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# When the Models Met Reality

Catastrophe Repricing, Carrier Retreat, and the Public  
Balance Sheet

**\$28-45B**

LA FIRE INSURED LOSS RANGE,  
JAN 2025

**92%**

SECONDARY-PERIL SHARE  
OF 2025 INSURED LOSSES

**<1%**

FLOOD INSURANCE  
PENETRATION, INLAND  
HELENE COUNTIES

## EXECUTIVE DASHBOARD

A year of secondary-peril compounding has changed the shape of US property catastrophe loss. The headline is no longer the named hurricane on a coastal city. It is the simultaneous arrival of wildfire, severe convective storm, and inland flood losses that pre-event models had not been calibrated to weight together.

## THESIS

The 2023 to 2025 catastrophe cycle did not break the US property-insurance market; it forced a **repricing and repositioning** in which state-backed insurers, the federal flood program, and the mortgage system absorbed the residual that private carriers and pre-event models had not.

## KEY STATISTICS

**\$107B**

global insured catastrophe losses in 2025<sup>4</sup>

**92%**

secondary-peril share of 2025 insured losses, a record<sup>4</sup>

**\$28-45B**

LA fires January 2025 insured loss across modelers<sup>1, 2, 3</sup>

**\$25B**

Hurricane Milton insured loss, October 2024<sup>5</sup>

**\$700B**

California FAIR Plan total exposure, Sept 2025<sup>7</sup>

**385K**

Florida Citizens policy count, year-end 2025 (1.4M peak)<sup>9, 10</sup>

**-14.7%**

global property-cat reinsurance pricing, 1/1 2026<sup>11</sup>

**\$136B**

alternative/ILS reinsurance capital, year-end 2025<sup>12</sup>

**Scope & method.** Open-source intelligence verified against allowlisted Tier 1-4 sources. Insured-loss estimates are reported as the published range across major modelers (Verisk, Moody's RMS, CoreLogic, Swiss Re). Confidence and rationale carried on every analytic judgment. Window: 2023 to early 2026. Timeliness: CURRENT, with a 2 to 6 month shelf life. Material updates expected after the 2026 Atlantic hurricane season, September reinsurance meetings, or the next CA/FL regulatory action of consequence.

## KEY JUDGMENTS

Six judgments anchor this assessment. Each is tied to the cited evidence in the sections that follow and carries an explicit confidence level.

**1** **High** Secondary perils (wildfire, severe convective storm, inland flood) are now the dominant insured-loss drivers, structurally outweighing named tropical cyclones at the industry-loss level. <sup>4, 14</sup>

**2** **High** The January 2025 Los Angeles firestorm is a calibration shock for wildfire catastrophe models, with industry-loss estimates clustering between \$28B and \$45B and total economic loss approaching \$65B. <sup>1, 2, 3</sup>

**3** **High** Carrier retreat from concentrated coastal and wildland-interface geographies has shifted residual risk onto state-backed insurers and NFIP; CA FAIR Plan exposure has quintupled in five years. <sup>7, 25, 26</sup>

**4** **Moderate** The inland-flood protection gap is the most consequential under-insured exposure surfaced by Helene; in worst-affected counties NFIP penetration was below 1 percent. <sup>6, 23</sup>

**5** **High** Reinsurance capital expanded fast enough to absorb the 2023-2025 cycle; the binding constraint is primary-carrier risk appetite and rate access, not aggregate capital. <sup>11, 12, 13</sup>

**6** **Moderate** The insurance-cost shock is now a banking and credit story; the Dallas Fed 6.7M-borrower study shows premium rises measurably raise mortgage and credit-card delinquency. <sup>42, 43</sup>

## SECTION 01 · STRUCTURE

# The Shape of the Losses Has Rotated

What 2023 through 2025 delivered to insurers was not the textbook major-hurricane scenario. It was a sequence of secondary-peril compounding losses that crossed the industry-loss threshold and stayed there.

