2013

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Publication: Rutgers Journal of Law & Public Policy

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THE BALKANIZATION OF CAT PROPERTY INSURANCE: FINANCING AND FRAGMENTATION IN STORM RISKS

Donald T. Hornstein

After a catastrophic weather event ("CAT"), such as a hurricane, there inevitably arise disputes over the cause of property damage, with losses attributable to flooding assigned to policies issued under the National Flood Insurance Program, and losses attributable to wind assigned to policies issued by private insurers and/or by various state-based residual risk pools. Despite the fact that this “wind versus water” allocation has been occurring for almost half a century, it is still used as a symbol of arbitrariness and dysfunction in society’s ability to deploy insurance in situations where it is most needed. Often, it is the point of contrast between the fragmented American approach to CAT property losses and more unified approaches found in the “code des assurances” in France (mandatory disaster coverage), coverage for bundled natural-disaster losses

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1 Aubrey L. Brooks Professor of Law, University of North Carolina School of Law, and Member, Board of Directors, North Carolina Wind Pool. All of the views expressed in this paper are attributable to me solely in my capacity as a law professor. None of these views are intended to represent the views of the North Carolina Wind Pool or the North Carolina FAIR Plan, or even my own views when serving in my capacity as a member (and alternate member) of those institutions. Special thanks to Rory Fleming, UNC Law School Class of 2015, for invaluable research assistance.


This Article surveys recent developments in the ongoing American debate over the fragmentation, and possible integration, of CAT property insurance, focusing on storm-related CATs. In most respects, for those who decry fragmentation of coverage, it’s all bad news. Not only is there no visible political momentum behind proposals for national catastrophe insurance, but the wind-water dividing line is further fractured by doctrinal differences among jurisdictions over concurrent cause, by the increasing tendency among private wind carriers and state wind pools to expand deductibles and reduce policy limits, and by recent legislative changes in

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3 See Isabelle Durant, Belgium, in Financial Compensation for Victims of Catastrophes, supra note 2, at 66-69 (key provisions of the Belgian Act of 21 May 2003).

4 See Véronique Bruggeman, Michael Faure & Tobias Heldt, Insurance Against Catastrophe: Government Stimulation of Insurance Markets for Catastrophic Events, 23 DUKE ENVT'L L & POL'Y F. 185, 196 (2012) (“In California, the [California Earthquake Authority] . . . assumes primary responsibility for bearing earthquake risk . . .”).

5 See Robert H. Jerry, II & Steven E. Roberts, Regulating the Business of Insurance: Federalism in an Age of Difficult Risk, 41 WAKE FOREST L. REV. 835, 875 (2006) (noting that, despite several bills having been introduced in Congress in 2006 to address lack of catastrophe insurance, “to date, except for the creation of the national flood insurance program in 1968, the federal government has not intervened in insurance markets to enhance coverage availability for victims of natural disasters.”).

6 See, e.g., Joseph Lavitt, The Doctrine of Efficient Proximate Cause, the Katrina Disaster, Prosser’s Folly, and the Third Restatement of Torts: Cracking the Conundrum, 54 LOY. L. REV. 1, 1 (2008) (“Identical classes of loss following an event such as Hurricane Katrina may be covered by insurance in one state, but excluded in another—solely because of varying enforcement of standardized insurance policy exclusions.”).

Summer 2012 to the National Flood Insurance Program ("NFIP") that created varying subcategories of coverage.\(^8\)

To be sure, against this evidence of disintegration of CAT storm insurance in the short term, there is some evidence of counter-trends that could lead to re-integration in the future. First, there are signs that CAT storm insurance is maturing financially. In 2012, Congress abandoned the idea that flood insurance should be marketed at below-actuarially-fair prices; a policy shift reflecting in part Congress’ sticker-shock, after Hurricane Katrina, at being forced to bail out the NFIP’s actuarially unsound book of business (a policy shift surely reaffirmed after another congressional appropriation became necessary following Superstorm Sandy).\(^9\) As publicly subsidized CAT storm insurance becomes right-priced, it increases the possibility of private carriers reentering the market, especially to the extent that they might be able to externalize some of their risks onto global reinsurance- or equity markets.\(^10\) This raises the prospect that the insurance industry might, after all, be capable financially of insuring correlated CAT risks. And, to the extent this occurs, it undermines the central rationale for fragmenting CAT storm risks in the first place — to avoid risks that were considered by private carriers to be financially

\(^8\) See U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-13-607, FLOOD INSURANCE, MORE INFORMATION NEEDED ON SUBSIDIZED PROPERTIES 13 (2013) (noting the phasing out of subsidized rates for non-primary residences, severe repetitive loss properties, and business properties, among others).

\(^9\) See Arthur D. Postal, As NFIP Faces Deepening Debt, Some Call for More Subsidies and Lower Rates, PROPERTY CASUALTY 360 (Mar. 25, 2013), http://www.propertycasualty360.com/2013/03/25/as-nfip-faces-deepening-debt-some-call-for-more-su (“The result of the subsidies . . . has been nothing but environmental catastrophe and financial ruin . . . the NFIP is flat broke, and has been ever since 2005, when Hurricanes Katrina, Rita and Wilma forced it[sic] borrow more than $19 billion from the U.S. Treasury just to pay its claims.”) (internal quotes omitted); see also James Rowley, Sandy Aid Runs Into Republican Demands for Spending Cuts, BLOOMBERG (Jan. 11, 2013), http://www.bloomberg.com/news/2013-01-11/sandy-aid-runs-into-republican-demands-for-spending-cuts.html.

uninsurable at rates property owners were willing to pay given the alternative of cheap(er) federal coverage.

The second trend involves the possibility of greater coordination between risk mitigation measures and CAT risk insurance, coordination that could improve the risk landscape for which CAT insurance is sought. To some extent, we can expect some risk mitigation measures to be more widely implemented in response to rising rates: fewer properties located within especially flood-prone areas, other properties better designed, and properties built to withstand storms. Indeed, signs of this have become evident in New Jersey communities starting to rebuild after Superstorm Sandy, as properties re-classified as risky by new FEMA flood maps seek out financing for protective design features that will lower their insurance bills.¹¹ But, there are also signs of broader political conversations beginning to take place about protective measures that can be taken, and financed by, political bodies – ranging from changes in zoning laws to community resiliency planning to the construction of artificial wetlands and hardened storm barriers.¹² As governments deploy their police powers and public-finance assets to address CAT risks, it improves the risk landscape for which private CAT insurance is sought, contributing to improvements in affordability and market penetration, and perhaps reducing the weight borne in CAT storm policies by provisions designed to reduce risk mostly by fragmenting it.

