Saddle Up for Extreme Weather

RIMS
OREGON CHAPTER

Saddle Up for Extreme Weather

Oregon RIMS Education Day
June 11, 2026
Sisters, Oregon

Elena Peterson, EMBA, ARM-E
Corporate Risk Manager
Tidewater Transportation & Terminals

Alexander Mirescu, Ph.D.
Head, Extreme Weather
Zurich Resilience Solutions

Pranav Sharma
VP, Client Service Manager
FM

Agenda

- Why Extreme Weather Resilience? The ROI of Adapting to Risk
- The Value Proposition: Quantifying Hazards, Derisking Financing for Resilience
- The Resilience Dividend: Connecting the Resilience Journey to Insurance
- The Insurance Impact
- Loss Prevention Lessons
- Closing Thoughts / Q&A

Why Extreme Weather?

Alexander Mirescu, PhD
Head, Extreme Weather
Zurich Resilience Solutions

System-based approach to understanding risk

Event

Any disruption of normal operations leading to adverse consequences, influenced by the effectiveness and reliability of the controls.

Exposure

People, assets, business performance, processes, or infrastructure critical to the value chain, potentially subject to disruption.

Hazards

Natural or manmade (potential) sources of damage to the exposures, and future projections (according to IPCC scenarios).

Controls

Existing physical or organizational measures intended to reduce the severity of adverse consequences or their likelihood of occurrence.

The ROI of Resilience

World Resources Institute:

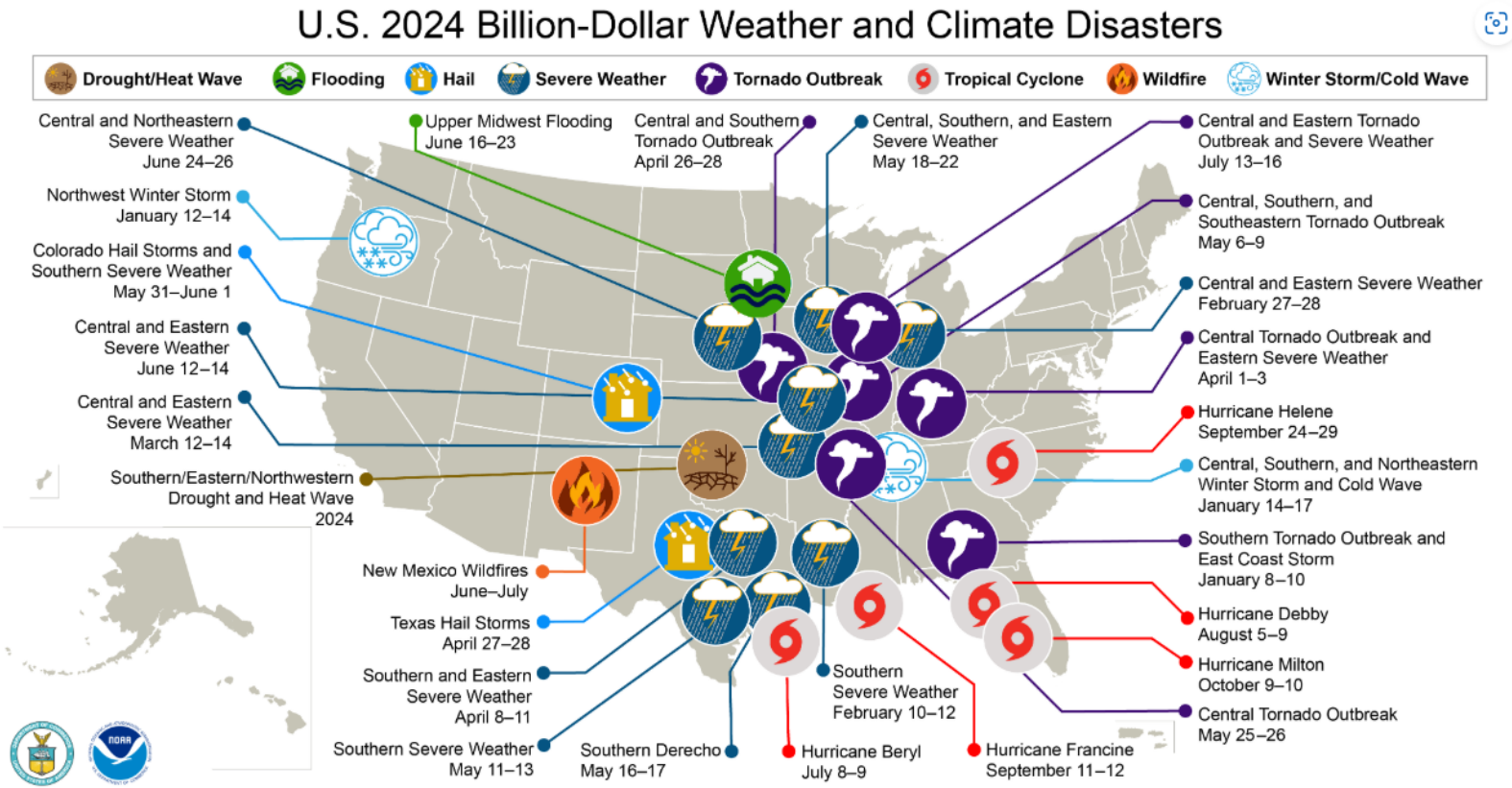
Analyzed 320 adaptation and resilience investments across 12 countries totaling $133 billion

