Florida Hurricane Catastrophe Fund

Annual Report of Aggregate Net Probable Maximum Losses,
Financing Options, and Potential Assessments

February 2016

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The data contained in this report has not been audited. This report was prepared by Raymond James & Associates as financial advisor to the Florida Hurricane Catastrophe Fund.

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Purpose and Scope

Section 627.35191, Florida Statutes, enacted in 2013, requires the Florida Hurricane Catastrophe Fund (FHCF) to provide a report to the Legislature and the Financial Services Commission regarding the aggregate net probable maximum losses, financing options, and potential assessments of the FHCF. More specifically:

> **§ 627.35191(1) Required Reports.** By February 1 of each year, the Florida Hurricane Catastrophe Fund and Citizens Property Insurance Corporation shall each submit a report to the Legislature and the Financial Services Commission identifying their respective aggregate net probable maximum losses, financing options, and potential assessments. The report issued by the fund and the corporation must include their respective 50-year, 100-year, and 250-year probable maximum losses; analysis of all reasonable financing strategies for each such probable maximum loss, including the amount and term of debt instruments; specification of the percentage assessments that would be needed to support each of the financing strategies; and calculations of the aggregate assessment burden on Florida property and casualty policyholders for each of the probable maximum losses.

Introduction

The FHCF plays a significant role in the provision of property insurance coverage for Florida residents. Ten consecutive seasons without hurricane activity affecting Florida have given the FHCF an opportunity to accumulate sufficient reserves to prepare for future storms. The FHCF has significant financial resources as of the end of 2015, with an estimated fund balance of approximately $12.7 billion. In addition to these resources, the FHCF also has $1.5 billion in proceeds from outstanding Series 2013A pre-event debt ($500 million of the $2 billion outstanding matures on July 1, 2016 and will therefore not be available to pay claims for the 2016 season) and projected $1.2 billion in proceeds from Series 2016A pre-event debt that is expected to price and close in February 2016, providing additional liquidity for 2016 and future seasons. Nonetheless, the FHCF might still need to rely on relatively marginal emergency assessments and post-event bonding capabilities to pay claims if a storm or storms of sufficient size impacted Florida. The analyses presented in this report summarize those resources and how the FHCF would apply them after an event.

Aggregate Net Probable Maximum Loss

The basic claims payment structure of the FHCF is as follows:

- Except for certain de minimis exemptions, all admitted insurers writing residential property insurance in Florida, including Citizens Property Insurance Corporation, are required by Section 215.555, Florida Statutes, to obtain FHCF reimbursement coverage.

- The FHCF reimburses each participating insurer for a portion of its hurricane losses under residential policies. The insurer has the option of selecting a coverage percentage of 45%, 75%, or 90%.

- An insurer's FHCF reimbursement coverage is triggered after it meets its retention (the functional equivalent of a deductible). For the contract year that began on June 1, 2015 and ends on May 31, 2016, the aggregate retention for all participating insurers is $6.9 billion. Aggregate retention for the contract year beginning on June 1, 2016 is projected to be $7.0 billion. Once an insurer's losses exceed its share of the aggregate industry retention, it triggers coverage. It is not a requirement that aggregate insurer losses exceed the aggregate industry retention prior to that insurer being eligible for FHCF reimbursement.

- The maximum obligation of the FHCF for a given contract year is specified by statute. The current maximum is $17 billion. Each insurer's reimbursement coverage is limited to its share of the $17 billion maximum obligation.

- An insurer's reimbursement premium, retention, and coverage limit are based on its total insured values by ZIP code as of June 30, which must be reported by each insurer annually by September 1 of each year.

- The claims-paying resources of the FHCF include:

    - Reimbursement premiums: cash available from current and past accumulation of reimbursement premiums and investment income. The cash balance is used before any of the other claims-paying resources are used. The FHCF collected approximately $1.2 billion in reimbursement premium, net of expenses, mitigation and debt service, from participating insurers for the 2015-2016 contract year and the total preliminary cash balance as of December 31, 2015 was $12.7 billion. The FHCF is projected to collect $1.2 billion in reimbursement premium, net of expenses, mitigation and debt service, for the 2016-2017 contract year and the total projected cash balance as of December 31, 2016 is $13.8 billion.

- Proceeds from pre-event financing: the FHCF currently has $2 billion in proceeds from the Series 2013A pre-event bond issue, but only $1.5 billion will be available for the 2016 season as $500 million matures on July 1, 2016. The FHCF and its financial services team is working on the projected issuance of $1.2 billion of Series 2016A pre-event bonds that is expected to price and close in February 2016 and will be available for the 2016 and subsequent seasons.

- Proceeds from any post-event debt: post-event debt is repaid from emergency assessments on most Florida property and casualty premiums of both admitted and non-admitted lines of business (the exceptions are workers' compensation, medical malpractice, accident and health, and federal flood insurance). Post-event resources could also include funds from assessments levied without the issuance of post-event debt. The maximum assessment percentage is 6% with respect to any one contract year's losses and 10% with respect to all contract years' losses combined. No such post-event debt is outstanding and therefore there are currently no assessments.