¹¹ See N.J. DEP’T OF ENVTL. PROT., FACT SHEET: REBUILDING AFTER SANDY (2013), available at http://www.state.nj.us/dep/special/hurricane-sandy/docs/rebuilding-after-sandy-factsheet.pdf (“Under a recently adopted DEP rule, you are required to elevate and/or meet new construction standards if your house is located in a flood zone and was declared substantially damaged by your local floodplain administrator . . . .”).

I. THE EMERGENCE OF FRAGMENTED CAT STORM COVERAGE

Most property insurance, as to dwellings and structures, provide “all-risk” coverage, meaning that direct physical losses are covered unless they fall within a particular exclusion. As a general proposition, causation drives coverage, as losses caused by certain events can be, and are, excluded. It bears mentioning that, in all-risk policies, the insured bears the burden of proving that a covered loss has occurred, but thereafter the burden shifts to the insurer to prove that the loss is excluded. It is common for standard homeowner policies to exclude any loss to dwellings and structures resulting “from flood, surface water, waves, tidal waves, overflow of a body of water, spray from these, whether or not driven by wind.”

A. THE FLOOD EXCLUSION IN PRIVATE COVERAGE AND CREATION OF THE NFIP

The “water” or “flood” exclusions became standard in private, all-risk property insurance when the NFIP was created.

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13 Marc J. Shrake, Appleman on Insurance Law and Practice § 44.02 (2d ed. Supp. 2013) (“Under an ‘all risk’ property insurance policy, losses to covered property caused by any and all perils, or risks, are covered, unless the loss is caused by a peril that is expressly and unambiguously excluded by the policy.”).

14 Mitchell L. Lathrop, Insurance Coverage for Environmental Claims § 4.03 (2d ed. Supp. 2012) (“Under the all risk policy, the insured need only show that it suffered a loss to insured property. The burden of proof then shifts to the insurer to demonstrate that the loss is excluded.”).

15 Brendan R. Vaughan, Watered Down: Are Insurance Companies Getting Hosed in the Wind vs. Water Controversy?, 2008 U. Ill. L. Rev. 777, 784 (2008) (discussing Leonard v. Nationwide Mut. Ins. Co., 438 F. Supp. 2d 684, 689 (S.D. Miss. 2006)). It is worth noting that personal property coverage in homeowners’ policies is often “specified peril” coverage which, although often covering losses “caused by windstorm or hail” does not cover losses to property inside a building that are caused by rain “unless the direct force of wind or hail damages the building causing an opening in a roof or wall and the rain . . . enters through this opening.” Douglas R. Richmond, Insurance and Catastrophe in the Case of Katrina and Beyond, 26 Miss. C. L. Rev. 49, 58 (2006–2007).
by the National Flood Insurance Act of 1968.\textsuperscript{16} In part, the NFIP was a public program responding to evidence of market failure, the belief among private insurers that flooding was uninsurable—a correlated risk insurable only at sufficiently expensive prices as not to be sustainable in the face of adverse selection pressures.\textsuperscript{17} Additionally, the NFIP was also an experiment with publicly subsidized insurance as a regulatory tool, designed to reduce the escalating costs of public outlays for post-CAT disaster relief.\textsuperscript{18} NFIP insurance is available only to property owners residing in “participating communities,” with participation requiring state and local governments to engage in various levels of floodplain management.\textsuperscript{19} Communities in flood-prone areas that decline to participate are disqualified from receiving various grants administered by the Federal Emergency Management Agency (“FEMA”).\textsuperscript{20} Historically, NFIP policies were made available to eligible property owners at rates less—and in some cases, far less—than actuarially-based rates.\textsuperscript{21}


\textsuperscript{17} See, e.g., Adam F. Scales, \textit{A Nation of Policyholders: Governmental and Market Failure in Flood Insurance}, 26 MISS. C. L. REV. 3, 7 (2006–2007) (“[Flood insurance] suffers from unusual demand—and supply-side constraints that make it a relatively difficult market for insurers, and they have responded rationally by avoiding it.”).

\textsuperscript{18} Id. at 12 (“NFIP-backed insurance was conceived of as a way of inducing communities to adopt flood mitigation policies that the federal government . . . could not compel.”).

\textsuperscript{19} Charlene Luke & Aviva Abramovsky, \textit{Managing the Next Deluge: A Tax System Approach to Flood Insurance}, 18 CONN. INS. L.J. 1, 8 (2011–2012) (“Even today, individuals are not able to participate in the NFIP unless their communities agree to abide by various regulations intended to mitigate flood loss.”).

\textsuperscript{20} Sandra Leon & Sandy Lubin, \textit{FEMA: Federal Disaster Relief}, 17 A.B.A. GEN. PRACTICE, SOLO & SMALL FIRM DIV. MAGAZINE 5 (2000) (stating that non-participating communities are ineligible for FEMA’s Pre-Disaster Mitigation Grant Program as well as FEMA’s Hazard Mitigation Grant Program).

To a large extent, the water exclusion, and subsequent wind-versus-water disputes, would not be as salient if people purchased below-cost NFIP flood insurance to complement their all-peril homeowners’ coverage. But, they don’t. Even though Congress, in 1973, required flood insurance as a condition for federal home loans,\textsuperscript{22} there are widely varying estimates of NFIP market penetration. At the most optimistic, one study suggests a national compliance rate of 75–80\%,\textsuperscript{23} whereas other evidence indicates that, in Louisiana, in areas most severely affected by Hurricane Katrina, only 30\% had flood insurance.\textsuperscript{24} Other studies suggest that, of 60,196 homes with severe wind damage from hurricanes in 2005, 38\% did not have insurance against wind loss.\textsuperscript{25} Furthermore, regardless of which type of insurance was missing, the Department of Housing and Urban Development “reported that 41 percent of damaged homes from the 2005 hurricanes were uninsured or underinsured.”\textsuperscript{26} When CAT storms involve both high winds and flooding, insureds suffering storm losses will almost always seek coverage from whatever policies they have in place. And, with evidence sometimes arising of sharp dealing by insurers, many view wind-versus-water exclusions merely as arbitrary.

