FEDERAL ASSOCIATION FOR INSURANCE REFORM

The Florida Hurricane Catastrophe Fund Demystified:

Legislative Relief for Florida's Homeowners

June 3, 2021

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Executive Summary

The Florida Hurricane Catastrophe Fund, (FHCF) was created in November 1993 during a special session of the Florida legislature. The bill, CS for HB 31-C, passed the Senate by a vote of 27 to 10. It created section 215.555 of the Florida statutes:

> *"F.S. 215.555 (1) FINDINGS AND PURPOSE. — The Legislature finds and declares as follows: (a) There is a compelling state interest in maintaining a viable and orderly private sector market for property insurance in this state. To the extent that the private sector is unable to maintain a viable and orderly market for property insurance in this state, state actions to maintain such a viable and orderly market are valid and necessary exercises of the police power."*

In order to achieve the aforementioned "PURPOSE", The Florida Legislature in 1993 provided the FHCF the statutory authority to offer Florida's admitted insurers unlimited reinsurance capacity to achieve and maintain a viable and orderly private sector market for property insurance marketplace. The only limitation to that public reinsurance offering was the capacity had to be commensurate with the FHCF's bonding capacity.

Per the FHCF Claims-Paying Capacity Estimates report dated May 19, 2021, the FHCF has very strong bonding capabilities:

> "From a credit standpoint, the ability to levy emergency assessments on all property and casualty insurance lines except workers' compensation, medical malpractice, federal flood, and accident and health lines is similar to a statewide sales tax on an essential product with an underlying premium base of $55.9 billion. The strength of this pledged revenue stream is the primary reason the three major rating agencies – Moody's, Standard & Poor's, and Fitch – rate the FHCF's debt Aa3, AA, and AA, respectively. To put these ratings in perspective, less than 5% of U.S. corporations have ratings in the "AA" category by all three rating agencies."

Hurricane Loss Reimbursement History

The FHCF has paid reimbursements to insurers for their hurricane losses from five hurricane seasons thus far: 1995, 2004, 2005, 2017, and 2018. This chart shows the amounts paid and the number of insurers affected:

Year	Covered Events	Number of Insurers Reimbursed by FHCF	Total FHCF Reimbursement Paid ($ million)	Projected FHCF Ultimate Total Loss ($ million)
1995	Erin, Opal	9	$13	--
2004	Charley, Frances, Ivan, Jeanne	136	$3,860	--
2005	Dennis, Katrina, Wilma	114	$5,536	--
2017	Irma (as of 12/31/2019)	90	$3,523	$6,000
2018	Michael (as of 12/31/2019)	29	$839	$1,450

The total historical reimbursements and projected future reimbursements from Hurricane Irma and Michael paid out since the creation of the FHCF has been $16.9 billion, less than the current full claims paying capacity of the FHCF.

This report recognizes Florida's private reinsurance market has dramatically hardened over the past several years and as a result recommends a number of moderate structural reforms to the FHCF to promote short-term and long-term benefits for Florida's overall economy, real estate market and insurance rate payers. Implementing the reforms listed below will yield market stability and double-digit decreases in property insurance rate pressure:

1) Remove 25% rapid cash buildup factor; maintain $17B limit excess $7.740B Retention. Savings to Consumer $372,143,669; 3.10% of gross premium; and
2) Shift Retention from $7.740B to $4.5B Maintain $17B limit. Savings to Consumer $187,248,423; 1.56% of gross premium; and
3) Add $3.24B to FHCF $17B limit; lower retention to $4.5B. Savings to Consumer $482,204,808; 4.02% of gross premium; and
4) Eliminate 10% co-participation - add $1.89B to FHCF $17B Limit Savings to Consumer $212,905,033; 1.77% of gross premium.

The intent of this report is to provide public policy makers and regulators a high level view of the current market conditions affecting property insurance in our state, and to provide a greater historical and operational understanding of the FHCF to support and quantify the benefits of regularly aligning the FHCF to provide the most effective and stable public reinsurance offerings.

Florida’s Current Residential Insurance Market Environment

Florida’s residential insurers have posted billions of dollars of underwriting losses over the past five years. The cost drivers adversely impacting Florida’s insurance market include the unexpected increases in the frequency of catastrophe and non-catastrophe weather events. Additionally, soft and hard fraud claims mining techniques being deployed by a growing number of third-party individuals. A large portion of those claims expenses are ultimately ceded to the reinsurance industry, which has resulted in restricted reinsurance capacity for Florida’s insurers. Moreover, the reinsurance capacity that is available, is being offered at increasingly higher premium levels. Consequently, Florida insurers have experienced adverse reserve development and erosion of policyholder surplus (net worth). In an attempt to increase policyholder surplus (net worth) and maintain the required risk-based capital levels, many Florida insurers have tried to secure debt capital to sustain their business operations. Residential insurers continue to experience adverse loss developments, deteriorating financial positions, and limited availability to debt capital at very high rates of interest.

There are three fundamental problems facing Florida’s residential market:

1) The short-term need to preserve and improve policyholder surplus (net worth); and
2) The long-term need to dedicate appropriate resources to investigate and prosecute soft and hard fraud claim schemes; and
3) The long-term need to reform the self-interested financial gamesmanship out of the claims and litigation process.

