

CATASTROPHE LOSS DEVELOPMENT

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WHAT IS A CATASTROPHE?

× Catastrophe Definition

- An event causing \$25 million or more of insured property damage **AND**
- affecting a significant number of policyholders and insurers
- Same definition in use for the PCS-Canada service.

INSURED PROPERTY DAMAGE BY PCS STORM FAMILY 1950 TO 2010

<u>Storm Family</u>	<u>Estimated Insured Loss</u>
Hurricane (88)	\$136,556,445,790
Wind and Thunderstorm Event (1251)	\$118,505,197,458
Winter Storm	\$25,438,656,159
Fire - Other	\$20,050,753,604
Earthquake	\$13,964,150,000
Wildland Fire	\$6,677,348,000
Tropical Storm	\$4,094,320,000
Riot	\$970,250,000
Water Damage	\$300,000,000
Utility Service Disruption	\$180,000,000
Volcanic Eruption	\$27,000,000
Total Insured Loss (1598)	\$326,789,121,011



Survey #	2	3	4	5	6	7	8	9	10	11	Final Est (\$bn)
1 Katrina (49-05)	10.9%	0.0%	6.5%	0.0%	0.0%	0.2%	0.0%	0.0%	1.0%	0.0%	41.1
2 Northridge (78-94)	80.0%	22.2%	30.9%	25.0%	15.6%	7.7%	4.5%	6.8%	0.0%		12.5
3 Wilma (54-05)	38.0%	11.1%	10.2%	0.0%	0.0%	0.0%	0.0%				10.3
4 Rita (51-05)	6.0%	0.0%	1.4%	5.4%	5.8%	0.0%	0.0%				5.6
5 Charley (26-04)	0.0%	9.9%	0.0%	0.0%	0.0%						7.5
6 Frances (28-04)	0.0%	3.7%	0.0%	0.0%	0.0%						4.6
7 W&T (61-02)	22.1%	50.3%	19.8%	8.8%	0.0%						1.7
8 WTC (48-01)	0.0%	22.6%	0.0%	-7.7%							18.8
9 Ivan (30-04)	18.3%	0.0%	0.0%	0.0%							7.1
10 Jeanne (29-04)	6.0%	6.3%	0.0%	0.0%							3.7
11 W&T (38-01)	193.1%	11.8%	0.0%	15.8%							2.2
12 W&T (88-03)	101.9%	2.4%	0.0%								3.2
13 Georges (69-98)	15.9%	0.0%	0.0%								3.0
14 TS Allison (44-01)	104.9%	0.0%	0.0%								2.5
15 Floyd (97-99)	35.8%	8.9%	0.0%								2.0
16 Isabel (95-03)	44.0%	0.0%	0.0%								1.7
17 Andrew (27-92)	37.2%	44.9%									15.5
18 Gustav (58-08)	13.2%	0.0%									2.2
19 Ike (60-08)*	31.5%	7.9%									11.5
20 Opal (54-95)	0.0%										2.1
21 Oakland Hills (87-91)	41.7%										1.7
22 WS (46-93)	7.7%										1.8
23 Hugo (18-89)	5.3%										4.2
Avg	35.4%	10.6%	4.3%	4.3%	3.1%	2.0%	1.1%	3.4%	0.5%	0.0%	166.5

ISSUES AFFECTING INSURANCE PAYMENTS: DEMAND SURGE

- × Florida Lanais
 - + Value before and after
- × Florida Roofers and Other Contractors
- × Florida Business Licenses and Permits
- × Minnesota – shows Florida not alone
 - + 1998 Cat Ser No. 51 Wind and Hail
 - × July \$410 Million Insured Loss
 - × December \$1.3 Billion Insured Loss

ISSUES AFFECTING INSURANCE PAYMENTS: CLIMATE CHANGE

- × Hurricanes
 - + Two Theories – more intense
- × Thunderstorms Increase
- × Flooding is more rampant, e.g. Nashville, TN
- × Catlin North Pole Expedition

ISSUES AFFECTING INSURANCE PAYMENTS: POLITICAL FACTORS

- ✘ Trent Lott and Gene Taylor After Katrina
 - + Negative publicity and negative attitudes
- ✘ Wind v. Water After Katrina
 - + Class Action Lawsuits
- ✘ Florida – rebates, premiums, and funding
- ✘ MS Governor vetoes \$20M for the Wind Pool After Katrina

ISSUES AFFECTING INSURANCE PAYMENTS: THE IMPACT OF MEGACATASTROPHES

✘ Katrina Lessons

- + Mass evacuations and contact issues (State Farm)
- + Rebuilding with reimbursement issues
- + Employee issues
- + Slow rebuilding – do I or don't I

ISSUES AFFECTING INSURANCE PAYMENTS: THE EXPANDING IMPACT OF CATASTROPHES

- ✘ New Lines of Insurance Affected
 - + World Trade Center Attack
 - ✘ Life, Health, Workers Comp
 - ✘ Use of PCS catastrophe serial number
 - + Hurricane Katrina
 - ✘ Life and Health Benefits Insurance
 - ✘ Mortgage Insurance
 - + Pandemic
 - ✘ TXDOI Survey for Business Continuity

ISSUES AFFECTING INSURANCE PAYMENTS: THE 1938 HURRICANE

- × In 1938
 - + Long Island and Providence, Rhode Island
- × Update in 2010
 - + \$33 billion
 - + 4 million claims
- × Move this storm 60 miles west
 - + \$100+ Billion
 - + 10 million claims

ISSUES AFFECTING INSURANCE PAYMENTS: THE IMPACT OF CONCURRENT EVENTS

- × 1989 Hugo and Loma Prieta
- × 1992 Andrew and Iniki
- × 1994 Northridge and 6 winter storms
- × 2004 Four hurricanes strike Florida
- × 2005 KRW
- × 2008 Ike, Gustav and 3 other tropical cyclones

OTHER REPERCUSSIONS AND ISSUES

There are other, major consequences that follow from mega-catastrophes:

Class action lawsuits spurred in part by a lack of appropriate coverage for perils that end up being uninsured.

Finding sympathetic juries for trials of those accused of perpetrating insurance fraud.

The debt incurred by the National Flood Insurance Program and other public entities, such as wind pools, requires taxpayers to assume a long term debt to support recovery efforts.

The political furor that results from either personal loss experience or from the perception of utter breakdown in response and recovery efforts.

A change in the way insurers manage risk and exposure that often includes increased premiums or higher deductibles or non-renewed policies.