for Sustainable Flood Insurance (CSFI)** was formed by GNO, Inc. in 2013, and grew to be national in scope.







Risk Rating 2.0 Affordability Challenges

Risk Rating 2.0 (RR 2.0) – implemented in full on <u>April 1, 2022</u> – represents the greatest overhaul of NFIP rates since its establishment in 1968. In year one, an estimated 77% of policyholders nationwide will see an increase. In following years, all policies will increase. According to the Congressional Research Service, impacts of RR 2.0 include:

- 50% of policies will be at full-risk rate after
 5 years; 90% will be at full-risk rate after
 10 years.
- Affordability challenges for homeowners on limited incomes, with adverse impact on low- and moderate-income households
- Difficulty in selling homes with high premiums
- Drops in coverage resulting in unprotected homeowners and lower program participation







FEMA "Rate Explanation Guide"

FEMA's **Rate Explanation Guide** identifies specific characteristics of properties which are used as rating factors for input into premium calculation.

- "Where it is built" (Geographic Factors)
 - Distance to flooding sources (coast, ocean, rivers, and Great Lakes)
 - Ground elevation
 - "Other characteristics" (Base Rate, Drainage Area, Levee Quality, HUC12)
- "How it is built" (Property Factors)
 - Building occupancy
 - Foundation type
 - First floor height
 - Number of floors
 - Unit location
 - Construction type
 - Flood openings
 - Machinery & equipment
- "What is built and covered" (Contract Factors)
 - Building replacement cost value
 - Building and contents coverage
 - > Building and contents deductible





FEMA "Premium Calculation Worksheet"

				National Flood In: Risk Rat									
			Cou	nish mad Intrywide, Non-Leve		ome							
				,									
			Premi	um Calculation Y	orksheet Exam	ple 1							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
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	h	Calculation	Inland		Storm S		Tsun			Lakes	Coastal I		All Peril
	İtem	Calculation	Building	Contents	Building	Contents	Building	Contents	Building	Contents	Building	Contents	All Covera
							-	ographic Factor					
							46	ograpaic racto	7.5				
Α.	Base Rate (per \$1,000 of Coverage Value)	-	2.255	3.611	5.652	8.022	0.000	0.000	0.000	0.000	4.063	1.166	
п. В.	Distance to River	-	1,068	1.068	5.552	0.022	5.550	5.550	5.550	0.000	4.550	00	
c.	Elevation Relative to River by River Class		0.567	0.567									
D.	Drainage Area		0.744	0.744									
E.	Structural Relative Elevation	=	0.898	0.898									
F.	Distance to Coast by Barrier Island Indicator	-			1.413	1.413	1.000	1.000			0.000	0.000	
G.	Distance to Ocean by Barrier Island Indicator	=			1.000	1.000	1.000	1.000					
H.	Elevation by Barrier Island Indicator	=			0.730	0.730	1.000	1.000					
l.	Distance to Lake	-							0.525	0.525			
J.	Elevation Relative to Lake	=							0.004	0.004			
K.	Territory (HUC12 & Barrier Island Indicator)	=	0.477	0.477	1.092	1.092	0.000	0.000	0.000	0.000			
_													
L	Geographic Rate by Peril & Coverage "	Product of A to K	0.435	0.697	6.366	9.036	0.000	0.000	0.000	0.000	0.000	0.000	
							Ø	y & Contract F					
							Propert	y & Contract r	ectors			$\overline{}$	_
M	Type of Use	-	1.000	1.000	1.000	1.000	1.000	1.000	1,000	1.000			
N.	Floors of Interest		0.300	0.300	0.900	0.900	0.300	0.300	0.900	0.900			
D.	Foundation Type	=	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,000			
Ρ.	First Floor Height by Foundation Design & Flood Vents		0.561	0.561	0.561	0.561	0.561	0.561	0.561	0.561			
Q.	M&E above First Floor	-	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
R.	Coverage Value Factor	=	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
S1.	Deductible & Limit to Coverage Value Ratio *	(Note 1)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
\$2.	Deductible to Coverage Value Ratio *	(Note 2)	0.045	0.065	0.035	0.040	0.035	0.040	0.035	0.040	0.035	0.040	
\$3.	Initial Deductible & ITV	(\$1 - \$2)	0.955	0.935	0.965	0.960	0.965	0.960	0.965	0.960	0.965	0.960	
\$4.	Final Deductible & ITV	(Note 3)	0.955	0.935	0.965	0.960	0.965	0.960	0.965	0.960	0.965	0.960	
Т.	Concentration Risk	=	0.964	0.964	0.949	0.949							
U1.	CRS Discount Percentage	=	15.0%	15.0%	15.0%	0.150	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	1:
U2.	CRS Discount Factor	(1 - U1)	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.
٧.	Rate by Peril & Coverage "	(Note 4)	0.172	0.270	2.502	3.533	0.000	0.000	0.000	0.000	0.000	0.000	
	Rate (per \$1,000 of Building Value)	(Note 5)										-	2
													3.0
	Rate (per \$1,000 of Contents Value)	(Note 5)											
Χ.		(Note 6)	6.432%	7,100%	93.568%	92.900%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	





FEMA "Premium Calculation Worksheet"