Every $1 invested in adaptation and resilience generates more than $10 in benefits over ten years. This translates to potential returns of over $1.4 trillion, with average returns of 27%.

Insurers, the World Economic Forum, investors, data providers and think tanks have recently put out analyses with estimates of the ROI of climate adaptation and resilience. Across recent studies, spending $1 has an ROI of $2 to $43 (JP Morgan Chase, summer 2025).

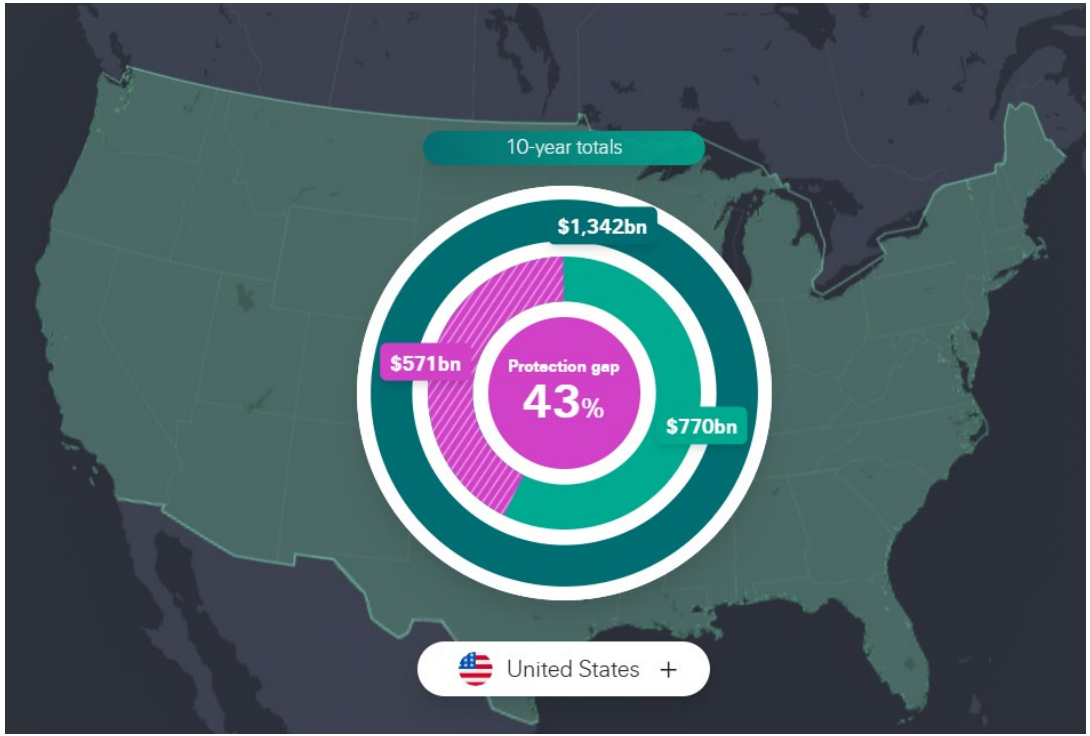
U.S. 2024 Billion-Dollar Weather and Climate Disasters