While combating fraud and improving the claims and litigation environment are critical to the long-term sustainability and affordability of Florida’s residential insurance market, this paper focuses on reforming the Florida Hurricane Catastrophe Fund (FHCF) to provide immediate financial relief to Florida’s insureds. It is important to note that the largest expense to Florida’s insurers is its cost of reinsurance and those costs are ultimately borne by Florida’s insureds.

Florida has a long history of amending the statutes that form the structure of the FHCF to ensure a stable and adequate supply of reinsurance capacity for Florida’s admitted insurers. This white paper recommends and quantifies the benefits of legislative reforms, provides a historical account, explains the ratemaking process, and quantifies the cost differential between the private reinsurance market and the reinsurance capacity provided by the FHCF.

Recommended Reforms to the FHCF

The reinsurance problems faced by insurers writing homeowners business in Florida today are:

- Reinsurance below the FHCF retention is expensive.
- Aggregate reinsurance is generally unavailable.
- Cascading catastrophe reinsurance is generally unavailable.
- Reinsurance for third and fourth events is expensive.

These problems could be addressed by amending the FHCF statute in two ways:

- Reduce the industry retention to $4.5 billion – the level it was in 2005.
- Return to FHCF to providing the aggregate loss protection it originally provided by eliminating the language in the current law which requires a company's full FHCF retention to be used in two separate hurricanes before the coverage drops down.

Additional changes to the FHCF statute should include:

- Eliminate the required rapid cash buildup factor which increases FHCH premium by 25% (a cost savings of over $200 million).
- Repeal the 10% reimbursement for loss adjustment expense and provide that the FHCF will reimburse participating insurers for 100% of loss adjustment expense (this provision was in the original FHCF statute).
- Eliminate any reference to "actual claims-paying capacity" when describing the limit offered by the FHCF to make it clear that the FHCF is required to pay a sum certain each contract year.
- Make it clear that the FHCF's assessment authority is separate from and independent of its ability to issue bonds.
- Repeal the authority of the FHCF to purchase reinsurance.
- Prohibit the FHCF from "grossing up" coverage selections and clarify that the FHCF is not required to sell the maximum statutory limit.
- Repeal the statutory exclusions for hurricane claims that result from loss assessments, bad faith awards, or amounts paid under liability coverages. Those exclusions are not present in most private reinsurance contracts and, to the extent possible FHCF coverage was originally intended to mirror the coverage provided by the private reinsurance market.

These changes would reduce the total reinsurance costs paid by Florida insurers and those savings would, under current law, be passed on to insureds, in the first required annual rate filing made subsequent to the effective date of the adopted reforms.

Estimated Rate Impacts Based on Proposed FHCF Legislative Reforms*

Remove 25% rapid cash buildup factor; maintain $17B limit excess $7.740B Retention Savings to Consumer $372,143,669; 3.10% of gross premium

1) Rapid Cash Buildup Removal	Limit	Retention	% Plc.	ROL
As-if 90% Level - wRapid Cash	18,888,888,889	7,740,000,000	90.0%	7.02%
As-if 90% Level - xRapid Cash	18,888,888,889	7,740,000,000	90.0%	5.61%
FHCF Chg.				(238,544,092)
Open Market Chg.				-
$				(238,544,092)
Premium Savings at 35.9% premium expense factor				**(372,143,669)**
Rate Impact on $12B Residential HO Premium Base				**-3.10%**

Shift Retention from $7.740B to $4.5B Maintain $17B limit Savings to Consumer $187,248,423; 1.56% of gross premium

2) Shift Retention from $7.740B to $4.5B	Limit	Retention	% Plc.	ROL
As-if 90% Level - wRapid Cash	18,888,888,889	7,740,000,000	90.0%	7.02%
As-if 90% Level - wRC / 4.5B Ret.	18,888,888,889	4,500,000,000	90.0%	9.34%
FHCF Chg.				395,674,087
Open Market Chg.				(515,700,326)
$				(120,026,239)
Premium Savings at 35.9% premium expense factor				**(187,248,423)**
Rate Impact on $12B Residential HO Premium Base				**-1.56%**

Add $3.24B to FHCF $17B limit; lower retention to $4.5B

Savings to Consumer $482,204,808; 4.02% of gross premium

3) Shift Retention / Expand Limit	Limit	Retention	% Plc.	ROL
As-if 90% Level - wRapid Cash	18,888,888,889	7,740,000,000	90.0%	7.02%
As-if 90% Level - wRC / +3.24B@90% / 4.5B Ret.	22,128,888,889	4,500,000,000	90.0%	8.51%
FHCF Chg.				501,922,449
Open Market Chg.				(811,015,731)
$				(309,093,282)
Premium Savings at 35.9% premium expense factor				**(482,204,808)**
Rate Impact on $12B Residential HO Premium Base				**-4.02%**