Z. Weighted Deductible & ITV Factor (Building)	(Note 7)			0.964
AA. Weighted Deductible & ITV Factor (Contents)	(Note 8)			0.95
AB. Minimum Rate (per \$1,000 of Building Value)				0.000
AC. Maximum Rate (per \$1,000 of Building Value)	=			14.460
AD. Minimum Rate (per \$1,000 of Contents Value)	-			0.000
AE. Maximum Rate (per \$1,000 of Contents Value)	= =			14.370
AF. Final Rate (per \$1,000 of Building Value)	MIN(MAX(W, AB), AC)			2.674
AG. Final Rate (per \$1,000 of Contents Value)	MIN(MAX(X, AD), AE)			3.803
AH. Coverage Value in Thousands (Building)	-			\$250.00
Al. Coverage Value in Thousands (Contents)				\$100.00
AJ. Initial Premium without Fees (Building) **	AF x AH			\$668.50
AK. Initial Premium without Fees (Contents) **	AG x AI			\$380.30
AL. Initial Premium without Fees **	AJ + AK			\$1,048.80
AM. Prior Claims Premium **	(Note 9)			\$0.00
AN. Premium excluding Fees & Expense Constant **	AL + AM			\$1,048.80
AO. Expense Constant	=			\$62.93
AP. Loss Constant	=			\$130.00
AQ. Premium without Fees	AN + AO + AP			\$1,241.79
AR. ICC Premium	=			\$4.00
AS. ICC Premium with CRS Discount **	(U2 x AR)			\$3.40
AT. Subtotal	(AQ + AS)			\$1,245.18
AU. Reserve Fund Factor	=			1.19
AV. Sebtotal **	(UA x TA)			\$1,431.97
	[HI I NO]			
AW. Probation Surcharge	=			\$0.00
AX. HFIAA Surcharge By Primary Residence Indicator	(Note 10)			\$25.00
AY. Federal Policy Fee	=			\$50,00
AT. Tederal Policy Fee	-			\$50.00
AZ. Premium with Fees	(AV + AV + AX + AY)			\$1,506.97
* Rounded to the nearrest thousandth				
** Manual along the action and the det			 	





RR2.0 Formula via LSU AgCenter

Geographic Rates by Peril & Coverage:

 M_{ij} = Geographic Rate by Peril i & Coverage i

 A_{ij} = Base Rate by Peril i & Coverage j

 B_i = Distance to River by Peril i

 C_i = Elevation Relative to River by Peril i

D = Drainage Area

 E_i = Structural Relative Elevation by Peril i

 F_i = Distance to Coast by Peril i

 G_i = Distance to Ocean by Peril i

 H_i = Elevation by Peril i

 I_i = Distance to Lake by Peril i

 I_i = Elevation Relative to Lake by Peril i

 K_i = Levee Quality by Peril i

 L_i = Territory by Peril i

Rate:

$$M_{i_i} = A_{i_i} * B_i * C_i * D * E_i * H_i * K_i * L_i$$

Building Rates:

N =Type of Use

O =Floors of Interest

P = Foundation Type

Q =First Floor Height

R = M&E above First Floor

Rate:

$$W_{ij} = N * O * P * Q * R$$

Rates by Peril & Coverage:

 S_i = Coverage Value Factor by Coverage

 $T1_{ij}$ = Deductible & Limit to Coverage Value Ratio by Peril i & Coverage j

 $T2_{ij}$ = Deductible to Coverage Value Ratio by Peril i & Coverage j

 $T3_{ij} = T1_{ij} - T2_{ij} =$ Initial Deductible & ITV by Peril i & Coverage j

 $T4_{i,i}$ = Final Deductible & ITV by Peril i & Coverage j;

(if Coverage Limit = 0 then 0 else $max(T3_{i_i}, 0.001)$)

 U_i = Concentration Risk by Peril i

V1 = CRS Discount Percentage

V2 = 1 - V1 = CRS Discount Factor

Final Rate:

$$Y_{ij} = M_{ij} * W_{ij} * S_j * T4_{ij} * U_i * V2$$

- The rating factors are multiplied and summed by peril and coverage to get the initial premium without fees for each structure.
- As the rating factors are multiplicative, **lower factors contribute to lower risk** premiums.





ReadYourRisk.com Calculator

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Gographic State	De progratio con from may Name and a 1 (1/20) con major.
111	Florial - Building (GR, F, 85
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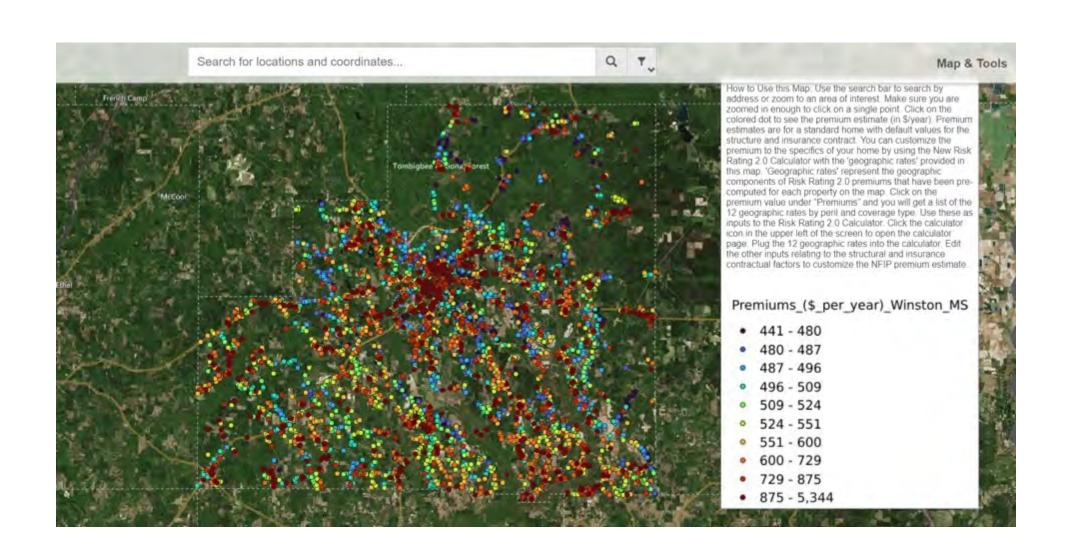
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ReadYourRisk.com Geographic Rating Factor Maps