- Risk transfer: recoverables from reinsurance and other risk transfer products. The FHCF purchased $1 billion of reinsurance for the first time ever for the 2015 season. No such risk transfer products are in place as of the date of this report for the 2016 season.

Table 1 on the following page shows the net probable maximum loss to the FHCF from storms of the return time specified. The loss calculations were derived from the FHCF 2015 Ratemaking Formula Report prepared by Paragon Strategic Solutions Inc., consulting actuary to the FHCF. The complete 2015 Ratemaking Formula Report can be found at http://fhcf.paragonbenfield.com/pdf/15ratereport.pdf

Table 1
($ in billions)

Return Time (Years)	Gross Probable Maximum Loss[1]	Maximum Net Losses to FHCF[2]	Adjusted Net Losses to FHCF[3]	Projected Year-End Fund Balance[4]	Potential Post-Event Bonding[5]
250	$80.6	$17.0	$16.9	$13.8	$3.1
100	$53.9	$17.0	$16.4	$13.8	$2.6
50	$36.0	$17.0	$14.2	$13.8	$0.4

Coverages	Amount
2016 Retention (Projected)	$7.0
FHCF Coverage	$17.0

1 Represents gross loss to all Florida residential policyholders from a storm of the indicated return time multiplied by 1.05 to allow for 5% loss adjustment expenses pursuant to Section 215.555(4)(b)1, FL Statutes.

2 Based on the maximum statutory limit and the assumption that the FHCF operates as a single industry entity with a single industry retention and industry limit that apply to industry gross losses from total industry exposure.

3 Based on the assumption that the total FHCF net losses is the sum of losses from approximately 157 individual companies, each with its own retention, limit and exposure distribution. Under this assumption it is unlikely for all insurers to trigger or exhaust the total of all FHCF coverage. Adjusted loss information for 2016 is not available, and may be different from that shown as derived from the 2015 Ratemaking Formula Report.

4 FHCF fund balance is projected as of 12/31/16.

5 Adjusted Net Losses to FHCF less Projected Year-End Fund Balance. Assumes the use of post-event financing, which is repaid with emergency assessments but does not contemplate risk transfer.

Numbers may not add due to rounding.

Financing Options

The FHCF undertakes two basic types of financing: (1) pre-event financing to provide liquid funds to reimburse participating insurers in a timely manner; and (2) post-event financing designed to provide the ultimate source of payment of covered claims in excess of cash on hand.

The FHCF has $2.0 billion of Series 2013A pre-event debt outstanding, but only $1.5 billion is available to pay claims for the 2016 season as $500 million matures on July 1, 2016. The FHCF is also projected to have an additional $1.2 billion of Series 2016A pre-event debt that is expected to price and close in February 2016. The proceeds of these pre-event financings are available to pay future claims. Pre-event interest expenses are designed to be paid primarily from the interest earnings on the invested proceeds of the pre-event bonds (which are retained pending their use to pay future claims) and from reimbursement premiums. There are no assessments associated with pre-event bonds of the FHCF. If the proceeds of pre-event bonds are ever used to pay claims, the FHCF can levy emergency assessments to pay back the bonds or the FHCF can refinance such pre-event bonds using post-event bonds secured by emergency assessments.

The FHCF has no post-event bonds outstanding. The FHCF defeased its outstanding post-event bonds issued to pay claims for 2005 events and therefore the associated assessments were also eliminated for all policies issued or renewed on or after January 1, 2015.

The FHCF has the statutory authority to amortize its debt over a term of up to 30 years. Given the magnitude of the losses associated with the storms summarized in Table 1 above, the FHCF could use this full term (or any shorter term) for any bonds associated with the financing of these losses. Market conditions are significantly better today than six years ago, interest rates are at historically low levels and the FHCF's Series 2013A taxable pre-event financing was extremely successful. However, market conditions and access are relatively uncertain but critical to understanding the challenges facing the FHCF, especially after a large event. As summarized in Table 1, bonding needs of this size are large by municipal market standards.

Conditions in the municipal and corporate markets are favorable, having significantly improved in recent years. U.S. corporate bond sales increased to $1.5 trillion in 2014, surpassing the record in 2014 of over $1.4 trillion, as investors sought higher-yielding alternatives to government securities and companies took advantage of relative all-time low interest rates. The corporate bond market has topped $1 trillion each year since 2010 as interest rates have been consistently historically low. After declining significantly in 2011, municipal issuance also rebounded strongly in 2012 with a 30% increase. In 2015, the municipal bond market was 12% higher than 2014 and 13% higher than 2013, with $378 billion in total issuance, of which $28 billion was taxable.