Eliminate 10% co-participation - add $1.89B to FHCF $17B Limit

Savings to Consumer $212,905,033; 1.77% of gross premium

4) Eliminate Co-Participation - Limit at 100%	Limit	Retention	% Plc.	ROL
As-if 90% Level - wRapid Cash	18,888,888,889	7,740,000,000	90.0%	7.02%
As-if 100% Level - wRapid Cash	18,888,888,889	7,740,000,000	100.0%	7.02%
FHCF Chg.				132,524,496
Open Market Chg.				(268,996,622)
$				(136,472,126)
Premium Savings at 35.9% premium expense factor				**(212,905,033)**
Rate Impact on $12B Residential HO Premium Base				**-1.77%**

Implement All Suggested Changes Combined; Additional Limit Provided: $5,128,888,889 Savings to Consumer $1,336,187,862; 11.13% of gross premium

5) Implement All Changes Combined	Limit	Retention	% Plc.	ROL
As-if 90% Level - wRapid Cash	18,888,888,889	7,740,000,000	90.0%	7.02%
As-if 100% Level / 4.5B/ +3.24B / xRC	22,128,888,889	4,500,000,000	100.0%	6.81%
FHCF Chg.				313,628,792
Open Market Chg.				(1,170,125,212)
$				(856,496,419)
Premium Savings at 35.9% premium expense factor				**(1,336,187,862)**
Rate Impact on $12B Residential HO Premium Base				**-11.13%**

* Calculations are based on the FHCF 2020 reported financials.

Note: The 35.9% premium expense factor to calculate the estimated premium savings: The net cost of reinsurance is a fixed expense. To calculate the impact to total premium written, the net cost of reinsurance must be adjusted by the variable expense components which are estimated to be 35.9%:

Category of Expected Expenses	Variable Expense Loading
Commissions	**24.9%**
Other Acquisition Costs	**0.1%**
General Expenses	**0.3%**
Premium Taxes	**1.8%**
Misc. Licenses & Fees	**0.0%**
Profit & Contingency	**4.2%**
Other Expenses	**4.6%**
Total Current Cost	**35.9%**

Florida Hurricane Catastrophe Fund

The Florida Hurricane Catastrophe Fund (FHCF) – a tax-exempt trust fund that provides reinsurance for hurricane losses to the 165 insurers (including Citizens which purchases about 10% of the FHCF capacity) that write personal residential insurance coverage in Florida. The FHCF collects over $1 billion in annual reinsurance premium from the insurers that write personal residential coverage in the state of Florida and, in the event of a major loss, can levy an assessment on all property and casualty insurance policies written in Florida except those that provide coverage for workers compensation or medical malpractice claims.

FHCF Legislative History

> *"F.S. 215.555 (1) FINDINGS AND PURPOSE. — The Legislature finds and declares as follows: (a) There is a compelling state interest in maintaining a viable and orderly private sector market for property insurance in this state. To the extent that the private sector is unable to maintain a viable and orderly market for property insurance in this state, state actions to maintain such a viable and orderly market are valid and necessary exercises of the police power."*

The FHCF was created in November 1993 during a special session of the Florida legislature. The bill, CS for HB 31-C, passed the Senate by a vote of 27 to 10. It created section 215.555 of the Florida statutes. The preamble to the bill noted:

- "as a result of unprecedented catastrophic insured losses in recent years, and especially as a result of Hurricane Andrew, numerous insurers have determined that in order to protect their solvency, it is necessary for them to reduce their exposure to hurricane losses"
- "as a result of these events, world reinsurance capacity has significantly contracted"
- "the insolvencies and financial impairments resulting from Hurricane Andrew demonstrate that many property insurers are unable or unwilling to maintain reserves, surplus, and reinsurance sufficient to enable the insurers to pay all claims in full in the event of a catastrophe"
- "State action is, therefore, necessary to protect the public from an insurer's unwillingness or inability to maintain sufficient reserves, surplus, and reinsurance"
- "A state program to provide reimbursement to insurers for a portion of their catastrophic hurricane losses will create additional insurance capacity sufficient to ameliorate the current dangers to the state's economy and to public health, safety, and welfare."

Key Structural FHCF Items Codified into Florida Statute in 1994

- The first reimbursement(reinsurance) contract would be effective on June 1, 1994.
- Coverage would be provided for hurricane losses and loss adjustment expenses to policies covering both residential and commercial policies.
- For large insurers (those with over $15 million in policyholder surplus (net worth) the contract would reimburse insurers 75% of losses and loss adjustment expenses that exceeded 200% of gross written premium from covered policies the previous calendar year. For smaller insurers, reimbursement of 75% of losses would begin when hurricane

losses and loss adjustment expenses exceeded 150% of gross written premium from covered policies written the previous calendar year.

- The limit of the reimbursement would be the sum of the cash on hand at the FHCF plus the amount the FHCF could borrow. The FHCF was authorized to issue revenue bonds with a term of up to 15 years supported by future premium collections. If future revenues were insufficient to support the amount of bonds necessary to pay hurricane claims in full, then the FHCF was authorized to issue an emergency assessment on every property and casualty company doing business in Florida (except insurers writing workers compensation insurance). The assessment could not exceed 2% of written premium but the assessment could continue until the bonds were fully repaid.
- The rates charged for coverage would be "actuarially indicated" and be expressed as a percent of insured value by zip code. The rates charged by the FHCF are not subject to review and approval by the OIR.
- Participating insurers were permitted to purchase coverage from the private market that overlapped coverage provided by the FHCF.
- The FHCF was authorized to purchase reinsurance to maximize the capacity of the fund.
- If no covered events occurred in any year, the statute provided that up to two percent of that year's reimbursement premium could be appropriated by the legislature for mitigation projects.