FEMA "Discount Explanation Guide"

FEMA"s **Discount Explanation Guide** provides impacts of implementing mitigation measure, in terms of percentages, on certain rating variables (<u>not total premium</u>):

First Floor Height

- Differs based on foundation type
- For example, a building with a crawlspace foundation and FFH of 3 feet above adjacent grade corresponds to a 22.1% discount compared to the same building having a FFH of 0."

Flood Openings

- Differs based on foundation type and first floor height
- "For example, a building Elevated with Enclosure Not on Posts, Piles, or Piers with a FFH measurement of 9 feet above the adjacent grade corresponds to a 11.8% mitigation discount"

Machinery & Equipment

- "5% mitigation discount if certain covered Machinery and Equipment...are elevated to at least the elevation of the floor above the building's first floor."
- Also references Floor of Interest, Statutory Discount, and CRS Discounts





FEMA "Discount Explanation Guide"

1. First Floor Height & Foundation Type

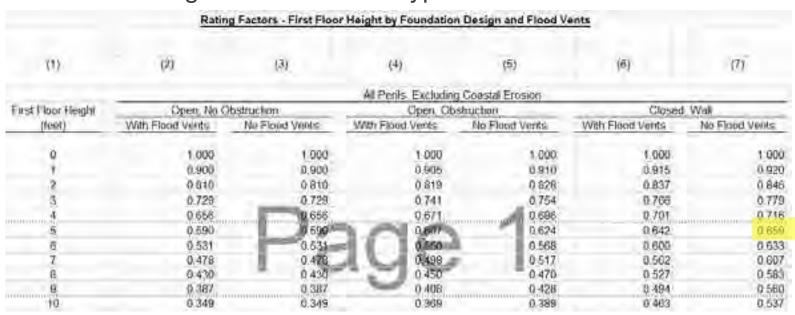
First Floor Height* (in Fast)	Slab on Grade	Basement	(Including Sengration Crawing ace)	Elevated with Enclosure Not an Posts, Pilna, or Piera	Elevated with Enclosure on Posts, Piles, or Piers	Elevated without Enclosure on Posts Piles, or Piers
0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
10	-8.0%	-8.0%	-8.0%	-8.0%	-9.0%	-10.0%
2	-15.4%	-15.4%	-15,4%	-15.4%	-17.2%	-19.0%
3	-22.1%	-22.1%	-22.1%	-22.1%	-24.6%	-27.1%
4	-28.4%	-28.4%	-28.4%	-28.4%	-31.4%	-34.4%
5	-34.1%	-34.1%	-34.1%	-34.1%	-37.6%	-41.0%
6	-36.7%	-36.7%	-36.7%	36.7%	-43.2%	-46.9%
7	-39.3%	-39.3%	-39.3%	-39.3%	-48,3%	-52.2%
8	-41.7%	41.7%	-41.7%	-41.7%	-53.0%	-57.0%
9	-44,0%	-44.0%	-44.0%	-44.0%	-57.2%	-67.3%
10-14	-46.3% to -54.4%	-46.3% to -54.4%	-46,3% to -54.4%	-46.3% to -54.4%	-61.1% to -73.3%	-65.1% to -77.1%
15-25	-56.2% to -70.9%	-56.2% to -70.9%	-56.2% to -70.9%	-55.2% to -70.9%	-75.7% to -86.6%	-79.4% to -88.9%





FEMA "Appendix D – Rating Factor Tables"

1. First Floor Height & Foundation Type



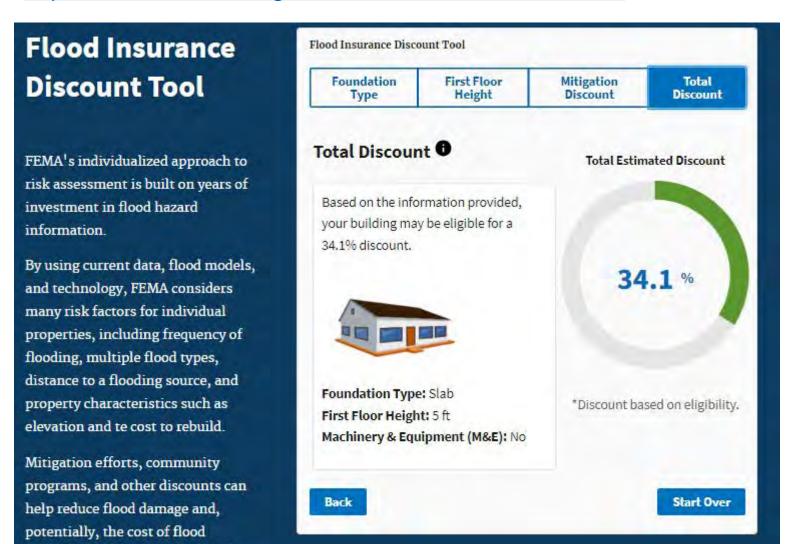
	Rating Factors - Foundatio	n Type			
(1)	200	(3)	(4)	(5)	(6)
	All Perils, Excluding	Inland	Storm		Great
Foundation Type	Coastal Erosion	Flood	Surge	Tsunami	Lakes
Basement	1.300	1.300	1,300	1.300	1.300
Crawispace	1.200	1.200	1.200	1.200	1.200
Elevated with Enclosure, Not Post, Pile, or Pier	1.250	1.250	1.250	1.250	1.250
Elevated with Enclosure, Post, Pile, or Pier	1.000	1.000	1.000	1.000	1.000
Elevated without Enclosure, Post, Pile, or Pier	1.000	1.000	1,000	1.000	1.000
Slab	1.000	1.000	1.000	1.000	1 000