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\textsuperscript{22} 42 U.S.C. § 4002(b)(4) (2013).
\textsuperscript{23} Lloyd Dixon et al., The National Flood Insurance Program’s Market Penetration Rate: Estimates and Policy Implications xvii (2006). This result is roughly consistent with evidence that of the thousands of homes in Louisiana impacted by Hurricane Katrina, 64.4\% were covered by flood insurance. Meg Green, Not Business As Usual, BEST’S REV. 28 (June 2006).
\textsuperscript{24} James A. Knox, Jr., Causation, the Flood Exclusion, and Katrina, 41 TORT TRIAL & INS. PRAC. L.J. 901, 911 (2006); see also Amanda Ripley, Floods, Tornadoes, Hurricanes, Wildfires, Earthquakes . . . Why We Don’t Prepare, TIME, Aug. 20, 2006, at 58 (noting that, nationally, only about 20\% of homeowners living in flood-prone areas purchase flood insurance).
\textsuperscript{25} U.S. Gov’t Accountability Office, GAO-08-7, NATURAL DISASTERS: PUBLIC POLICY OPTIONS FOR CHANGING THE FEDERAL ROLE IN NATURAL CATASTROPHE INSURANCE 25 (2007).
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technicalities. As a general matter, however, exclusions for flood losses in all-risk homeowners’ policies are valid, enforceable provisions.

B. “WIND-VERSUS-WATER” AND THE RISE OF ANTI-CONCURRENT-CAUSE LITIGATION

Precisely because CAT storms so frequently involve high winds, driving rain, and flooding, the possibility of losses from multiple causes often characterize CAT insurance disputes, playing a special role in further fragmenting the insurance-coverage landscape. Absent countervailing policy language, the most common interpretive approach to multiple-causation issues is the “efficient proximate cause” (“EPC”) doctrine. Generally speaking, EPC searches for the “predominant” or “prime” or “moving” cause of the loss and, if not an excluded cause, can find coverage even if an excluded cause played some (secondary) role, a pro-insured interpretation most frequently referenced as the “concurrent cause” doctrine. Additionally, insurers in some jurisdictions include coverage for “ensuing losses” that occur after an otherwise excluded event, such as

27 See Richmond, supra note 15, at n.67 (relating unverified, but published, allegations from State Farm employees that supervisors at the insurer pressured outside engineers to alter reports so that it appeared that homeowners’ damages were caused by water rather than wind).


29 See Young, supra note 28, at 760 (“Depending upon the jurisdiction, the EPC might be defined as the ‘predominant’ or most important cause in the chain of events, or alternatively, as the ‘prime’ or ‘moving’ cause of the loss: the cause that ‘set the chain of events in motion.’”).

30 See Mark M. Bell, A Concurrent Mess and a Call for Clarity in First-Party Property Insurance Coverage Analysis, 18 CONN. INS. L.J. 73, 76 (2011–2012) (“Under the pro-policyholder approach, if multiple perils combine to create a loss, the full amount of the loss is covered, so long as part of the loss was caused, even if insignificantly, by a covered cause . . . referred to by courts as the ‘concurrent causation’ doctrine or approach.”).
fires that occur following earthquakes.\textsuperscript{31} Moreover, there are meaningful differences among many EPC jurisdictions, including some jurisdictions that experiment with apportionment of losses,\textsuperscript{32} leading to considerable uncertainty in coverage.\textsuperscript{33} The result is that following CAT storm events, often with tens of thousands of property losses, both insureds and insurers face the risk of judicial decisions at odds with the contracts into which they believed themselves to be parties.\textsuperscript{34}

To contract around this uncertainty, insurers insert into all-risk property insurance anti-concurrent-cause ("ACC") clauses. There are two principal variations. The first, Insurance Services Office ("ISO") clause, provides:

1. We do not cover loss to any property resulting directly or indirectly from any of the following. Such a loss is excluded even if another peril or event contributed concurrently or in any sequence to cause the loss . . .

(b) Water or damage caused by water-borne material. Loss resulting from water or water-borne material damage described below is not covered even if other perils contributed, directly or


\textsuperscript{32} See Bell, \textit{supra} note 30, at 80 (citing Wallis v. United Serv. Auto Ass’n, 2 S.W.3d 300, 303 (Tex. Ct. App. 1999) (putting burden of proof on insured regarding which portion of loss is covered)).

\textsuperscript{33} Bell, \textit{supra} note 30, at 74–75 ("[T]he resultant patchwork has operated to deprive policyholders of their reasonable expectations and has prevented insurers from maintaining contract certainty when drafting insurance policies.").

\textsuperscript{34} \textit{Id.}
indirectly, to cause the loss. Water and water-borne material damages means:

(1) flood, surface water, waves, tidal waves, overflow of a body of water, spray from these, whether or not driven by the wind.\(^{35}\)

An even stricter version, developed by State Farm, provides:

2. We do not insure under any coverage for any loss which would not have occurred in the absence of one or more of the following excluded events. We do not insure for such loss regardless of: (a) the cause of the excluded event; or (b) other causes of the loss; or (c) whether other causes acted concurrently or in any sequence with the excluded event to produce the loss; or (d) whether the event occurs suddenly or gradually, involves isolated or widespread damage, arises from natural or external forces, or occurs as a result of any combination of these . . .

c. Water Damage, meaning

(1) flood, surface water, waves, tidal water, tsunami, seiche, overflow of a body of water, or spray from any of these, all whether driven by wind or not.\(^{36}\)

In two claims arising out of Hurricane Katrina, Judge Senter of the Southern District of Mississippi found both types of ACC clauses ambiguous and unenforceable. In *Leonard v. Nationwide Mutual Insurance Company*, \(^{37}\) involving the

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\(^{36}\) Young, *supra* note 28, at 763 (citing Tuepker v. State Farm Fire & Cas. Co., 507 F.3d 346, 351 (5th Cir. 2007)).