Key Structural FHCF Items Amended into Florida Statute Between 1995-2020

Section 215.555 has been amended in 17 of the 27 years since it was created. Some of the major changes to the FHCF include the following:

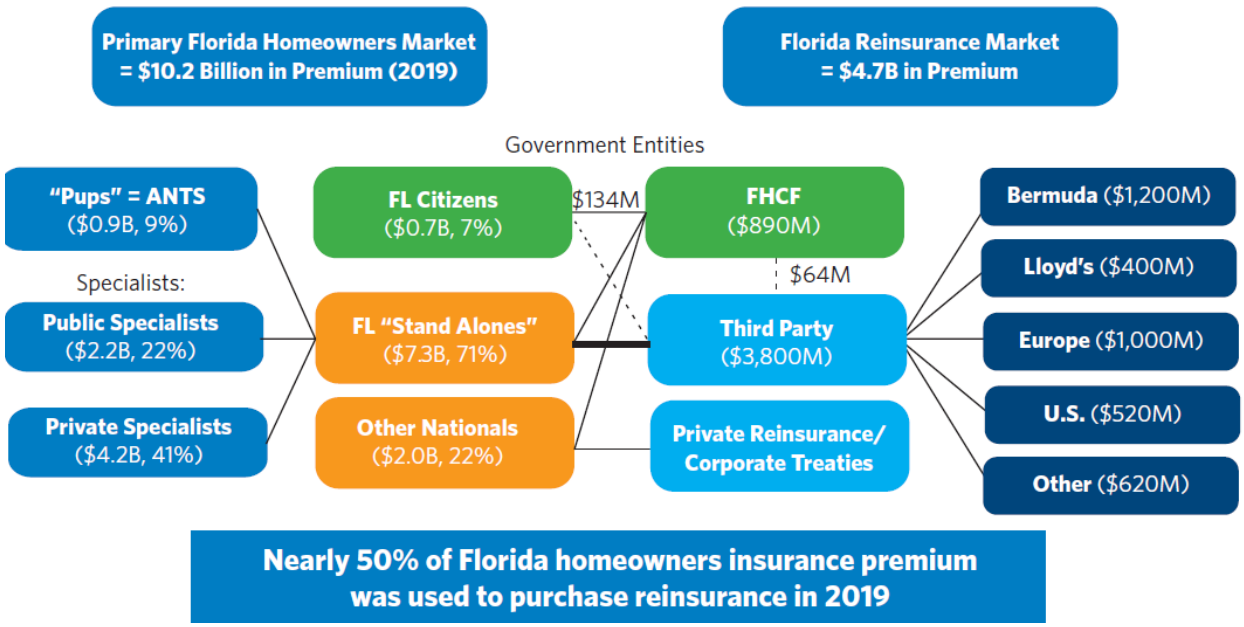
- The retention of a company has changed from a percentage of gross written premium to a percentage of an "industry retention" which has changed over time. The "industry retention" has varied from a low of $2.9 billion in 1996 to a high of $7.7 billion today.
- In addition to the 75% reimbursement option in the original statute, options of 45% reimbursement and 90% reimbursement were adopted in 1995.
- Nonresidential commercial property insurance was excluded from coverage in 1995.
- Reinsurance coverage for loss adjustment expenses was limited to 5% of paid losses in 1995 and increased to 10% in 2019.
- The limit of coverage was fixed at $11 billion in 1999. That limit was increased to $17 billion in 2010 and frozen at that level unless a second season limit of $17 billion could be fully funded by the FHCF's estimated borrowing capacity.
- Optional coverages were offered for several years after the storms of 2004 and 2005. Those optional coverages, which have been repealed, included:
    1. Coverage with an industry retention of $3 billion, $4 billion, or $5 billion
    2. An additional $12 billion of coverage above the mandatory FHCF layer
    3. $10 million of optional coverage for smaller insurers which attached at 30% of the insurer's policyholder surplus (net worth) (net worth)
- Reimbursement premiums were increased by adopting an optional "rapid cash build-up" factor in 2002. The factor was initially used in 2006, was repealed in 2007, and readopted in 2009. Currently, the rapid cash build-up factor adds 25% (about $250 million) to the reinsurance premium charged by the FHCF.
- Assessment authority was increased to a maximum of 4% per year or 6% for multiple years in 1999. Assessment authority was increased again in 2004 to a maximum of 6% for a single year of storms or 10% for multiple years of storms.
- Full retention for two events was required in 2005 prior to a drop-down to one-third of the retention for the third and subsequent events.
- In 2007, the SBA was given authority to increase the limit of the FHCF by $4 billion if market conditions required. That authority was repealed in 2009.