In 2025, total global natural-catastrophe insured losses reached approximately \$107 billion. Swiss Re Institute attributes 92 percent of that total to wildfires, severe convective storms, and floods.<sup>4</sup> That share is a record on Swiss Re's series. In 2024, US severe-convective-storm insured losses exceeded \$36 billion through Q2 alone, the second-highest first-half total on record; full-year 2023 US SCS losses exceeded \$58 billion on Aon's accounting.<sup>14, 15</sup> A single severe-weather outbreak across the central and southern United States between May 6 and 10, 2024, generated over 165 tornadoes and more than \$5 billion in economic damage.<sup>14</sup>

Hurricane Milton produced approximately \$25 billion of insured losses in October 2024 against \$38 billion of total economic loss. It was the costliest insured event of 2024 despite Hurricane Helene's larger economic damage, partly because Milton's outer rainbands spawned one of the most prolific tornado outbreaks ever recorded with a tropical cyclone.<sup>5</sup>

The January 2025 Los Angeles firestorm sits in its own category. Verisk estimated combined Palisades and Eaton fire insured losses at \$28 to \$35 billion. Moody's RMS estimated \$20 to \$30 billion. CoreLogic estimated \$35 to \$45 billion.<sup>1, 2, 3</sup> Verisk separately estimated total economic losses up to \$65 billion with 60 to 70 percent insurance penetration. Swiss Re sigma classified the event as the largest wildfire loss event in its records.<sup>4, 17</sup>

## ASSESSMENT · HIGH CONFIDENCE

The aggregate share of insured loss flowing from perils historically treated as second-tier has crossed the threshold where industry results, regulatory capital adequacy, and rating-agency stress tests must be specified around them. The named tropical cyclone is no longer the singularly dominant pricing risk for the US property book.

**Rationale:** Multi-source convergence (Swiss Re sigma, Aon Catastrophe Recap, Verisk AAL) and the multi-year run rate support the rotation as structural rather than cyclical. SCS losses have grown faster than overall property exposure for three consecutive years.

## SECTION 02 · POLICY

# Where the Models Met Reality

Catastrophe modeling is the actuarial engine of reinsurance. When a modeled distribution is wrong it is discovered one event at a time; the lag between event and recalibration is the carrier exposure.

For wildfire, the January 2025 Los Angeles event was the discovery event. The 2024 release of Verisk's Wildfire Model already incorporated post-2017 California fire calibrations and a forward-looking view of climate-amplified risk.<sup>19</sup> In July 2025 the California Department of Insurance approved that model as the first catastrophe model successfully completed under the state's new regulatory framework for use in property-insurance ratemaking, a milestone arriving six months after the loss event the model now had to be repriced around.<sup>20</sup>

For severe convective storm, the calibration problem differs in character. SCS losses are not driven by single events at the scale of an LA firestorm; they accumulate from a high frequency of moderate-severity hail and tornado events. Aon attributes much of the recent SCS-loss rise to exposure growth in high-hail corridors, values insured rather than pure frequency change.<sup>15</sup> Swiss Re sigma cautions that for some perils, hazard and vulnerability are evolving faster than exposure alone would imply.<sup>4</sup>

For inland flood, the calibration problem is the protection gap rather than the model. Helene's economic loss reached well beyond the coastal-exposure zone, with private insured losses estimated by Moody's RMS at \$8 to \$14 billion and NFIP losses above \$2 billion.<sup>6, 23</sup> In the worst-hit inland counties (Buncombe County in western North Carolina is the canonical case) fewer than 1 percent of properties carried flood insurance.<sup>6</sup> NFIP loss ratios driven by the Helene and Milton combination exceeded 200 percent in 2024.<sup>24</sup>

**ASSESSMENT · HIGH CONFIDENCE**

The structural risk is not that catastrophe models were wrong before the events. It is the lag between event arrival, model recalibration, regulatory review, and recovery of the prior view in primary-carrier underwriting and rate filings. The California Verisk approval came six months after the Los Angeles event; during the lag, primary carriers carry the calibration mismatch on their balance sheets while reinsurers and ILS capital reprice on a faster cycle.

**Rationale:** *The mechanism is observable across the State Farm California, Allstate California, and pre-Demotech-downgrade Florida insolvency sequences, each of which involved a primary carrier carrying a calibration mismatch into a loss event without commensurate rate flexibility.*

**SECTION 03 · STAKEHOLDER**

# Who Is Left Holding the Policies

Carrier retreat from California and Florida is the most visible feature of the cycle and the one that has changed the residual-carrier distribution most consequentially.

State Farm announced in May 2023 it would stop accepting new applications for personal property and casualty in California, then in March 2024 announced the non-renewal of approximately 30,000 California policies beginning July 3, 2024.<sup>25</sup> Allstate ceased writing new home insurance in California; Farmers capped new California policies at approximately 7,000 per month starting July 2023.<sup>26</sup> The major national carriers collectively dropped over 100,000 California homeowners between 2019 and 2024.