Billion-Dollar Weather and Climate Disasters | National Centers for Environmental Information (NCEI) (noaa.gov)



This map denotes the approximate location for each of the ***27 separate billion-dollar weather and climate disasters that impacted the United States in 2024.***

Understanding the Protection Gap: How big is it in the United States?



The protection gap refers to the difference between insured and uninsured losses. It shows how resilient societies and economies are to disasters. A big protection gap lowers the financial ability of economies to bounce back from disasters, as lack of insurance makes recovery harder for businesses and people.

Source: How big is the protection gap from natural catastrophes where you are? | Swiss Re

The Value Proposition

Alexander Mirescu, PhD
Head, Extreme Weather
Zurich Resilience Solutions

Extreme weather is an enterprise risk

- The world is experiencing increasingly severe weather
- Businesses' physical assets, operations, people and revenue are at risk
- Regulators are increasing requirements on companies:
  - ✓ To identify, manage, and report on their climate risks
  - ✓ Demonstrate resilience and economic sustainability

27 - $1B+
natural disasters

2024 produced the second-largest number of climate disasters, including severe weather/ hail events

The $178 trillion business conundrum

The World Economic Forum estimates that unchecked climate change could cause economic losses of $178 trillion between 2021 and 2070, with the hourly global cost of climate change already expected to be a staggering $16 million.[1]

Deepening our risk analysis with financial loss quantification: Understanding Extreme Weather Risks as Site-Level

Risk quantification introduces an enhanced understanding of climate risk by integrating site data. This approach offers insights into the projected financial loss at each site, including:

- The possible financial impact relative to the total value of buildings, contents, and inventory.
- The anticipated duration of business disruption in days.

This detailed information can assist various stakeholders by offering greater granularity to address a variety of business objectives.

Loss prevention

Site and risk managers need to identify their exposure to extreme event scenarios at their sites, to best support resilience planning.

Loss estimations further contextualise the impact of these events and help to measure the positive effects of implementing resilience measures.

Regulatory reporting

As well as identifying current and future risk, CSRD and other climate risk reporting frameworks require businesses to report on "risk materiality" and "potential financial effects", which financial loss estimations are essential for.

Budget allocation

Identifying exposure to risk can help risk managers prioritize which sites require further assessment and adaptation measures.

Loss quantification strengthens the business case for specific budget and resource to be allocated to key sites in order to manage the financial exposure.

The Resilience Dividend

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The Last Mile of Resilience: Rewarding the Resilience Journey from an Underwriting Perspective