FEMA's New "Flood Insurance Discount Tool"

https://www.floodsmart.gov/flood-insurance-discount-tool







Risk Rating 2.0 – Emerging & Pressing Issues

- Greater transparency in development of rates
- Widespread communication to various audiences, including flood plain managers, policyholders, realtors, bankers, homebuilders
- Data Reliability No appeals process; limited clarity property-level data inputs
- Affordability There is no discount on premiums based on income; however, HFIAA instructed FEMA to minimize number of policies with annual premiums that exceed 1% of total coverage provided by policy
- Appropriate Credit for Flood Protection and Mitigation Coastal restoration, elevation, or flood protection are not reliably lowering rates
- NFIP Policy Lapses Can't assume policy or benefit from glidepath if policy wasn't renewed
- Continuous Coverage Can't buy private insurance and return to NFIP with glidepath





RR2.0 Examples

Town	Zone	Replacement Cost	Square Footage	1.0 Premium	2.0 Premium	% Increase
Belle Chasse, LA	AE	\$393,985	3,050	\$572	\$8,828	1,443%
Picayune, MS	AE	\$250,000	1,800	\$900	\$4,823	436%
Key West, FL	X	N/A	N/A	\$914	\$3,595	293%
Scituate, MA	AE	\$250,000	1,800	\$650	\$1,297	100%
Hatteras, NC	AE	N/A	N/A	\$643	\$3,153	390%
Long Island, NY	AE	\$250,000	N/A	\$535	\$3,614	576%





RR2.0 Examples

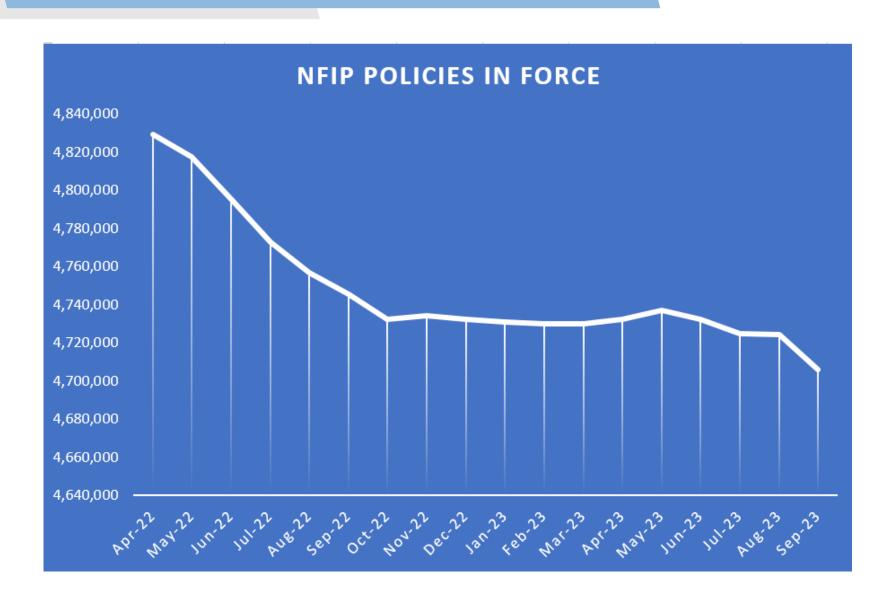


Town	Zone	Replacement Cost	Square Footage	1.0 Premium	2.0 Premium	% Increase
Belle Chasse, LA (Plaquemines)	AE	\$393,985	3,050	\$572	\$8,828	1,443%





NFIP Participation (Apr. 2022 – Sep. 2023)







NFIP Participation (Sep. 2021 – Sep. 2023)

State	Sep 2021 Policies	Aug 2023 Policies	Total Change	% Change
Total	4,899,114	4,705,979	-193,135	-3.94%
TEXAS	785,395	671,884	-113,511	-14.45%
LOUISIANA	508,043	457,653	-50,390	-9.92%
CALIFORNIA	202,111	194,017	-8,094	-4.00%
VIRGINIA	100,013	93,680	-6,333	-6.33%
MISSISSIPPI	60,882	55,499	-5,383	-8.84%
NORTH CAROLINA	137,296	132,555	-4,741	-3.45%
GEORGIA	79,268	74,614	-4,654	-5.87%
HAWAII	59,810	55,728	-4,082	-6.82%
PENNSYLVANIA	49,273	45,493	-3,780	-7.67%
ARIZONA	26,161	23,242	-2,919	-11.16%
ALABAMA	51,658	48,948	-2,710	-5.25%
ОНЮ	26,467	24,118	-2,349	-8.88%
WEST VIRGINIA	12,491	10,310	-2,181	-17.46%
ILLINOIS	35,013	33,083	-1,930	-5.51%
TENNESSEE	27,100	25,187	-1,913	-7.06%