Key Structural FHCF Items as Reflected Currently in Florida Statute

- $17 billion limit ("actual claims-paying capacity")
- No optional coverages are available
- $7.74 billion industry retention ($4.5 billion plus exposure growth since 2005)
- Retention lowered by two thirds for the third hurricane provided a company's full FHCF retention has been applied in each one of two separate hurricanes
- 86.193% average coverage selection (options 45%, 75%, 90%)
- Coverage selections are grossed up in order to sell the full $17 billion limit
- $1.193 billion in premium (includes rapid cash buildup factor of 25%)
- $2.450 trillion exposure base
- 0.4867 rate per $1,000 of exposure
- Losses caused by the following are excluded from FHCF coverage:
    1. Loss assessments from condominium or homeowners' associations
    2. Amounts paid for bad faith awards or punitive damage awards
    3. Amounts paid in excess of policy limits
    4. Amounts paid under liability coverage
- Reimbursement for loss adjustment expense is fixed at 10% of indemnity losses paid
- The FHCF is authorized to purchase reinsurance
- At least $10 million must be appropriated annually for mitigation projects

Reinsurance of Florida Residential Risks

Like individuals, insurers purchase insurance to protect themselves against hurricane losses. The insurance purchased by insurers is called "reinsurance". Like an insurance policy, a reinsurance policy (or contract) contains a deductible (called retention) and a limit (the maximum amount that will be paid in the event of a hurricane loss). The flow of premium in the Florida market for 2019 is shown below.



Source: Dowling & Partners Securities, LLC

The state of Florida requires any admitted company writing over $10 million in business to purchase reinsurance from the FHCF. Beyond that, Florida statutes and the rules promulgated by the OIR are silent on any required reinsurance for insurers writing homeowners insurance.

However, rating agencies that review the performance of Florida insurers have several specific guidelines for reinsurance which did not exist when Hurricane Andrew struck Florida in 1992:

- The company's retention (deductible) in the event of a hurricane loss cannot exceed 15% of a company's policyholders' surplus (net worth).
- The first event limit must exceed the 130-year return period.
- The second event limit must exceed the 50-year return period after assuming that the FHCF limit has been exhausted.

The probability that hurricanes will occur is often expressed as a return period.

The inverse of probability (generally expressed in %), return period gives the estimated time interval between events of a similar size or intensity. For example, the return period of a hurricane might be 100 years; otherwise expressed as its probability of occurring being 1/100, or 1% in any one year. This does not mean that if a hurricane with such a return period occurs, then the next will occur in about one hundred years' time - instead, it means that, in any given year, there is a 1% chance that it (or a larger storm) will happen, regardless of when the last similar event was. Or, put differently, it is 10 times less likely to occur than a hurricane with a return period of 10 years (or a probability of 10%).

Here is the estimated return period of the ten largest hurricanes to hit the state of Florida:

Year	Storm	Insurance Industry Losses in 2020 Dollars with Current Exposure	Personal and Commercial Residential Loss in Billions of 2020 Dollars and Current Exposure	Estimated Return Period (Years)
1926	Great Miami	$149.5	$ 60.9	123
1928	Lake Okeechobee	$ 76.7	$ 43.5	57
1947	Fort Lauderdale	$ 69.4	$ 33.2	36
1992	Andrew	$ 59.8	$ 23.0	22
1949	No name 02	$ 36.7	$ 21.3	20
2005	Wilma	$ 27.6	$ 17.4	17
1950	King	$ 42.9	$ 16.6	16
1921	Tampa Bay	$ 22.3	$ 12.2	12
1945	Homestead	$ 25.5	$ 11.9	12
1935	Labor Day	$ 16.2	$ 9.8	10

Source: Karen Clark & Company

This chart should not be used to minimize either the destruction or the disruption caused by a major hurricane. There will be damage to infrastructure which is not insured. There will be portions of the damage to homes and businesses that are not covered by insurance. There will be significant hurricane deductibles which will be paid by individual homeowners and businesses. (The estimated hurricane deductible on Florida's personal residential and commercial residential risks reinsured by the FHCF is $3.5 billion)

The chart should be used to indicate that Hurricane Andrew was not a 100-year event or the most destructive storm to hit Florida. However, Hurricane Andrew did surprise a lot of insurers and caused 11 insolvencies because the computer models used by insurers to monitor their hurricane exposure today did not exist in 1992.

Finally, the chart should be used to indicate that the reinsurance capacity provided by the FHCF (currently $17 billion) is less than one third the amount needed to protect insurers from insolvency after a major hurricane. The other financial resources to pay for hurricane claims must come from insurance carriers paying their retentions and private insurers providing reinsurance to insurers writing risks in Florida at open market prices. The price of private reinsurance is typically two or three times the price charged for that same reinsurance by the FHCF.

Who Pays for Losses Caused by a Hurricane?

The distribution of the losses depends on the size of the storm. As the size of the storm increases, the FHCF will pay a greater share of the loss because more insurers will exceed their FHCF retention (deductible) specified in their contract with the FHCF. Here are some examples of how the loss was distributed in past hurricanes (amounts in billions).