The Insurance Impact

Pranav Sharma
VP, Client Service Manager
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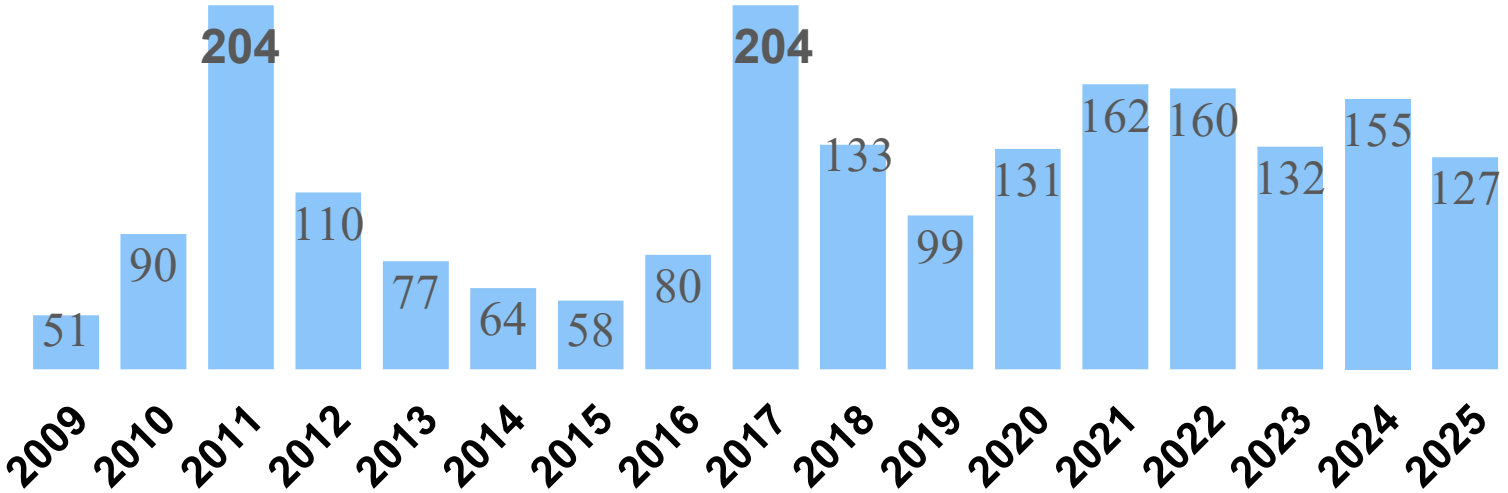
Global insured losses from natural disasters