narrower ISO clause, Judge Senter found the language ambiguous because, read with the coverage grant for wind, it would literally exclude any damage caused by wind where there was also involved even de minimis concurrent water damage.\textsuperscript{38} In \textit{Tuepker v. State Farm Fire & Cas. Co.},\textsuperscript{39} involving the stricter State Farm clause, Judge Senter similarly struck down the ACC clause as otherwise it would deny coverage for wind losses that would not have occurred “but for” water damage, even where plaintiffs could prove that their loss was proximately caused by wind.\textsuperscript{40}

On appeal, the Fifth Circuit reversed both of the district court’s ACC holdings.\textsuperscript{41} In \textit{Leonard}, the Court of Appeals made an “Erie guess” that Mississippi follows the EPC doctrine as its default common-law rule, but that Mississippi law does not

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\textsuperscript{38} \textit{Id.} at 694. The court reasoned:

When the policy is read as a whole, I find that this exclusionary provision is ambiguous . . . [t]he most reasonable interpretation for these conflicting policy provisions is that this policy provides coverage for windstorm damage . . . and that coverage is not negated merely because an excluded peril . . . occurs at or near the same time.

\textit{Id.}


\textsuperscript{40} \textit{Id.} at *13–14. The court opined:

To the extent that plaintiffs can prove their allegations that the hurricane winds . . . and rains entering the insured premises through openings caused by the hurricane winds proximately caused damage to their insured property, those losses will be covered under the policy, and this will be the case even if flood damage, which is not covered, subsequently or simultaneously occurred.

\textit{Id.}

\textsuperscript{41} \textit{Leonard v. Nationwide Mut. Ins. Co.}, 499 F.3d 419, 430 (5th Cir. 2007); \textit{Tuepker v. State Farm Fire & Cas. Co.}, 507 F.3d 346, 354–55 (5th Cir. 2007).
forbid the use of ACC clauses to contract around the rule.\textsuperscript{42} In \textit{Tuepker}, the Fifth Circuit similarly found the ACC clause to be un-ambiguous, enforceable, and to have effectively overruled the EPC doctrine in Mississippi.\textsuperscript{43}

Two years later, however, in \textit{Corban v. United Services Automobile Association},\textsuperscript{44} the Mississippi Supreme Court held that ACC clauses would only apply when wind and water losses were “truly concurrent,” when wind and flood “simultaneously converg[e] and operat[e] in conjunction to damage the property . . . .”\textsuperscript{45} But where wind loss can be proven to have occurred first, followed by water loss, the insured must be covered for any loss proven to have been caused by wind.\textsuperscript{46} In short, the law in

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\item \textsuperscript{42} \textit{Leonard}, 499 F.3d at 436. The court reasoned:
\begin{quote}
[T]he judicial elevation of the efficient proximate cause doctrine to a rule of contract construction after contrary policies had been approved by the state insurance commissioner would essentially usurp the legislature’s authority . . . it seems most likely that the Mississippi Supreme Court would regard insurance policy regulation as a matter better suited for the Legislature to address rather than the state judiciary.
\end{quote}

\textit{Id.} (internal citations omitted).
\item \textsuperscript{43} \textit{Tuepker}, 507 F.3d at 354 (“\textit{Leonard} governs this case, and compels the conclusion that the ACC Clause in State Farm’s policy is not ambiguous, and should be enforced under Mississippi law.”).
\item \textsuperscript{44} \textit{Corban v. United Servs. Auto. Ass’n}, 20 So. 3d 601 (Miss. 2009).
\item \textsuperscript{45} \textit{Id.} at 618.
\item \textsuperscript{46} \textit{See} Jennifer McNair, \textit{The Winds of Change: The Mississippi Supreme Court Examines Concurrent Causation in Hurricane Katrina Claims}, 30 MISS. C. L. REV. 579, 600 (2012). McNair suggests:
\begin{quote}
The Mississippi Supreme Court did not merely disagree with the Fifth Circuit’s "Erie guess," it provided the reasoning behind its disagreement. The ACC clause was not simply declared ambiguous or inapplicable as a whole; rather, the court explained when it could operate to exclude losses caused by truly concurrent causes and what portion of the provision was subject to divergent meanings and, consequently, ambiguous.
\end{quote}

\textit{Id.}
Mississippi—and many other jurisdictions—still allows for considerable litigation over whether wind or water caused losses, even in first-party all-risk policies that exclude water loss—a state of affairs, the Court observed, that would as a practical matter tend to work against the party who bore the burden of proof.47

C. SOME OFTEN-OVERLOOKED MECHANISMS FOR FRAGMENTING CAT STORM RISK ONTO THIRD-PARTIES AND THIRD-PARTY FINANCIAL POOLS

Before discussing other ways in which first-party CAT property insurance can be further segmented, it is worth observing that there may also be room for leakage of CAT storm losses into third-party insurance pools, and possibly also into general United States treasury funds via constitutional takings claims. Consider, first, tort claims by those suffering CAT losses against various entities whose activities may be alleged to have contributed to those losses. Local governments and utilities, when involved with flood-control activity, may be liable for the negligent design, maintenance, and operation of flood-control structures. In Kunz v. Utah Power & Light Co.,48 the Ninth Circuit found that a utility’s undertaking of flood-control measures established a common-law duty toward those downstream and created a duty to control floods.49 More recently, the Southeast Louisiana Flood Protection Agency-East announced plans to sue dozens of energy companies for cutting oil and gas access canals in the coastal wetlands surrounding New Orleans, alleging that these actions constituted negligence and/or nuisances in light of the role wetlands play in buffering the effects of hurricane storm surges.50 As to the federal

47 Corbin, 20 So.3d at 618–19.
48 Kunz v. Utah Power & Light Co., 526 F.2d 500 (9th Cir. 1975).
49 Id. at 504.
government, although the result is now seriously in doubt, New Orleans residents, businesses, and local governments sued the U.S. Army Corps of Engineers for flood-related damages estimated at $20 billion for the Corps’ alleged failure to maintain the Mississippi River-Gulf Outlet.\footnote{51} Although the federal government generally enjoys immunity from damages caused by floodwaters released in the course of flood-control activities, even if negligently done,\footnote{52} the U.S. Supreme Court held, in December 2012, in \textit{Arkansas Game & Fish Commission v. United States},\footnote{53} that the federal government might be liable under the Takings Clause to downstream landowners for government-induced flooding that rises to the level of a temporary or permanent occupation of plaintiffs’ riparian property.\footnote{54}