2004 – Four Storms
Industry Retention $4.6 billion

Losses Incurred by FHCF	$3.85	18.4%
Losses Incurred by insurers and reinsurers	$17.05	81.6%
Total Losses (Billions)	$20.90	100.0%

2017 Hurricane Irma
Industry Retention $6.8 billion

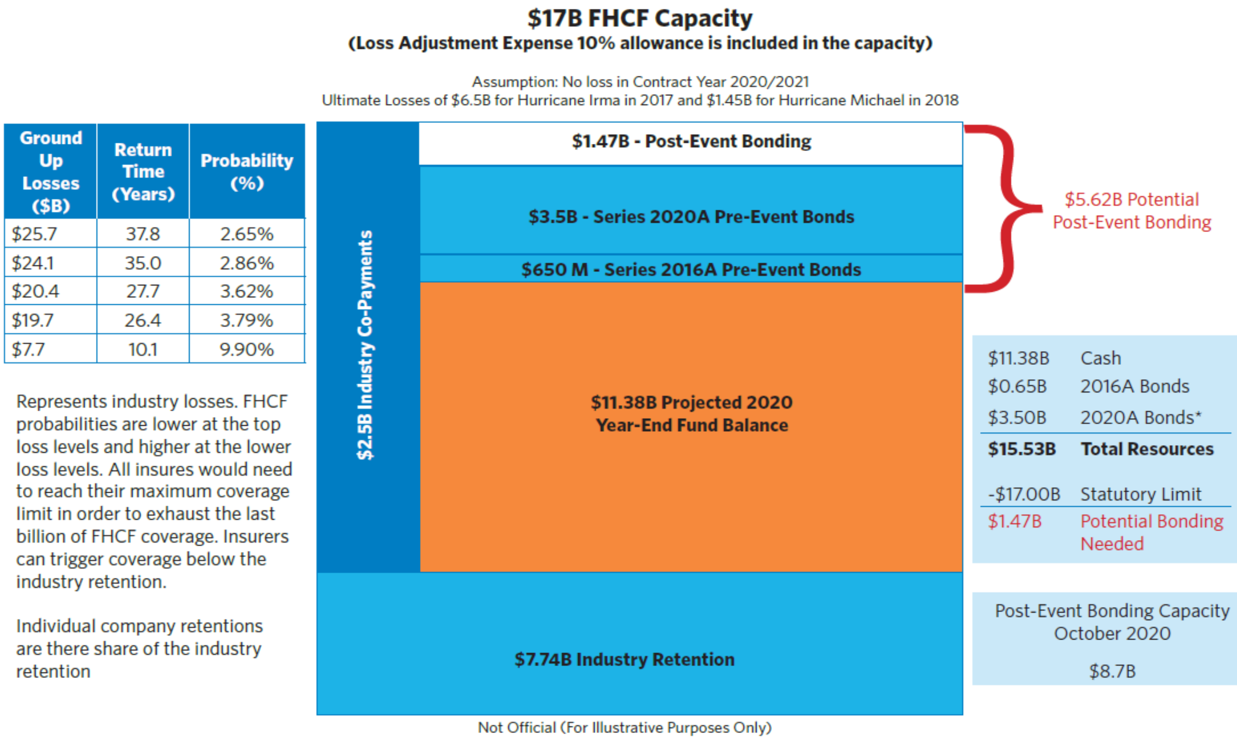
Losses Incurred by FHCF	$6.21	43.0%
Losses Incurred by insurers and reinsurers	$8.24	57.0%
Total Losses (Billions)	$14.45	100.0%

2018 Hurricane Michael
Industry retention $7.2 billion

Losses Incurred by FHCF	$1.31	25.7%
Losses Incurred by insurers and reinsurers	$3.79	74.3%
Total Losses (Billions)	$5.10	100.0%

What Does "Industry Retention" Mean?

The reference to "industry retention" which appears in the current statute describing the reinsurance coverage provided by the FHCF can be misleading to many legislators because the material presented to them by the FHCF looks like this chart:



A quick look at the probability, ground up losses, and return time could leave legislators with the impression that the FHCF would be loss free until the insurance industry losses from a hurricane reached $7.7 billion and that the $17 billion limit of the FHCF would be exhausted when industry losses reached $25.7 billion. This is not the case, as a result, FHCF has added the explanation which appears below the return time numbers shown on the chart they distribute.

The FHCF can be required to pay losses for some insurers after hurricanes that do not cause enough damage to reach the level of "industry retention." That can occur because the liability of the FHCF for hurricane claims is determined by 165 individual contracts that provide loss reimbursement when an individual company exceeds its FHCF retention and not by "industry retention." Individual insurers' retentions are their share of the industry retention. Some insurers have retentions that are quite large while other insurers have retentions that are quite small. It is also true that a storm that causes $25 billion in covered losses would not exhaust the FHCF limit of $17 billion excess of the industry retention of $7.7 billion. All 165 participating insurers would need to reach their maximum coverage limit in order to exhaust the last billion of the FHCF's $17 billion of coverage. That would not occur even in a 100-year event.