Following the January 2025 fires, California Commissioner Lara imposed a one-year mandatory moratorium on non-renewals and cancellations within the perimeters and adjoining ZIP codes of the Palisades, Eaton, Hurst, Lidia, Sunset, and Woodley fires; a 2026 settlement extended the moratorium for at least one additional year.<sup>27, 28</sup>

In Florida, the depopulation program ran in the opposite direction. Citizens Property Insurance transferred more than 546,000 policies to private carriers approved by FLOIR during 2025. Citizens' policy count fell from over 1.4 million at its 2023 peak to approximately 385,000 by year-end 2025, the lowest level in the corporation's history.<sup>9, 10</sup> The private market into which those policies moved is itself thinly capitalized in places. A

2023 academic study found nearly 20 percent of Demotech-rated Florida insurers became insolvent while holding an A rating between 2009 and 2022.<sup>29, 31</sup>

The California FAIR Plan absorbed much of California's residential displacement. Total exposure rose to approximately \$700 billion by September 2025, up roughly fivefold over five years; in-force residential policies reached 642,010, a 165 percent increase from September 2021.<sup>7, 8</sup> The FAIR Plan reported approximately \$4 billion of losses from the January 2025 wildfires and levied a \$1 billion assessment on California insurers, half of which is passable to policyholders.<sup>32, 33</sup>

#### ASSESSMENT · HIGH CONFIDENCE

The structure now sitting under US property insurance is a public-private bifurcation, with private carriers writing in screened, repriced, and capacity-managed segments and state-backed insurers and NFIP carrying the residual. This is not a temporary configuration; the FAIR Plan exposure trajectory and the depopulated-but-fragile Florida private market both reflect equilibria.

**Rationale:** *The breadth of public reporting and the regulatory architecture (CDI moratorium settlements, FLOIR depopulation, NFIP Risk Rating 2.0) all point at the same outcome. The state-backed insurers are now structural counterparties, not transitional ones.*

#### SECTION 04 · CAPITAL

## Reinsurance Was Not the Binding Constraint

The simplest hypothesis about the 2023 to 2025 cycle would be that capital exited the property-catastrophe risk pool. The data do not support it.

Aon reports global reinsurer capital reached a record \$785 billion at year-end 2025, up nearly 10 percent year-on-year.<sup>11</sup> Traditional reinsurance capital grew 8 percent during 2025; alternative or ILS capital grew 18 percent, reaching \$136 billion at year-end.<sup>12</sup> The catastrophe-bond market set successive issuance records, lifting outstanding cat bonds to \$61.3 billion at year-end 2025 after \$25.6 billion of 2025 new issuance.<sup>13, 36</sup>

The underlying allocators are pension and sovereign in nature: PFZW's PGGM-managed ILS portfolio reached \$8.9 billion at year-end 2025; the Florida Retirement System ILS

allocation reached approximately 1 percent of fund assets at \$2.23 billion; CalPERS ended 2025 at \$1.45 billion.<sup>37, 38, 39</sup>

The result at January 2026 renewals was a softening market. Global property-catastrophe reinsurance pricing fell on average 14.7 percent risk-adjusted; property-cat rates declined 10 to 20 percent across geographies.<sup>11, 40, 41</sup> Howden described the dynamics as a re-balancing rather than a softening, with property pricing multiples for ILS approaching all-time lows at the top end of programs.<sup>40</sup>

#### ASSESSMENT · HIGH CONFIDENCE

Reinsurance capital is not the binding constraint on US property insurance. The binding constraints are primary-carrier underwriting capacity, regulatory rate-adequacy access, exposure concentration in screened geographies, and the calibration lag between event and approved model.

**Rationale:** Three observations support the call at high confidence: the record cat-bond issuance through the largest wildfire loss in industry history; the persistence and growth of pension and sovereign-wealth allocations; the integration of cat-bond pricing into the broader 1/1 2026 softening narrative across Aon, Howden, and Gallagher Re.

#### SECTION 05 · TRANSMISSION

## Households, Banks, and Public Budgets

The 2023 to 2025 cycle is not contained to insurance balance sheets. It is transmitting through three channels now visible in the data.

A Federal Reserve Bank of Dallas 2025 working paper examining 6.7 million borrowers found that higher homeowners-insurance premiums raise the probability of mortgage delinquency, increase mortgage prepayment driven mainly by relocation, and worsen credit-card delinquency and overall creditworthiness.<sup>42</sup> This links loss-driven repricing directly to consumer credit performance with implications for mortgage-backed-securities credit risk.