6th Straight Year Exceeding $100 Billion

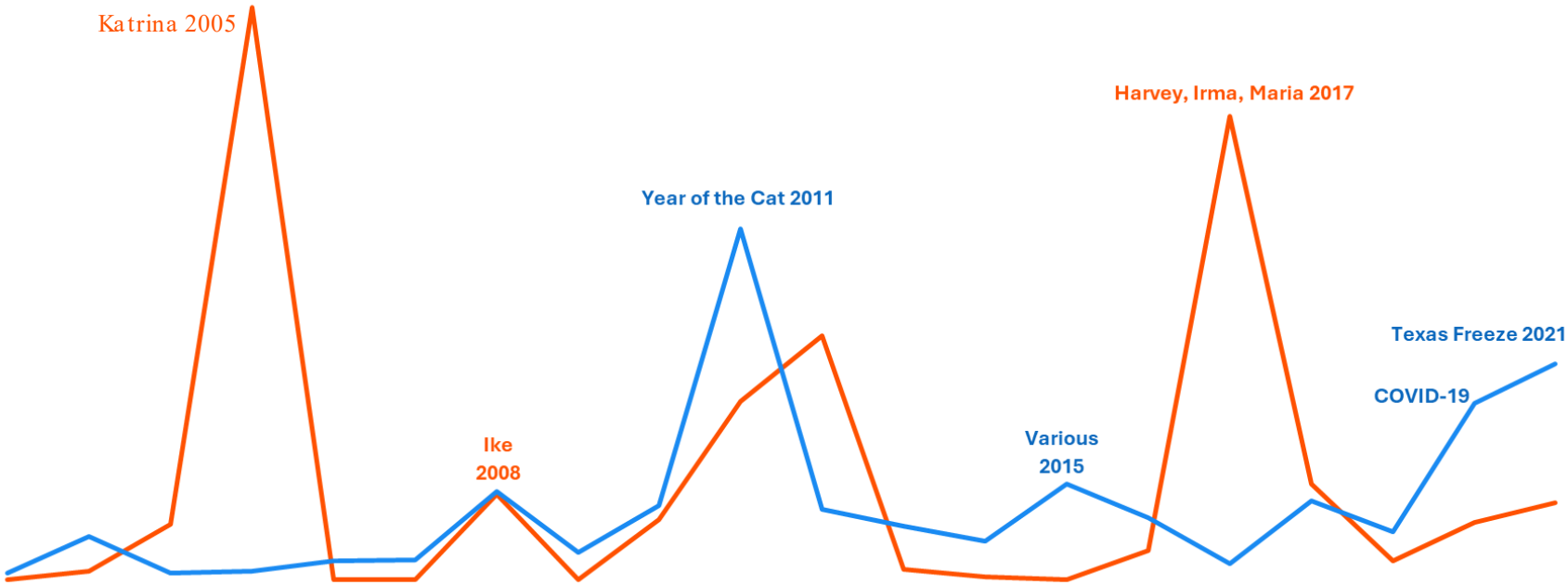
In 2025, severe convective storms accounted for $61Bn of insured loss. Wildfire accounted for $42Bn.