This difficult concept can be better understood by studying the chart below which summarizes the loss experience of the FHCF since its inception in 1994:

Year	Event	Total Participants	Participants Reimbursed	Total Paid by FHCF	Reported but unpaid losses
1995	Erin, Opal	290	9	$ 13,000,000	$ 0
2004	Charley, Frances, Ivan, Jeanne	236	136	$ 3,860,000,000	$ 0
2005	Dennis, Katrina, Wilma	214	114	$ 5,536,000,000	$ 0
2017	Irma	160	90	$ 4,720,000,000	$ 1,490,000,000
2018	Michael	165	29	$ 1,020,000,000	$ 290,000,000
Total	**11 Hurricanes in 27 years**	**1,065**	**378**	**$15,149,000,000**	**$ 1,780,000,000**

Irma covered the entire state and caused insured personal residential and commercial residential losses of $15 billion. After that loss, only 90 of the 160 insurers that purchased reinsurance from the FHCF qualified for loss reimbursements. The reported loss to the FHCF, $6.2 billion, is only 37% of the statutory limit of $17 billion. This meant that Hurricane Irma was about a 20-year loss event for the FHCF.

FHCF Loss	Estimated Return Time	Probability of Exceedence
$2 Billion	11.3 Years	8.83%
$5 Billion	16.9 Years	5.92%
$8 Billion	22.8 Years	4.39%
$10 Billion	31.2 Years	3.21%
$12 Billion	38.2 Years	2.62%
$14 Billion	52.6 Years	1.90%
$16 Billion	99.6 Years	1.00%

Source: FHCF 2020 Rate Making Formula Report

Financial Results of the FHCF

Since its inception, the FHCF has earned about $26.5 billion in revenue. This includes about $24 billion in "reimbursement premium" collected from "participating insurers" and about $2.5 billion in investment income.

The biggest expense incurred by the FHCF is for hurricane losses. These losses have been $16.9 billion from 11 hurricanes since inception.

To maintain the tax-exempt status of the FHCF the Legislature is required to appropriate, at least $10 million annually, from the investment income of the FHCF to fund "mitigation" projects. Since its inception, those appropriations have totaled $266 million.

The FHCF also spends money on pre-event notes to provide liquidity in the event of a large hurricane and, in some years, reinsurance to protect from large events. The costs of the pre-event notes and the reinsurance are passed thru to participating insurers in the form of increased reimbursement premiums.

The FHCF has a staff of fewer than 20 people and most of that administrative and actuarial work is contracted to Paragon Strategic Solutions, Inc., a subsidiary of the insurance and reinsurance broker AON. Paragon has performed this role since the inception of the FHCF. Paragon's staff and consulting expenses total about $5 million per year.

At present, the FHCF has $15.53 billion of cash on hand to pay future claims. That amount will grow by over $1 billion in 2021 as reimbursement premiums and investment income are collected.

FHCF Bonding Capacity

In addition to cash on hand, the FHCF has the statutory authority to issue revenue bonds to pay hurricane claims after the storm. The revenue bonds would be repaid from future premium collections and assessments of up to 6% of premium on all property and casualty insurance policies written in Florida, except policies providing workers compensation coverage or medical malpractice coverage.

After the storms of 2005, the FHCF issued $2.65 billion in bonds and levied an assessment of 1%. The assessment was subsequently raised to 1.3% and remained in effect until January 1, 2015.

The assessment is levied on the insured. The insurance company's responsibility is to collect the assessment and remit the funds to the FHCF. Non-payment of an assessment is treated as non-payment of premium and the insurance policy is canceled.

On October 27, 2020, financial advisors estimated that, if required, the FHCF had the capacity to issue up to $18 billion of revenue bonds over a 24-month period. This level of borrowing would fully fund a total loss of $17 billion in 2021 and provide $9.9 billion of liquidity to pay for hurricane losses that occurred in 2022. That is approximately 58% of the statutory liability of $17 billion for the second season.

FHCF Ratemaking Process

FHCF rates are calculated by Paragon Strategic Solutions, Inc., a subsidiary of the insurance and reinsurance broker AON, and approved by the State Board of Administration.

The process of calculating the rates is described in a “Ratemaking Formula Report” which is issued annually. See a link below to access the report:

http://fhcf.paragon.aonbenfield.com/rates-and-premium/2020/

The process begins by calculating an expected annual industry loss using five different computer models that have been approved by the Florida Commission on Hurricane Loss Projection Methodology. The approved models used in calculating the expected annual loss are AIR, CoreLogic EQECAT, RMS, Applied Research Associates (ARA), and the Florida Public Model (FPM). The sixth approved model, Karen Clark & Company (KCC) was not used in 2020 because KCC declined to participate in the 2020 ratemaking process.

The results of the individual models are not released by Paragon or the FHCF. The results of the five models are ranked from lowest to highest based on annual aggregate expected losses. The model results are then weighted 5%, 20%, 50%, 20%, and 5% to produce the estimated annual aggregate loss used in the ratemaking formula. The expected annual industry loss estimate was $3,102,472,750 for 2020.

The estimated expected annual loss for the industry is then allocated to the FHCF $17b coverage layer. The FHCF allocation for 2020 was $873,085,307.