FHFA issued two Advisory Bulletins on climate-related risk management in 2024 providing guidance to Fannie Mae, Freddie Mac, and Common Securitization Solutions, and released a Mortgage Loan and Natural Disaster Dashboard mapping climate-hazard exposure to GSE-

backed loans by census tract.<sup>43, 44</sup> The framework is in place; the systemic question is what enforcement and capital posture follow.

California's FAIR Plan, Florida Citizens, and NFIP become significant fiscal counterparties in loss years. Assessment mechanics pass residual losses back to the broader insurance base or, ultimately, to taxpayers. The CA FAIR Plan's \$1 billion 2025 assessment, the Florida Citizens assessment authority, and the federal Treasury backstop to NFIP via borrowing authority are different mechanisms for the same outcome.

#### ASSESSMENT · MODERATE CONFIDENCE

The credit-transmission channel is the most underappreciated single risk in the current configuration. Mortgage finance had been treated through the 2010s as substantially independent of insurance availability and premium levels in its credit-risk frameworks. The Dallas Fed work indicates that assumption is wrong.

**Rationale:** *The judgment is moderate because the magnitudes are not yet large enough to register at GSE portfolio levels, but are clearly directionally significant. FHFA framework documents acknowledge the channel; capital posture is the open question.*

#### SECTION 06 · OUTLOOK

## Three Scenarios, 12 to 24 Months

Construction confidence reflects analytical quality, not probability. Each scenario carries a risk velocity and an earliest-signal trigger.

### Baseline · Soft cycle persists, residual carriers expand

CONSTRUCTION CONFIDENCE: HIGH · VELOCITY: GRADUAL

The 2023 to 2025 cycle is priced into reinsurance and ILS; capital remains abundant; primary-carrier exits in California and Florida continue at controlled pace, with state-backed insurers absorbing displaced policyholders. NFIP is reauthorized via legislative bridge mechanisms. The credit-transmission channel registers in marginal mortgage-delinquency rates without moving GSE risk capital.

**SIGNAL TO WATCH: APRIL 2026 MID-YEAR REINSURANCE RENEWALS SHOW FURTHER SINGLE-DIGIT SOFTENING ON PROPERTY-CAT**

## Deterioration · Single-event recapitalization shock

CONSTRUCTION CONFIDENCE: MODERATE · VELOCITY: RAPID

A 2026 hurricane landfall on a peak-zone metropolitan area or a second consecutive major California wildfire produces an industry-loss event in the \$60B to \$100B range. Reinsurance capital re-prices sharply at the next renewal; alternative capital pauses pending pricing reset; state-backed insurer assessment authority is triggered in California or Florida at scale; one or more Demotech-rated Florida carriers fails through the event.

**SIGNAL TO WATCH: A CONFIRMED ATLANTIC LANDFALL WITH CATEGORY 3+ INTENSITY IN A POPULATED US GULF OR SOUTHEAST METROPOLITAN AREA**

## Stabilization · Public-private repartition formalizes

CONSTRUCTION CONFIDENCE: MODERATE · VELOCITY: STRUCTURAL

Federal and state policy responses formalize the residual-carrier configuration. NFIP enacts long-term reauthorization with rate-adequacy and geographic re-rating provisions; California and Florida adopt expanded reinsurance backstops for FAIR Plan and Citizens; FHFA enforces climate-risk capital requirements at the GSE level. The system stabilizes at a higher premium-to-coverage ratio than the 2010s baseline.

**SIGNAL TO WATCH: A MULTI-YEAR NFIP REAUTHORIZATION THAT INCLUDES AFFORDABILITY-PROGRAM FUNDING AND RATE-ADEQUACY PROVISIONS**

### ASSESSMENT · HIGH CONFIDENCE

The 2026 outlook hinges on whether the next twelve months deliver an event large enough to force the formal public-private repartition described in the stabilization scenario, or whether they extend the baseline trajectory in which residual carriers expand quietly and the credit-transmission channel slowly tightens. Baseline is the most likely twelve-month path; stabilization is the most likely two-to-three-year outcome regardless of which intermediate shock arrives.

**Rationale:** Directional commitments are now in place at FHFA, NAIC, CDI, and FLOIR. They have not yet been forced by a stress event but the trajectory of each agency suggests the eventual destination is the public-private repartition described.

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## Publishable Market Research

**Timeliness: CURRENT.** The configuration documented here is changing on the cadence of state-insurance regulatory action, federal flood-program reauthorization, and Atlantic hurricane-season outcomes. This assessment carries a two- to six-month shelf life. Material updates may follow the 2026 Atlantic season, the September reinsurance meetings, and the next California or Florida regulatory action of consequence.

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