NFIP Participation (Sep. 2021 – Sep. 2023)

State	Sep 2021 Policies	Aug 2023 Policies	Total Change	% Change
FLORIDA	1,689,300	1,709,451	20,151	1.19%
NEW JERSEY	198,219	205,763	7,544	3.81%
UTAH	3,881	7,476	3,595	92.63%
NEW YORK	165,623	167,744	2,121	1.28%
PUERTO RICO	3,920	5,700	1,780	45.41%
DELAWARE	25,305	26,224	919	3.63%
SOUTH CAROLINA	201,296	202,203	907	0.45%
MASSACHUSETTS	54,812	55,393	581	1.06%
RHODE ISLAND	11,157	11,492	335	3.00%
DISTRICT OF COLUMBIA	2,089	2,300	211	10.10%
ALASKA	2,172	2,325	153	7.04%
VIRGIN ISLANDS	1,384	1,466	82	5.92%
WYOMING	1,603	1,679	76	4.74%
VERMONT	3,203	3,223	20	0.62%





Full-Risk Rates Released on April 19, 2023

Cost of Flood Insurance for Single-Family Homes under Risk Rating 2.0



English

The <u>National Flood Insurance Program (NFIP)</u> uses Risk Rating 2.0, a new method for calculating flood insurance rates based on a unique combination of rating variables for each property to reflect its flood risk.

These examples show the cost of flood insurance for single-family homes under Risk Rating 2.0, using data from single-family policies renewed before Sept. 30, 2022. These exhibits will be updated and revised once all policyholders have renewed their policies under Risk Rating 2.0.





Full-Risk Rates by State

	State/Territory	Average Current Cost of Insurance	Average Risk- based Cost of Insurance	% Premium Increase	X Premium Increase
ALL	ALL STATES AND TERRITORIES	\$ 888	\$ 1,808	103.6%	2.03
1	HAWAII	\$ 1,437	\$ 3,653	154.1%	2.54
2	WEST VIRGINIA	\$ 1,133	\$ 3,074	171.2%	2.71
3	CONNECTICUT	\$ 1,590	\$ 3,000	88.6%	1.89
4	MAINE	\$ 953	\$ 2,700	183.2%	2.83
5	NEW HAMPSHIRE	\$ 1,216	\$ 2,545	109.2%	2.09
6	VERMONT	\$ 1,449	\$ 2,248	87.7%	1.88
7	FLORIDA	\$ 1,197	\$ 2,213	131.1%	2.31
8	KENTUCKY	\$ 958	\$ 2,201	107.6%	2.08
9	NEW YORK	\$ 1,060	\$ 2,197	85.5%	1.86
10	MISSISSIPPI	\$ 1,184	\$ 2,137	149.1%	2.49





Full-Risk Rates by State

	State/Territory	Curre	erage ent Cost surance	Average Risk- based Cost of Insurance		% Premium Increase	X Premium Increase
ALL	ALL STATES AND TERRITORIES	\$	888	\$	1,808	103.6%	2.03
41	WISCONSIN	\$	878	\$	1,331	51.6%	1.52
42	NEBRASKA	\$	824	\$	1,323	60.6%	1.61
43	ОНЮ	\$	883	\$	1,303	47.6%	1.48
44	VIRGINIA	\$	743	\$	1,077	44.9%	1.45
45	MICHIGAN	\$	811	\$	1,068	31.7%	1.32
46	NEVADA	\$	715	\$	1,031	44.1%	1.44
47	UTAH	\$	645	\$	953	47.7%	1.48
48	PUERTO RICO	\$	543	\$	757	39.3%	1.39
49	MARYLAND	\$	608	\$	742	22.0%	1.22
50	ALASKA	\$	454	\$	543	19.8%	1.20
51	D.C.	\$	404	\$	407	0.8%	1.01





Full-Risk Rates by County

	ID	County	Average Current Cost of Insurance		Average Risk- based Cost of Insurance		Premium Increase	
	ALL	ALL STATES AND TERRITORIES	\$	888	\$	1,808	103.5%	
1	LA	PLAQUEMINES PARISH	\$	842	\$	5,431	545.3%	
2	LA	ST. MARY PARISH	\$	1,074	\$	5,226	386.3%	
3	FL	FRANKLIN COUNTY	\$	1,664	\$	5,195	212.3%	
4	FL	MONROE COUNTY	\$	1,759	\$	4,622	162.7%	
5	CA	SONOMA COUNTY	\$	1,404	\$	4,464	217.9%	
6	ME	YORK COUNTY	\$	1,128	\$	4,247	276.4%	
7	FL	COLLIER COUNTY	\$	1,053	\$	3,980	277.9%	
8	FL	LEE COUNTY	\$	1,285	\$	3,965	208.6%	
9	LA	LAFOURCHE PARISH	\$	929	\$	3,909	320.6%	
10	FL	CHARLOTTE COUNTY	\$	1,428	\$	3,687	158.2%	