\footnote{51} On September 24, 2012, a panel of the Fifth Circuit Court of Appeals granted a petition for panel rehearing, and withdrew an earlier opinion \textit{upholding} a district court’s ruling that had imposed this multi-billion dollar liability. \textit{In re Katrina Canal Breaches Litigation}, 696 F.3d 436, 441, 454 (5th Cir. 2012) (despite government’s role in MRGO not involving "flood control activities"). The case is awaiting further decision by the entire Fifth Circuit on the ground of general federal government immunity for discretionary decisions. This recent reversal, as to the federal government’s third-party liability did not directly affect a parallel lawsuit, against the Washington Group (and its liability insurers), a private contractor alleged to have dug holes in the Industrial Canal as part of a lock replacement project, which began trial proceedings in September 2012. However, in April 2013, the district court in that case issued a judgment for the government and its contractor. \textit{See In re Katrina Canal Breaches Consolidated Litigation}, 2013 U.S. Dist. LEXIS 53802 (E.D. La. Apr. 12, 2013).


\footnote{53} \textit{Arkansas Game & Fish Comm’n v. United States}, 133 S. Ct. 511 (2012).

D. THE HOLLOWING OUT OF PRIVATE CAT WIND COVERAGE

Even if we restrict analysis to the fragmentation of first-party CAT storm coverage, and set aside all wind-water ambiguities, in recent years there has evolved an unmistakable pattern in private all-peril policies, at least as regards coverage for CAT wind. The trend is toward increased self-insurance for first-dollar losses, and increased use of excess insurance for last-dollar coverage. At best, private insurers are increasingly offering only hollowed-out CAT wind coverage. At worst, private insurers are now exiting markets for CAT wind coverage as surely as they exited markets for CAT flood insurance in the 1960’s. In their place, there have emerged state-run residual risk wind pools that are increasingly doing for CAT wind what FEMA did, historically, for CAT flood — making insurance available at below-market rates.

It is hard to understate the effect catastrophes have had on insurers within the past forty years. As Jaffee, Kunreuther, and Michel-Kerjan stated in 2008, “[b]etween 1970 and the mid-1980s, annual insured losses from natural disasters (including

55 See Hurricane Irene Likely to Strike East Coast: Do You Know What Your Hurricane Deductible Is?, INS. INFO. INST. (Aug. 25, 2011), available at www.iii.org/press-releases/hurricane-irene-likely-to-strike-east-coast-do-you-know-what-your-hurricane-deductible-is.html ("In some coastal areas with high wind risk, insurers may incorporate hurricane deductibles even higher than 5 percent); Coastal Property Insurance, COCHRAN INS. AGENCY, www.coastalpropertyinsurance.com (last visited Nov. 13, 2013) ("Excess coverage now available in North Carolina . . . the North Carolina Beach Plan will only be responsible on ‘primary’ up to $750,000").

56 See, e.g., J. Robert Hunter, The Insurance Industry’s Incredible Disappearing Weather Catastrophe Risk: How Insurers Have Shifted Risk and Cost Associated with Weather Catastrophes to Consumers and Taxpayers, CONSUMER FED’N. OF AM. 1 (Feb. 17, 2012), http://www.consumerfed.org/pdfs/InsuranceRegulationHurricaneRiskDisappearingCoverageStudy2-12.pdf (insurer savings "have been achieved by hollowing out coverage in homeowners’ insurance policies and raising rates.").

57 Id. ("[I]ndustry data demonstrates that insurers have significantly and methodically decreased their financial responsibility for those events in past years and shifted much of this risk to consumers and taxpayers.").

58 Id.
forest fires) were in the $3 to $4 billion range. . . . total losses paid by private insurers due to major natural catastrophes were $87 billion in 2005.” 59 To some extent, the overall increase and volatility of year-to-year CAT losses may reflect early signs of the gradual effects of climate change on CAT risks, including long-term changes to the frequency and severity of storms. 60 But, equally important to insurers are worst-case risks that can swing wildly from year-to-year, exposing insurers to solvency risks. In 1992, Hurricane Andrew led to the bankruptcy of ten Florida insurers, and imperiled the Florida Insurance Guaranty Association. 61 In 2006, six years before Superstorm Sandy, some prognosticators predicted “a northeastern hurricane twice as costly as Katrina that could devastate the New York boroughs of Brooklyn and Manhattan and submerge nearby parts of New Jersey.” 62 Concerned about just such worst-case scenarios, private risk-rating agencies such as AIR International (“AIR”) and Risk Management Solutions (“RMS”), employ proprietary risk models that are notorious for changing overnight, such as a 2011 RMS Model that increased hurricane risks almost overnight by 150 percent, attacked by its critics for in essence making Ohio a coastal state. 63 Of course, in October 2012, the

59 JAFFE ET AL., supra note 26, at 2.

60 See Evan Mills, Insurance in a Climate of Change, 309 SCIENCE 1040, 1040–41 (2005) (insurance is the world’s foremost integrator of climate-related impacts); see also Jeff Masters, 2011’s Billion-Dollar Disasters: Is Climate Change to Blame?, 65 WEATHERWISE 12, 15 (2012) (discussing the possibility that climate change has led to greater CAT losses and the potential financial impact of recent incremental weather changes on losses); see also Laurens M. Bouwer, Have Disaster Losses Increased Due to Anthropogenic Climate Change?, 92 AMER. METEOR. SOC. 39, 41–42 (2011) (22 studies show an increase in disaster losses in recent decades, although 14 of them accredit conflating factors, including wealth/population increases in areas of weather-related risk).

61 Richmond, supra note 15, at 53.

62 Id. at 50. (citing Amanda Riply, Why We Don’t Prepare for Disaster, TIME, Aug 28, 2006, at 54, 57 (“a serious hurricane is due to strike New York City, just as one did in 1821 and 1938)).

path of Superstorm Sandy eerily fulfilled both of these predictions, even to the point of bringing unprecedented storm damage to Ohio after making its infamous “left turn” at New Jersey and heading inland. In addition to outright solvency concerns, insurers worry about these volatile models because of their influence on rating agencies such as A.M. Best, Fitch, and Standard & Poor’s because ratings from these agencies affect the ability of insurers to attract customers and capital.