Data: Aon Catastrophe Insight

Primary vs. Secondary Perils

Event Yearly Gross Total



Blue = Secondary Perils

Orange = Primary Perils

Secondary Perils – In Focus

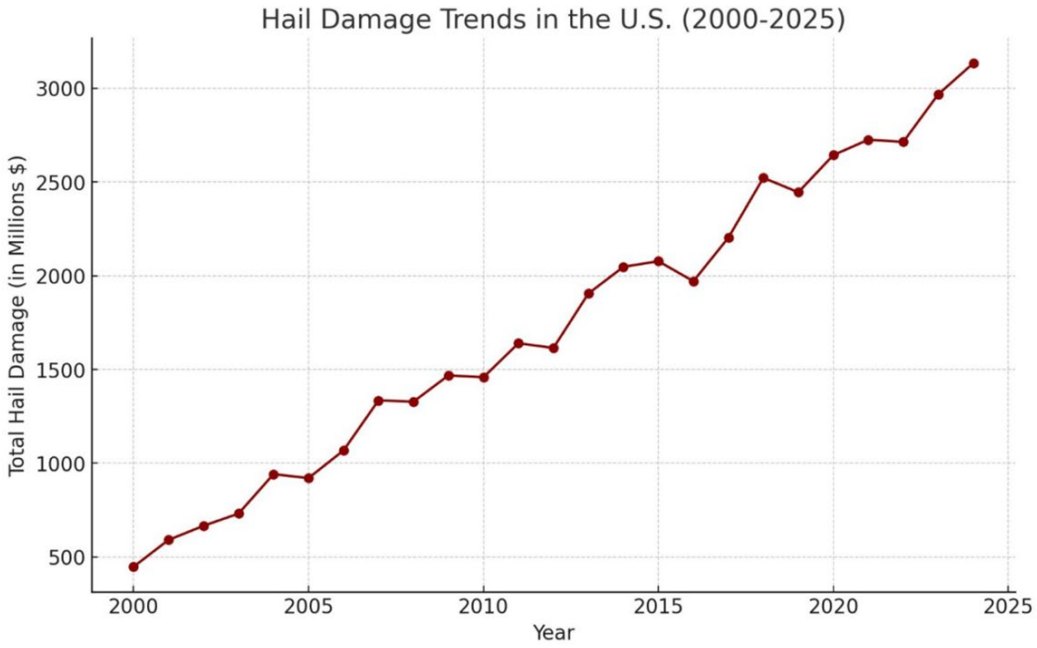
Hail

U.S. Hail Zones

Hail Trends

Event Yearly Gross Total

Hail Damage Trends Over Time

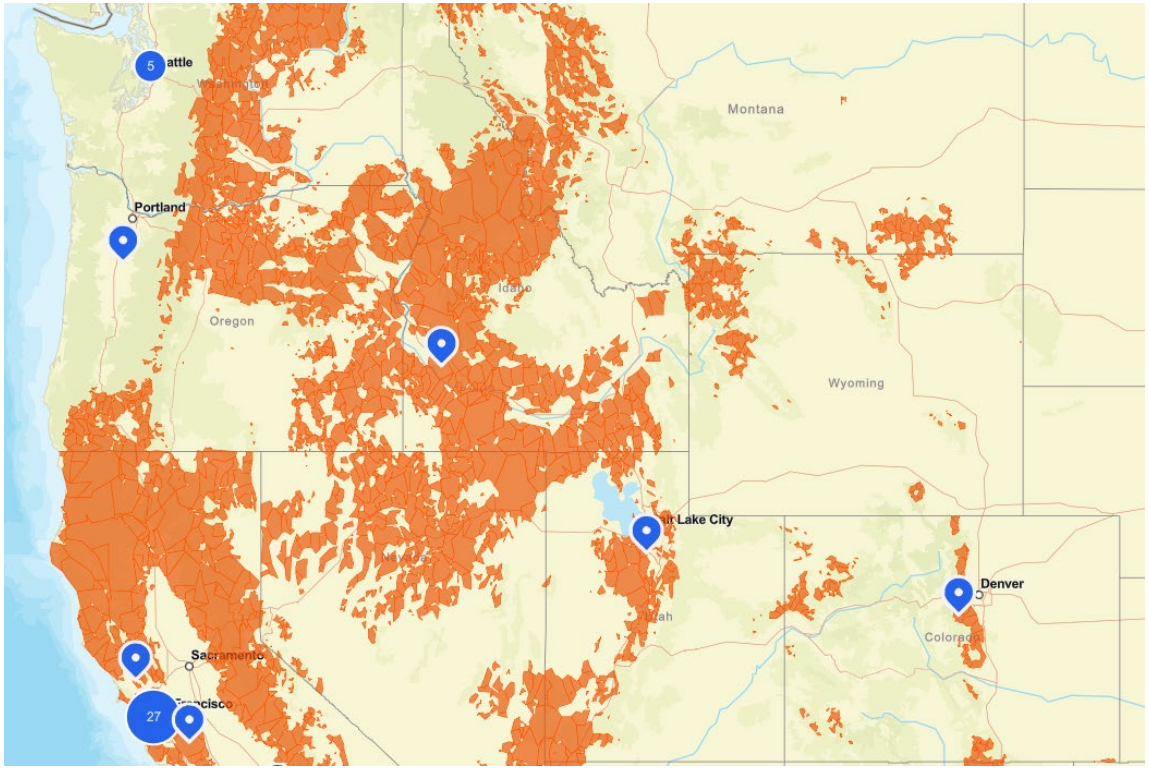


(Graph: Hail Damage Trends in the U.S. 2000-2025)