Full-Risk Rates by County – Gulf Coast

ID	County	Policies in Force	Average Current Cost Insurance	of base	rage Risk- ed Cost of surance	Premium Increase
ALL	ALL STATES AND TERRITORIES	4.7M	\$ 88	88 \$	1,808	103.5%
MS	JACKSON COUNTY	8,386	\$ 90	2 \$	2,664	195.2%
MS	HANCOCK COUNTY	4,994	\$ 88	7 \$	2,521	184.1%
MS	HARRISON COUNTY	8,227	\$ 84	1 \$	2,375	182.5%
MS	STONE COUNTY	22	\$ 69	9 \$	1,612	130.5%
MS	GEORGE COUNTY	62	\$ 93	4 \$	1,581	69.3%
MS	PEARL RIVER COUNTY	501	\$ 73	8 \$	1,290	74.8%





Full-Risk Rates by ZIP Code

	State	City	ZIP Code	Average Current Cost of Insurance		Average Risk- based Cost of Insurance		Premium Increase
		ALL	ALL STATES AND TERRITORIES	\$	888	\$	1,808	103.5%
1	FL	Naples	34102	\$	2,228	\$	8,067	262.1%
2	FL	Boca Grande	33921	\$	1,681	\$	7,766	362.1%
3	FL	Marco Island	34145	\$	1,601	\$	7,553	371.8%
4	FL	Clearwater Beach	33767	\$	2,999	\$	7,402	146.8%
5	FL	Key Biscayne	33149	\$	3,423	\$	7,097	107.3%
6	FL	Longboat Key	34228	\$	2,358	\$	7,058	199.4%
7	LA	Des Allemands	70030	\$	784	\$	6,677	751.8%
8	FL	Cocoa Beach	32931	\$	771	\$	6,638	761.1%
9	FL	Sarasota	34242	\$	2,871	\$	6,453	124.8%
10	FL	Fort Pierce	34949	\$	1,112	\$	6,428	478.0%





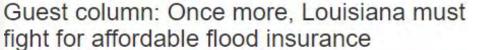
CSFI Action Plan

- Standing coalition calls, including stakeholders and congressional staffers
- > Building partnerships with trade associations and industry groups across county
- > Attending national conferences and presenting on RR2.0 to spread awareness
- > Conducting D.C. fly-ins., virtual meetings with congressional offices
- > Engaging the media, from the Wall Street Journal to the Advocate:

Highlights 3 key CSFI recommendations:

- Affordability limit max increase, create caps linked to coverage limits and means-tested provisions
- Mitigation additional weight for undertaking measures and assure CRS discounts
- Transparency rate calculator for better financial planning and building decisions

ADVOCATE









CSFI Affordability White Paper Overview



Now available on www.csfi.info:

- History of NFIP, Risk Rating 2.0
- Literature review of past academic studies
- Effectiveness of cap on annual increases
- Analysis of proposed affordability programs
- Profiles of select markets FL, OH, SC, TX

Recommendations:

- 1. <u>FEMA</u> should disclose the factor by which premiums are changing
- 2. <u>FEMA</u> should clearly disclose planned premium rate increase velocities
- 3. <u>FEMA</u> should counter the known negative relationship between price and participation by adopting a low-rate annual premium increase plan
- 4. <u>Congress</u> should carefully consider the limitations of affordability frameworks relying solely on income ratios...housing burden should be an additional tool
- 5. <u>Congress</u> should pursue legislative enactment of an affordability program





CSFI Reauthorization Priorities

- 1. Mandate Release of Full-Risk Rates and a Public-Facing Rate Calculator Congress should require that FEMA publish additional data on premiums and provide a cost calculator that policyholders can publicly access.
- 2. Enact a Means-Tested Affordability Program with Housing Burden as a Targeting Factor Congress should mandate that FEMA apply a housing burden factor to target discounts and equitably distribute benefits
- 3. Lower Annual Premium Increases to Nine Percent Congress should cap single-family primary residential rate hikes to a maximum of 9% each year, as a bridge to a permanent affordability program.
- **4. Forgive NFIP's Debt or Freeze Interest Payments** Congress should forgive NFIP's debt, or at the least forgive interest payments over a defined period of time, while requiring that lower premiums be offered.





NFIP's Debt

National Flood Insurance Program Continues to Pay Interest on its Treasury Debt

- NFIP continues to fulfill obligations to the US Treasury to satisfy debt obligations totaling \$20.5B
- Because the NFIP cannot fully pay back the debt it incurred paying claims for previous catastrophic flood disasters post Hurricane Katrina, it must be refinanced at current interest rates. This amounts to the program accruing \$1.7 million in interest per day.
- The NFIP must pay the interest out of the premium dollars collected. Currently, the agency is paying \$309 million in semiannual interest payments, which could have been utilized on disaster operations. The NFIP debt carries an average interest rate of 3.02%. This results in \$619 million annually that is paid to Treasury.
- Maurstad: "We think a better use for these interest payments would be to help policyholders rebuild their lives instead of being paid to Treasury. It's a vicious cycle that will only end with cancellation of the debt to avoid compounded interest and future borrowing."
- Cancelling the NFIP's debt is one of FEMA's **17 proposed reforms** that would help create a more fiscally sound framework that improves the program's ability to pay claims and sustains the program's credibility...





2023 Recent & Upcoming Events













March 10, 2023

House Financial Services Committee Hearing

"How Do We Encourage Greater Flood Insurance Coverage in America?"