	Municipal				Corporate	
Year	Tax-Exempt ($B)	Taxable ($B)	Total ($B)	% Change	Par ($B)	% Change
2009	$323	$84	$410	5%	$902	28%
2010	$279	$151	$433	6%	$1,063	18%
2011	$247	$31	$295	-32%	$1,012	-5%
2012	$335	$32	$382	30%	$1,365	35%
2013	$277	$35	$335	-12%	$1,414	4%
2014	$292	$23	$338	1%	$1,474	4%
2015	$350	$28	$378	12%	$1,509	2%

Source: SIFMA

The FHCF has some additional factors working in its favor independent of strong fixed income market trends, including, but not limited to: (1) in April 2013, the FHCF successfully priced $2 billion of Series 2013A taxable pre-event bonds with 3, 5 and 7-year maturities at a true interest cost of 2.61% and received over $3.6 billion in orders (1.79x oversubscribed) and the FHCF is also projected to issue $1.2 billion of Series 2016A pre-event bonds in February 2016, which will help to re-establish the FHCF in the taxable market; (2) the FHCF is a well-regarded, highly-rated credit (long-term ratings of AA/AA/Aa3 from Standard & Poor's, Fitch, and Moody's, respectively), closely associated with (though not guaranteed by) the State of Florida, which is a blue-chip name in the market; (3) similar to the Series 2013A pre-event financing and the projected Series 2016A pre-event financing, any post-event bond issuances of the size the FHCF may undertake would also be included in the various benchmark indices market observers use to track market performance, so institutional money managers seeking to at least match indexed returns may have a strong additional incentive to buy FHCF bonds, particularly if they are offered at interest rates marginally higher than those typically associated with AA rated credits; and (4) the FHCF has no post-event bonds outstanding.

Although financial market conditions have significantly improved over the last six years and are currently expected to be conducive to favorable debt issuance, it is not possible to guarantee financial market conditions into the future. If long-term bonding in sufficient amounts is not immediately available, the FHCF may need to explore alternatives, including the levying of emergency assessments with no financing, issuing bonds in multiple tranches over time and/or interim financing alternatives. The FHCF statute provides that the FHCF's liability is limited to the amount it can actually raise from bonding and other available claims payment sources. The timing of reimbursements to insurers can vary depending on whether insurers need to pay their policyholders quickly, such as might occur with a category five hurricane causing a large number of total losses, or slowly due to a covered hurricane where large losses are due to many partial losses materializing over a number of years.

Assessment Impact

As described above, in situations involving large losses with rapid loss development the FHCF would probably attempt a financing based on the projected or actual dollar losses generated by the hurricane or hurricanes in order to finance its statutory limit, as shown in Table 1. These bonds would be repaid using emergency assessments.

Table 2 shows the estimated annual assessment impact from the varying hurricane loss scenarios.

Table 2
($ in millions)

Return Time (Years)	Potential Post-Event Bonding	Required Annual Assessment[1]	Required Annual Assessment (%)[2]
250	$3,146	$205	0.50%
100	$2,593	$169	0.41%
50	$429	$28	0.07%

[1] Assumes annual assessment for 30 years using an interest rate of 5%. There is no certainty that FHCF covered loss reimbursements can be financed at assumed interest rates. The amount which can be financed after an event could be financed over a shorter period of time or could be smaller and is subject to financial market conditions following the event.

[2] Assumes annual assessment base of $40.9 billion, which is the projected base for 2015 based on actual direct written premium collections for the first three quarters of 2015 and projected direct written premium collections for the fourth quarter of 2015 based on the lowest quarterly increase in direct written premium for 2015 of 3.7%. Surplus Lines and Independently Procured Coverage are projected for 2015 at the lowest quarterly increase in direct written premium for 2015 of 3.7%. If this base is smaller, required assessment percentages would be marginally higher than shown above.

Conclusion

As a result of ten consecutive years without major hurricane losses, the FHCF has significant cash on hand to pay claims. In addition, it has $1.5 billion in Series 2013A pre-event bond proceeds available for the 2016 season and $1.2 billion of projected Series 2016A pre-event bond proceeds. For catastrophic events requiring funds beyond the cash and pre-event bond proceeds, the FHCF relies on post-event bonding and other revenue sources for claims paying capacity.

For catastrophic losses, either from an extreme single event or from multiple events, the FHCF will likely issue post-event bonds to pay claims and assess to repay the bonds. The potential assessment burden is estimated to be significantly lower to near none this year than in prior years. In the event bonding is required, conditions in the financial markets have also significantly improved over recent years, although, of course there cannot be a guarantee that all bonding can be placed. However, to serve its catastrophic purpose, the FHCF can and may need to execute one or more post-event financings over a 12 month period in order to accommodate participating insurers large losses that experience rapid loss development and exhaust their FHCF payout limits.

The ability of the FHCF to pay claims in a sufficient and timely manner is critical to the health of the Florida insurance market, property owners and residents, and the Florida economy in general.