Rational CAT insurers hardly need to wait for resolution of the scientific debate over climate change, or to subject themselves fully to the volatility of risk models. Because most property insurance is marketed on a year-to-year basis, insurers respond to underwriting uncertainties fairly quickly; the most obvious response is to seek rate increases to hedge the worst-case prospects of unexpectedly high losses. Between 2001 and 2006, rates for homeowners’ insurance in Florida rose 77%, in Louisiana 65%, and in South Carolina 56%. But, depending on state-by-state procedures for rate increases, it is at this point that connections between weather catastrophes and insurance


pivot into public law and the politics of coverage. Next, a second pivotal point begins when insurers do not get regulatory approval for all of the rate increases they seek. When this happens, insurers employ several mechanisms to limit their exposure to CAT risks: they simply stop writing insurance within a state’s high-risk areas, they sharply limit the maximum amounts of insurance they are prepared to offer any individual insured, and/or they force insureds to bear a greater proportion of losses through higher deductibles or copayments.

The overall effect of these market mechanisms is to create an insurance landscape of increasingly hollowed-out coverage, in which even those who can afford insurance are paying more for less, effectively being forced to self-insure ever-larger amounts of their own risk. The increasing retention of CAT-related risks by insureds is notable. In Florida, when an unprecedented sequence of four hurricanes swept the state in 2004, those who had insurance nevertheless bore 15–20% of the financial losses. In North Carolina, legislation adopted in 2009 capped the maximum policy limit that the state’s residual wind pool could offer homeowners for dwellings and structures at $750,000.

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67 See ENVIRONMENTAL DEFENSE, supra note 66, at 17 (“Allstate, which has dropped approximately 320,000 policies since 2004 in Florida, is no longer writing new coverage anywhere in the state.”). In 2008, coastal homeowners’ coverage in North Carolina became a public policy issue when Farmers Insurance decided to withdraw from property insurance statewide rather than participate in what it believed to be a system of actuarially unfair rates and post-event assessments for shortfalls. See Brian H. Kern, Farmers Insurance to Pull Out of North Carolina Homeowners’ Market, INS. JOURNAL (Aug. 14, 2008), http://www.insurancejournal.com/news/southeast/2008/08/14/92787.htm (“Farmers regrets having to non-renew our homeowners customers, but the current hurricane assessment process has forced us to make this difficult business decision”).


69 Id.

70 Id.

This is not to say that insurers, in what remains of the private market for coastal CAT insurance, which are primarily wind losses, are behaving irrationally, at least in the corporate world in which they must remain cognizant of their ability to attract investment capital. But it is to say that there is more to the story than the common scenario put forth by CAT insurers when seeking rate increases, namely that any profits they show in the “good” years—meaning the is weather relatively quiet—is more than offset in the catastrophic years. Rather, by a combination of increased revenue through higher premiums, often based on CAT models justifying higher rates than historical models, hollowing out their risk exposure, and the purchasing of reinsurance or other financial instruments to limit their losses in the event of worst-case scenarios, those dwindling property/casualty insurers that remain in the business increasingly shed risks to the point that they can sometimes enjoy less investment risk than the market in general. Robert Hunter explains:

[The risk of a stock is] shown in any Value Line publication, which tests the risk of a stock. One key measure is the stock’s Beta, which is the sensitivity of a stock’s returns to the returns on some market index, such as the Standard & Poor’s 500. A Beta between 0 and 1, such as utility stocks, is a low-volatility investment. A Beta equal to 1 matches the index. A Beta greater than 1 is anything more volatile than the index, such as a “small cap” fund.

Consider Allstate. At the same time the company has taken draconian steps to sharply raise premiums and/or reduce coverage for many homeowners in coastal areas, it has presented shareholders with very low risk: Beta = 0.90 . . . .72

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Although plainly, as the “global aggregator” of climate-related losses, insurers can be drastically affected financially when weather catastrophes occur, it is precisely for this reason that insurers have, and will continue to, rationally take steps not to be on the bleeding edge of these financial effects. Private insurers in the twenty-first century are in the process of exiting CAT wind markets, just as they exited CAT flood markets in the twentieth century.

E. THE EMERGENCE OF STATE RESIDUAL RISK POOLS FOR CAT WIND COVERAGE

To fill the void, states in the southeast and gulf-coast region of the United States are increasingly relying on public or quasi-public residual risk pools for wind insurance, much like the federal government created the NFIP as a national high-risk pool for flood insurance forty-five years ago. In 2002, Florida created the Citizens Property Corporation.\(^{73}\) In 2003, Louisiana created the Louisiana Citizens Property Insurance Association.\(^{74}\) Texas has created the Texas Windstorm Insurance Association,\(^{75}\) Mississippi the Mississippi Windstorm Underwriting Association,\(^{76}\) and Alabama its “Beach Pool.”\(^{77}\) These plans and others typically reflect the structure of residual high-risk insurance entities in which the state conditions the right to sell insurance within the state with forced participation in its Fair Access to Insurance Requirement (“FAIR”) plans. For purposes


\(^{77}\) See Ala. Code § 27-1-24 (2009), available at http://alisondb.legislature.state.al.us/acas/ACASLoginMac.asp. The full name for the risk pool is the Alabama Insurance Underwriting Association. Id.
of this article, I will assume the constitutionality of this public policy movement. Typically, state wind pools are created as “insurers of last resort” for homeowners who cannot find affordable—or any—private CAT coverage. What is unmistakable is that these entities have become the fastest growing mechanism by which coastal homeowners obtain CAT wind insurance. Compared to approximately $55 billion in exposure to loss in 1990, state-run FAIR plans had, by 2007, become exposed to over $500 billion in potential losses. By 2007, Florida’s Citizens program had become Florida’s largest property insurer of first resort and the fourth-largest property insurer outright in the nation. North Carolina’s “Beach Plan” currently insures approximately 75% of the residential wind risk

78 There are, of course, those who question the constitutionality of these arrangements. See, e.g., Richard A. Epstein, Exit Rights and Insurance Regulation: From Federalism to Takings, 7 GEO. MASON L. REV. 293, 298 (1999).