April 19, 2023

House Committee on Homeland Security Hearing

Department of Homeland Security FY24 Budget Request

April 28, 2023

House Financial Services Committee Hearing

"The Reauthorization of NFIP: FEMA's Perspective"

May 2, 2023

Senate Banking Committee Hearing

"Reauthorization of NFIP: Improving Community Resilience"

November 2, 2023

House Financial Services Committee Hearing

"The Factors Influencing the High Cost of Insurance for Consumers"

November 17, 2023 NFIP's Authorization Expires





House Committee on Homeland Security FY24 Budget Hearing





- Sec. Mayorkas: "We are reviewing, and need to continue to review, the Risk Rating 2.0 given the concerns being expressed with it. And I can assure you that we are doing so, and will report out our results"
- Rep. Carter: "This is not a done deal."





Homeowner Flood Insurance Transparency and Protection Act



HOME ABOUT CINDY SERVICES ISSUES NEWSROOM CONTACT O

HYDE-SMITH LEADS RENEWED EFFORT TO HELP FLOOD INSURANCE POLICYHOLDERS

Wednesday, March 8, 2023

- The Homeowner Flood Insurance Transparency and Protection Act (S.721) would allow policyholders to retain previous NFIP premium rates rather than Risk Rating 2.0 rates, until FEMA satisfies:
 - Public notice and comment
 - Established policyholder premium appeals process
 - Economic impact analysis
 - Independent peer review
 - Assurance of data reliability
- Cosponsored by Senators Kennedy, Cassidy, and Cruz





Committee on Oversight and Accountability Letter



Published: May 2, 2023

Comer, Scalise Lead Bipartisan Oversight of FEMA's National Flood Insurance Program



Recent media reports show new NFIP methodology has caused premiums to increase, causing flood insurance to be unattainable for many

- The Committee on Oversight and Accountability is the principal oversight committee of the U.S. House of Representatives and has broad authority to investigate "any matter" at "any time" under House Rule X.
- 51 Members of Congress signed a letter to FEMA Secretary Dianne Criswell to request certain documents and information on RR2.0, and to request a staff-level briefing as soon as possible on the effects.





Senator Cassidy Meets with CSFI

BILL CASSIDY, M.D. UNITED STATES SENATOR FOR LOUISIANA

05.24.23

Cassidy Discusses Flood Insurance Affordability in New Orleans







Senator Cassidy Meets with CSFI

05.24.23

Cassidy Discusses Flood Insurance Affordability in New Orleans

- U.S. Senator Bill Cassidy, M.D. (R-LA) participated in a roundtable hosted by Greater New Orleans (GNO), Inc. and the Coalition for Sustainable Flood Insurance on addressing Risk Rating 2.0 and making flood insurance affordable.
- He announced he will soon be reintroducing bipartisan legislation to reauthorize the National Flood Insurance Program (NFIP) for five years and reform the program for long-term viability.
- Cassidy's NFIP Reauthorization and Reform Act improves the accountability, affordability, and sustainability of the NFIP. The bill will also place guardrails on FEMA's new Risk Rating 2.0 system that stands to drastically increase Americans' flood insurance premiums.
- "The high cost of flood insurance hurts everyone, but especially working families along our coast," said Dr. Cassidy. "This is a human problem, not just an actuarial one. We need to pass legislation that keeps rates low and FEMA accountable."





Senator Cassidy Introduces NFIP-RE Act

06.22.23

Cassidy, Menendez, Higgins, Pallone Rollout Bipartisan Legislation to Reform the National Flood Insurance Program

- U.S. Senators Bill Cassidy, M.D. (R-LA) and Bob Menendez (D-NJ) and U.S. Representatives Clay Higgins (R-LA-03) and Frank Pallone (D-NJ-06) introduced the bipartisan and bicameral National Flood Insurance Program Reauthorization (NFIP-RE) Act of 2023.
- This legislation would reauthorize the program for five years providing greater stability for homeowners, small business owners, and the real estate market as the nation continues to struggle with inflationary pressures. It will also implement a series of sweeping reforms to reduce costs, make generational investments in communities to reduce flood risk, and establish a fairer claims process for policyholders.
- "Reforming the NFIP means making it affordable again," said Dr. Cassidy. "We need to ensure families are not priced out of the program."





NFIP-RE Act

118TH CONGRESS 1ST SESSION	2
131 BESSION	.

To reauthorize the National Flood Insurance Program, and for other purposes.

- Long-Term Certainty Reauthorizes the NFIP for five years
- No Steep Rate Hikes Protects policyholders by capping annual increases at 9%.
- Affordability for Low- and Middle-Income Policyholders Provides a comprehensive means-tested voucher for policyholders earning up to 140% of AMI
- Path to NFIP Solvency Freezes interest payments on the NFIP debt and reinvests savings towards cost saving mitigation efforts
- Limits on Private Insurance Company Profit Caps Write Your Own (WYO) compensation
- Increased Cost of Compliance (ICC) Coverage Increases the maximum limit from \$30,000 to \$120,000 to reflect costs of rebuilding and implementing mitigation projects.
- More Accurate Mapping Increases funding for FEMA's flood mapping program





St. Charles Parish Files Suit



April 25, 2023 FOR IMMEDIATE RELEASE

St. Charles Parish Sues FEMA

The Parish takes legal action after being denied a public record request for Risk Rating 2.0

Hahnville, La.— This afternoon, President Matthew Jewell, on behalf of St. Charles Parish, filed suit in federal court against the Federal Emergency Management Agency (FEMA) after being denied public record requests for information on Risk Rating 2.0. The Parish was forced to file suit after exhausting all available administrative remedies and seeks to require FEMA to comply with federal law.