The modeled results for the FHCF are then adjusted by Paragon in the following manner:

- The average annual loss to the FHCF is increased by 4.26% to reflect estimated law and ordinance coverage, which is not include in the modeled losses, and an adjustment for aggregate wind deductibles.
- The average annual loss to the FHCF is reduced by .3566% to reflect individual company limits, retentions, and coverage based on an analysis by RMS and AIR
- The average annual loss to the FHCF is increased by 5% to reflect coverages like guaranteed replacement cost, inflation guard, “and other factors that are not directly included in the modeled loss results.”
- The modeled losses to the FHCF are not reduced to reflect the expected investment income of the FHCF.
- The average annual loss to the FHCF is increased by $8,778,138 to reflect the operating expenses of the FHCF.
- The average annual loss to the FHCF is increased by $8.2 million to reflect the estimated annual cost of pre-event notes.

The adjusted expected annual industry loss estimates for the FHCF listed above by Paragon produced an "actuarially indicated base premium" of $903,392,368 for contract year 2020.

The rapid cash buildup factor of 25% added $225,848,092 to the "base premium"

The final adjustment was to increase the base premium by $63,480,000 to reflect the anticipated purchase of private reinsurance by the FHCF. (That purchase was not made for the 2020 contract year).

This meant the total premium charged by the FHCF for contract year 2020 (June 1, 2020 to May 31, 2021) was $1,192,720,460. That is about 25% of the total amount spent by Floridians on reinsurance every year.

It should be noted that the cost of purchasing reinsurance from the FHCF is significantly less than purchasing reinsurance from the private sector. This occurs because the FHCF pays no taxes, has low expenses, and does not have to earn a rate of return on invested capital for shareholders. Additionally, they have an unlimited assessment base to make up for any claim payment obligations.

$17 Billion Limit excess of $7.740 Billion Industry Retention

Components	Premium Charge	Rate on Line
Average Annual Loss	$ 886,417,654	5.21%
Adjustments	$ 16,974,714	.10%
Rapid Cash Buildup	$ 225,848,092	1.33%
Reinsurance Purchase	$ 63,480,000	.37%
Total	**$1,192,720,460**	**7.02%**

Source: FHCF Ratemaking Formula Report March 17, 2020
Note: "Rate on Line" is "Premium Charge" divided by $17 billion limit
Note: FHCF Contract charged a total rate on line of 7.02%

In a 2011 presentation on behalf of Raymond James, John Forney made the statement that the cost reinsurance from the FHCF was only one third the cost of reinsurance provided by the private sector. At the time, Mr. Forney and Raymond James was a financial advisor to the FHCF and, while he might have overstated the case, he did have a valid point. The cost differential, as measured by rate on line, between the FHCF and the private sector today for the layer of reinsurance 90% of $17 billion excess $7.74 billion looks like this:

	FHCF Calculation	AIR Model	KCC Model
Average Annual Loss	5.21%	3.99%	5.16%
FHCF Premium (Rate on Line)	7.02%	7.02%	7.02%
FHCF Premium (Rate on line without rapid cash)	5.69%	5.69%	5.69%
Open Market Reinsurance Premium	14.24%	14.24%	14.24%
Cost Savings (Rate on line)	8.55%	8.55%	8.55%

Note: Rate on line is the reinsurance premium divided by the limit

The chart shows the following:

- The rate on line currently being charged by the private sector is two and one half times more expensive than the cost of the FHCF without the rapid cash buildup factor.
- The rate on line charged by the FHCF without the rapid cash build up exceeds the average annual loss projected by the KCC model. That means the rates being charged by the FHCF appear to be adequate.
- The rate on line being charged by the private reinsurers is three and one half times the average annual loss projected by the AIR model.

Conclusion

The legislature duly created the FHCF due to the unavailability and unaffordability of reinsurance capacity, which occurred after South Florida was impacted by Hurricane Andrew in 1992. Moreover, the structure of the FHCF has been legislatively amended many times over the years to provide a stable and sustainable source of reinsurance capacity for Florida's residential insurance environment during times of market disruptions. Once again, Florida's residential insurance environment is experiencing difficulty in obtaining available and affordable private reinsurance capacity and debt capital.

A number of fundamental reforms are needed to provide market certainty before the private reinsurance and capital markets soften their positions in regard to capacity and price. Implementing the fundamental legislative reforms required to stabilize the residential insurance market is a time sensitive matter, as any legislative action will likely take years to be fully adopted into the market environment and yield the intended benefits to Florida's insureds. However, additionally implementing the recommended FHCF reforms outlined in this report will provide the needed reinsurance capacity and rate relief to insureds on an expedited basis. The FHCF reforms outlined in this report will provide immediate stability and certainty, as it pertains to the current deficiency of available and affordable private reinsurance capacity, while allowing for the benefits of more fundamental legislative reforms to be realized over a longer time horizon.

In difficult times, the Florida Legislature has always used its available resources to provide Florida's economy and residential property insureds the necessary relief. The Florida Legislature should view the current insurance market disruptions through a holistic lens and implement reforms that benefit the greatest number of impacted stakeholders, rather than favoring one state institution (i.e., FHCF) or industry stakeholder (i.e., Private Reinsurers).

It would be my pleasure to provide a detailed review this report with any member of the Florida Legislature interested in more information. Please do not hesitate to contact me at 561-704-0428 or pjh@federalinsurancereform.org

Thank you in advance, for your review of these materials and consideration for legislative adoption.

Sincerely,

Paul Handerhan, MBA, CPCU, ARe, AIAF