Hail Loss Examples

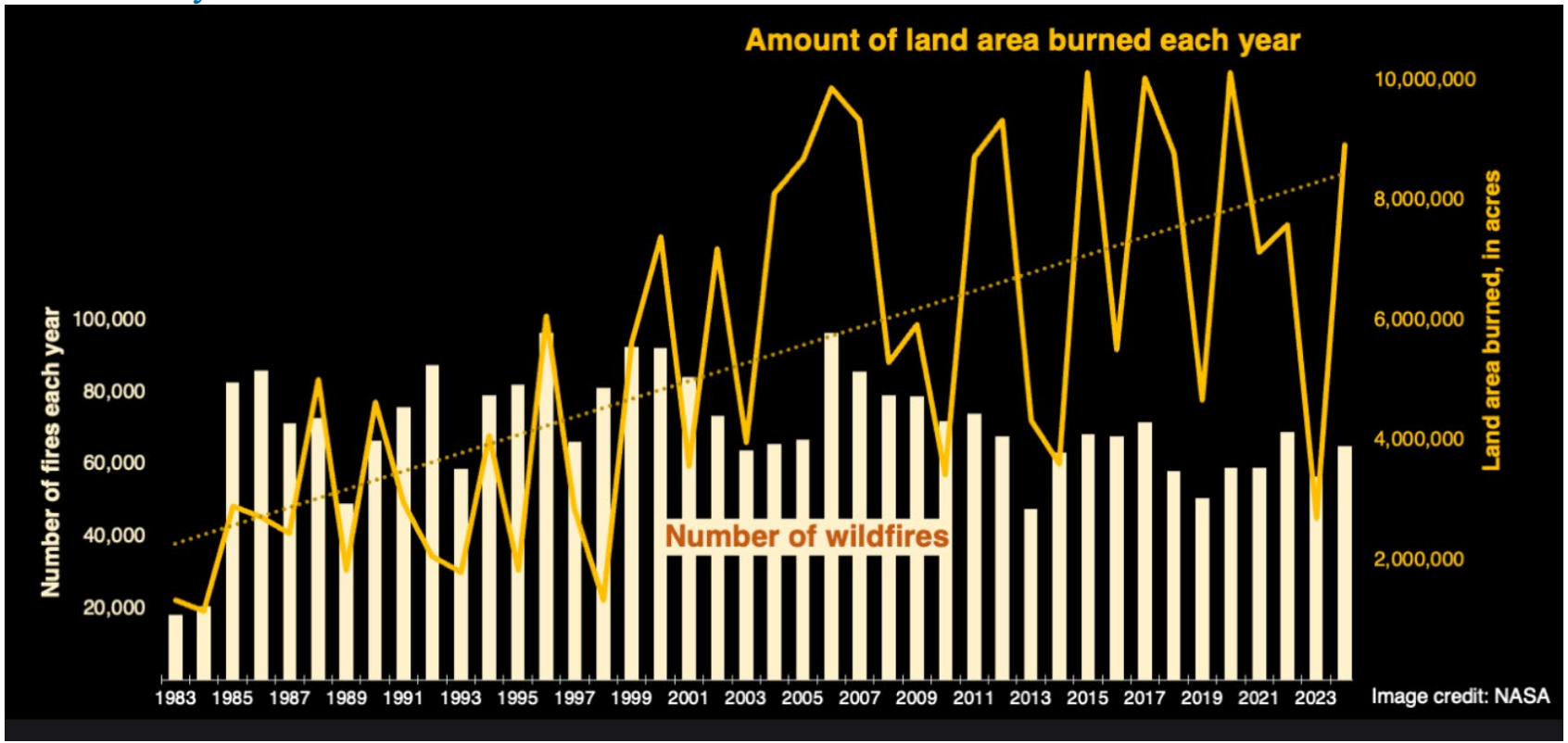
Wildland Fire Trends

U.S. Wildfire Evaluation Zone



Wildland Fire Trends

Event Yearly Gross Total



Wildland Fire Loss Examples

Wildland Fire Loss Examples

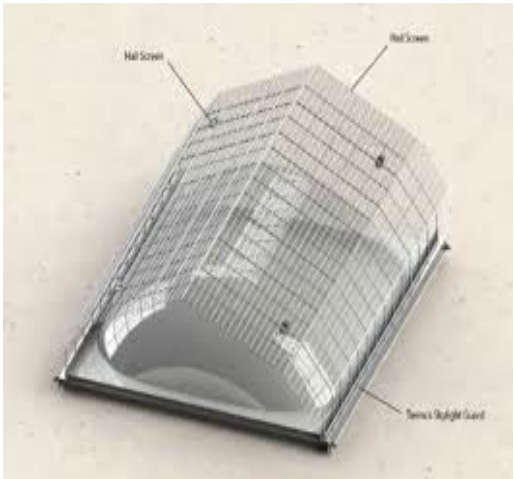
Wildland Fire Loss Examples

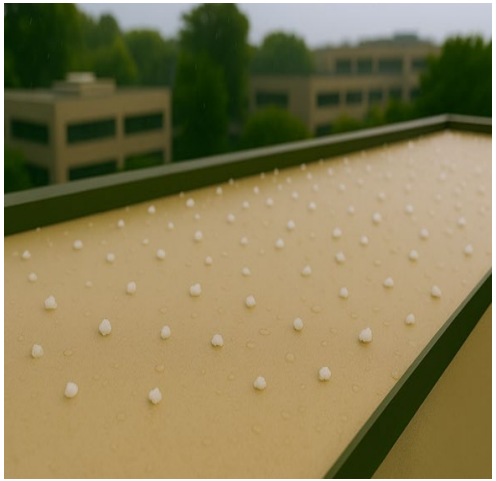
Loss Prevention Lessons

Pranav Sharma
VP, Client Service Manager
FM

Hail Loss Prevention Solutions

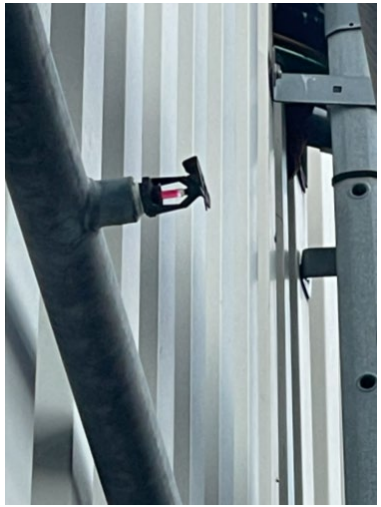
Approved Products





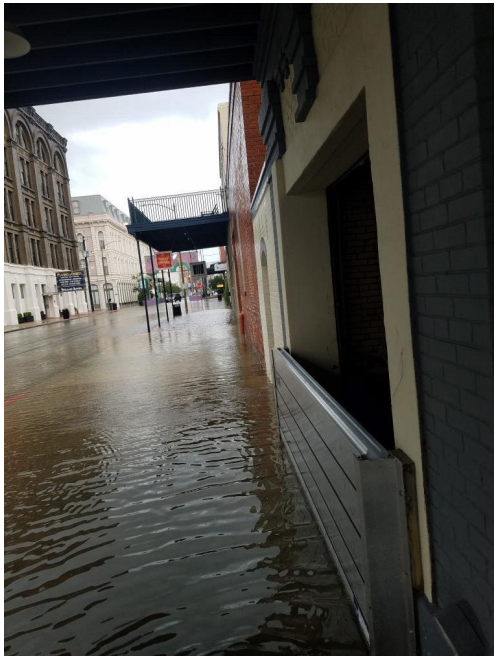
Wildland Fire Loss Prevention Solutions

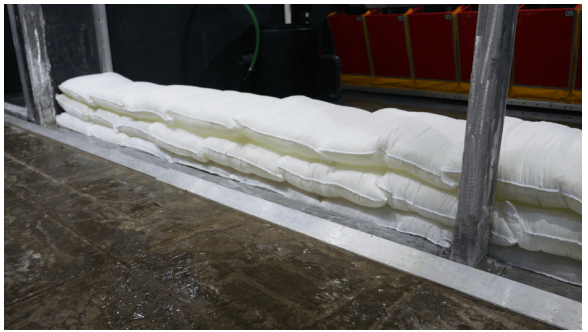
Approved Resources



Flood Loss Prevention Solutions

Approved Products





Earthquake Loss Prevention Solutions

Approved Products

Freeze/Water Intrusion Loss Prevention Solutions

Domestic Water Leak/Flow Detection

Closing Thoughts

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Alexander Mirescu, PhD
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Wrangling Extreme Weather

- Ensure organizational alignment for extreme weather resilience
- Understand and access vulnerabilities
- Develop emergency response plans
- Work with local emergency personnel
- Budget for large CapEx projects
- Communicate resilience actions to insurance underwriters and brokers

Thank you.

Questions?