In November 2022, St. Charles Parish made a Freedom of Information Act request to FEMA for information used in the model to determine rates affecting its residents. The Parish planned to use this information to assess its own risk and make any necessary improvements to its flood protection to ensure the lowest rate possible for its residents. To date, FEMA has failed to provide any data or documents it relied upon in formulating Risk Rating 2.0.





10 States File Suit



Louisiana, 9 other states sue US government over steep flood insurance rate increases







RR2.0 Lawsuit Plaintiffs & Defendants

Louisiana et al. v. Mayorkas et al., U.S. District Court for the Eastern District of Louisiana, case No. 2:23-cv-01839.

Plantiffs

- 10 States
 - State of Louisiana
 - State of Florida
 - State of Idaho
 - State of Kentucky
 - State of Mississippi
 - State of Montana
 - State of North Dakota
 - State of South Carolina
 - State of Texas
 - State of Virginia
- 43 Parishes
- 3 Municipalities
- 12 Levee Districts
- Association of Levee Boards

Defendants

- Alejandro Mayorkas, in his official capacity as Secretary of Department of Homeland Security
- 2. Department of Homeland Security
- Deanne Criswell, in her official capacity as Administrator of FEMA
- 4. Federal Emergency Management Agency
- Federal Insurance and Mitigation Administration





RR2.0 Lawsuit Argument

Such action are:

- Arbitrary & capricious
- In violation of the Administrative Procedure Act (APA)
- Exceed FEMA's statutory authority
- Unconstitutional
- Contrary to Law





RR2.0 Lawsuit Facts

- Banks won't finance certain properties without flood insurance, making it functionally mandatory for many homeowners.
- The average household income in Louisiana is \$77,025/year. The average flood insurance premium policy will go from \$813 to \$1904, almost double what it was under the Legacy Rating System. Based on this increase, there will be a 1.42% reduction in home purchase capabilities.
- 90% of Louisiana ratepayers subject to an increase in their flood insurance premiums can expect to see their annual cost increase by 18% per year for the next ten years.
- Some of the highest costs for flood insurance are occurring in areas that under previous FEMA maps were not in flood zones.
- These increased costs will lead to fewer policies in force and less coverage, creating greater risk exposure for Louisiana and its citizens.





RR2.0 Lawsuit Claims

- NFIP's rates must be consistent with objective of making flood insurance available where necessary at reasonable rates
- FEMA failed to take into account skyrocketing costs generated by new policy, mass withdrawals, or the effects of those withdrawals
- FEMA rate calculations completely ignore crucial risk factors, e.g., the effect of levees on the likelihood of flood damage
- Risk Rating 2.0 Equity in Action was published and implemented without notice or comment in violation of federal law
- FEMA did not consider homeowners reliance on grandfathered NFIP policies, or requirements of those who had previously accepted disaster assistance, SBA loans, or other forms of assistance
- FEMA did not consider the reliance interests of communities who had adopted ordinances and regulations in exchange for participation in NFIP, or those who had gone above and beyond the minimum federal requirements in exchange for discounts





Lawsuit Update

- Lawsuit filed on June 1, 2023
- Plaintiffs filed a Motion for Preliminary Injunction on June 14, 2023
 - FEMA then filed a Motion to Extend the Submission Date for Plaintiffs' Motion
- The Court issued a scheduling order on July 13, 2023:
 - A hearing on Plaintiffs' Motion for Preliminary Injunction was set for August 18
- FEMA filed a Motion to Dismiss Plaintiffs' Complaint on August 7, 2023
 - On August 9, Court issued a scheduling order that the preliminary injunction hearing (originally set for August 18) be continued and reset at a later date
- The Court scheduled a joint hearing on the Motion to Dismiss and the Motion for Preliminary Injunction on <u>Thursday</u>, <u>September 14</u>
 - A ruling from Judge Darrel Papillion is still pending





CSFI Social Media Toolkit

RISK RATING 2.0 (for Twitter)



Copy: 77% of policyholders' premiums across the country will increase with the implementation of Risk Rating 2.0. Some states, like Florida, Louisiana, and Texas, will see 80% of policies or more increases. Join @csfiusa to learn more and fight for sustainable flood insurance.

77% OF POLICYHOLDERS' PREMIUMS ACROSS THE COUNTRY WILL INCREASE WITH THE IMPLEMENTATION OF RISK RATING 2.0. Some states, like Florida, Louisiana, and Texas, will see 80 % of policies, or more, increase.







CSFI Social Media Toolkit

REAUTHORIZATION (for Facebook, Instagram, and LinkedIn)





Copy: The National Flood Insurance Program is critical to protecting properties and communities across the country. NFIP expires on November 17, and it needs to be reauthorized now. Join the Coalition for Sustainable Flood Insurance and tell your Members of Congress today!









Join Us

Become a CSFI member, and stay up to date!

- > Join CSFI by visiting **csfi.info** or emailing **pwaggonner@gnoinc.org**
- > Sign up for email updates
- > Follow us on social media



@csfiusa



@CSFIUSA





Regional Stakeholders Panel

Our Panelists



Scott Delano
Mississippi Senator,
District 50
Principal, Southeast
Commercial Real
Estate



Mary Martha Henson
Deputy Director
Jackson County
Economic
Development
Foundation



Peter Waggonner
Public Policy Director
Greater New Orleans
Inc.