It is the intent of the Legislature that the rates for coverage provided by the association be actuarially sound and not competitive with approved rates charged in the admitted voluntary market such that the association functions as a residual market mechanism to provide insurance only when the insurance cannot be procured in the voluntary market.

80 See ENVIRONMENTAL DEFENSE, supra note 66, at 8.

81 See Jean Gross, The Insurer of First Resort, BUS. OBSERVER FL (Jan. 20, 2011), http://www.businessobserverfl.com/section/detail/the-insurer-of-first-resort/ ("When it was created after Andres, Citizens was supposed to be the insurer of last resort . . . [t]oday, the state-owned agency has become the largest residential property insurer in Florida . . . .")

82 Tom Zucco & Jennifer Liberto, Citizens’ Business Booms, TAMPA BAY TIMES (June 26, 2007), http://www.sptimes.com/2007/06/26/Business/Citizens___business_bo.shtml (“Citizens currently has about 1.3-million homeowner policies, and its commercial business is growing by 1,000 percent this year. That makes Citizens the fourth-largest property insurer in the nation.”).
II. THE FUTURE OF CAT FLOOD AND CAT WIND COVERAGE

A. JULY 2012: A SEA CHANGE IN THE NFIP AND THE ECONOMICS OF CAT FLOOD COVERAGE

That Congress, and in particular this Congress, enacted sweeping changes to the NFIP in the summer of an election year, deserves special note. Although I leave a full recounting of this remarkable political event for another time, suffice it to note that on July 6, 2012, President Obama signed into law the “Biggert-Waters Flood Insurance Reform Act of 2012,” certainly the most significant revision to the NFIP in twenty years. Among its short-term achievements, it authorized funding for the NFIP over the next five years, against a backdrop of dozens of disruptive, short-term extensions of the NFIP program over the last few years that were reminiscent, on this small stage, of the current Congress’ use of precisely such short-term funding extensions in larger budget battles with the White House. In short, Biggert-Waters was a significant, and almost completely overlooked, sign of political cooperation over a significant budgetary matter. And the bipartisan support it drew, in particular in its elimination of the NFIP’s tradition of subsidizing below-cost flood insurance, laid down the groundwork for the unusual bipartisan political configurations

83 Email from Gin Schwitzgebel, Gen. Manager, N.C. Joint Underwriting Ass’n, to Donald T. Hornstein, Aubrey L. Brooks Professor of Law, Univ. of N.C. Sch. of Law. (Nov. 11, 2013) (on file with author).


86 Id. at 353.
that emerged in January 2013 when Congress, over significant objections from fiscal conservatives, enacted the $50.5 billion package for Superstorm Sandy relief.\(^\text{87}\)

Although I want to highlight mostly the Act’s central contribution toward eliminating the subsidized nature of NFIP flood insurance, one of its less noticed provisions is especially germane to the subject of fragmented risk and, in particular, to the “wind-versus water” elements of CAT storm coverage. A part of the Act included provisions of a parallel bill, the “Consumer Option for an Alternative System to Allocate Losses (“COASTAL”) Act of 2012, which had been introduced.\(^\text{88}\) Under its COASTAL Act provisions, Biggert-Waters requires FEMA to develop for “named” storms a post-assessment protocol and database for the purpose of creating a system for allocating losses among wind and water perils.\(^\text{89}\) Work under this delegated authority has barely begun, but it may be expected to parallel developments in CAT storm insurance that have emerged among private reinsurers and international CAT storm efforts involving “parametric insurance,” which trigger coverage based on such macro-features as wind-speed at particular measuring locations rather than ex-post micro determinations of particular losses to determine whether wind or water caused the loss.\(^\text{90}\) In the short term, it is also noteworthy that Biggert-Waters requires FEMA, at a state’s request, to participate in


\(^{89}\) Id. at § 100252.

state-sponsored non-binding mediations to resolve insurance claims disputes.\footnote{For background information on disaster mediation programs, see generally Bobby Marzine Harges, \textit{Disaster Mediation Programs -- Ensuring Fairness and Quality for Minority Participants}, 39 \textit{Cap. U. L. Rev.} 893 (2011).}

The principal change enacted by Biggert-Waters, however, is to mark the beginning of the end for NFIP’s historically below-market insurance rates for flood insurance. The Act requires premium rate adjustments for any property located within an NFIP-participating area to reflect the property location’s current risk of flooding and to take effect upon the “effective date” of any revised or updated flood insurance rate maps.\footnote{Pub. L. No. 112–141, § 100207, 126 Stat. 919 (2012) (codified at amended 42 U.S.C. 4015 (2012)) (“[A]ny property located in an area that is participating in the national flood insurance program shall have the risk premium rate charged for flood insurance on such property adjusted to accurately reflect the current risk of flood to such property, subject to any other provision of this Act.”). Since its enactment, however, there have been numerous efforts to repeal or delay implementation of coastal rate hikes. Senator Mary Landrieu (D-La) has worked especially hard to stall rate increases. \textit{See Arthur D. Postal, Louisiana Senators Push for Delay in NFIP Rate Hikes}, \textit{Property Casuality 360} (May 8, 2013), available at http://www.propertycasualty360.com/2013/05/08/louisiana-senators-push-for-delay-in-nfip-rate-hik. \textit{See also Evan Lehmann, Coastal Lawmakers, Fearing Rate Hikes, Cross Party Lines to Keep Flood Insurance Subsidies}, E&E PUBLISHING, LLC (June 7, 2013), available at http://www.eenews.net/stories/1059982464.} New properties insured under the NFIP—those not currently covered—must be based on “actuarial rates.”\footnote{Pub. L. No. 112–141, § 100205, 126 Stat. 919 (2012).} Rates for homes currently insured under the NFIP are allowed to rise by 20% annually, over a five-year period, until their rates also reflect the “actuarial” risk.\footnote{Id. at § 100207} Special subsidies that in the past were given

Any increase in the risk premium rate charged for flood insurance on any property that is covered by a flood insurance policy on the effective date of such an update that is a result of such updating shall be phased in over a 5-year period, at the rate of 20 percent for each year following such effective date.

\textit{Id.}
to second homes, business properties, severe repetitive loss properties, or substantially improved/damaged properties, are to be phased out entirely, with rates for such properties to increase by 25% per year until premiums meet the “full actuarial cost.”  

Prior to FEMA’s development of these updated rate maps, the Act establishes new, minimum property deductibles of $1,500 for properties insured for $100,000 or less and $2,000 for properties insured beyond $100,000, up to the NFIP maximum of $250,000. Following development of the updated FEMA rate maps, the deductibles will moderate marginally.

As these premium increases are tied to FEMA’s notoriously slow flood-mapping capabilities, it is significant that Biggert-Waters allocates $400 million annually to FEMA’s national flood mapping program. The Act requires maps for all areas within 100-year and 500-year floodplains and “residual risk” areas, and requires that the agency use the “most accurate data” in their development.

The Act also requires FEMA to

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97 Id. at § 100210(b)(1)(B).


100 See id. at § 100216(b)(1)(A) (mandating ongoing program between Administrator and Technical Mapping Advisory Council to review, update, and maintain NFIP rate maps with respect to the 100-year floodplain, the 500-year floodplain, areas of residual risk, areas that could be inundated in case of failed flood control structures, and the level of protection provided by such structures).

101 See id. at § 100216(b)(1)(C) (requiring the usage of “the most accurate topography and elevation data available” for development and publishing of any NFIP rate maps).
contract with the National Academy of Public Administration to conduct a study of inter-agency coordination between FEMA and both federal and state agencies over the flood-mapping program, and requires the Office of Management and Budget to submit a report to Congress when proposing FEMA's annual budget, specifically highlighting crosscutting budget issues involving mapping.

As so many of the NFIP’s weaknesses in past years involved hopelessly out-of-date flood maps, inadequate budget for their revision, and pressure from local stakeholders on accurate map updating, it is significant that Biggert-Waters provides that appeals of FEMA mapping determinations can be based solely on their technical and scientific validity, and creates a Scientific Resolution Panel to address any mapping-related concerns raised by communities who are dissatisfied with the outcome of any appeals to FEMA. Although it remains to be seen where opportunities lay, even within this revised bureaucratic architecture, for political pressure and procedural delay, it is significant that Biggert-Waters preemptively addressed the issue.

Although I will briefly address other, more long-term features of Biggert-Waters below, it is useful to recognize how updated FEMA maps, and the new NFIP premium structure, are already being felt on the ground. Even prior to the Act, FEMA had updated maps prepared for areas on the New Jersey coast devastated by Superstorm Sandy. In mid-December 2012,

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102 See Pub. L. No. 112-141, § 100221(a), 126 Stat. 933 (2012) (requiring a contract to form a study on how FEMA should improve coordination on mapping and establish joint funding across agencies and governmental units to promote sharing of data).

103 See Pub. L. No. 112-141, § 100220(a)(2), 126 Stat. 933 (2012) (codified in amended 42 U.S.C. 4101(c)) (to display relevant sections of budget proposed for each federal agency working on risk determination data and digital elevation maps, and to describe the effects of integration).


FEMA released some of the new advisory maps—the first change to New Jersey’s federal flood maps in more than two decades—that showed many properties that had previously been classified in a FEMA “A” zone to be reclassified into the higher-threat “V” zone. The effect on rebuilding options and the phase-in of higher NFIP flood rates can be stark. By one account, if a property owner under the old maps had been classified in an “A” zone, but is several feet “below” a new reference point known as “base flood elevation,” and simply rebuilds—especially if the damaged house had been built on a “slab” and is simply rebuilt on the same type of foundation, and at the same elevation—the rebuilt property would be rated at the higher risk and would be subject, after phase in, of up to $31,000 in annual NFIP flood-loss premium. If the owner were to rebuild to the suggested “base flood elevation,” the maximum phased-in premium would be approximately $7,000 annually. And if the resident were to rebuild on elevated structures to two feet above the base flood elevation, the annual phased-in NFIP premium would be closer to $3,500 annually.

B. THE FUTURE OF CAT WIND OR COMBINED CAT WIND/FLOOD INSURANCE

It is noteworthy that as Biggert-Waters ushered in a new world of increasingly restrictive and expensive NFIP coverage there were also nods toward more expansive possibilities. The Act requires the Government Accountability Office (“GAO”) to submit a report to Congress on losses that would have been


108 Id.

109 Stirling, supra note 105. See also Van Emden, supra note 107.
incurred in the notorious 2004–2005 hurricane season had the program insured policyholders up to a maximum of $417,000—far in excess of the current NFIP cap of $250,000. The Act also charged GAO, in the same report, to evaluate whether the Act’s phased elimination of subsidized, below-market rates for flood insurance can change the willingness of private insurers to reenter the flood-insurance market, and on whether further raising/lowering rates could provide the tipping point to induce just such a reawakening of interest in the private market. The Act separately charged GAO with reporting on whether the NFIP, if properly priced, could offer business interruption and additional-living-expenses coverage, features not now available through NFIP policies. More broadly, the Act requires the Director of the Federal Insurance Office to conduct a study on the current state of the market for general “natural catastrophe insurance in the United States” and submit the report to Congress by July 2013. These measures indicate the collection of information for even broader changes to the NFIP by future, budget-constrained Congresses.

III. CONCLUSION

In the short term, some things will remain the same. There will be CAT flood and wind losses, and there will continue to be wind versus water disputes over coverage in particular areas. But, because of the NFIP amendments, it is also likely that the next ten years of CAT coverage will be different from the previous ten years. NFIP premiums will rise and private insurers may reconsider entering the flood-risk market themselves, perhaps with cheaper options analogous to major-medical-only coverage designed to cover only worst-case losses. In light of rising costs, insureds may increasingly opt for higher


111 See id. § 100231(a)(4).


deductibles and self-insurance to keep premiums manageable. All of these trends will continue to fragment the financing of CAT losses in the United States. Fragmentation aside, the slow internalization of CAT losses by private markets and governmental budgets may, perhaps slowly, reinforce efforts to retrofit our floodplains and coasts with structures more resilient to storms.