

Parametric Insurance

MIABC Risk Management Conference 2026

Parametric Insurance – Fast, transparent and flexible

What is parametric insurance? Structure

In a parametric insurance policy, the loss is **pre-agreed**. The policy pays out when one or multiple event parameters meet a pre-defined value, and the insured incurs a financial loss¹

- Transparent loss settlement: payout is determined by parameters as provided by an independent 3rd party
- No dollar or percentage deductible
- Coverage terms: 1-3 years

Key benefits



Quick payout: typically, within 30 days of an event



Broad coverage: Payouts can be used for property replacement, repair costs, business expenses, lost revenue, CBI², ingress/ egress, landscaping, debris removal, off premises power outages and other immediate economic needs and business expenses not covered elsewhere.



Flexibility in structuring the cover.

¹ Some jurisdictions require a self-declaration of the financial loss sustained

² Contingent Business Interruption

Backbone of a Parametric Nat Cat Insurance Policy



Location

Defined by a geographic coordinate or area



Limit

Specified for the location in question



Data Provider

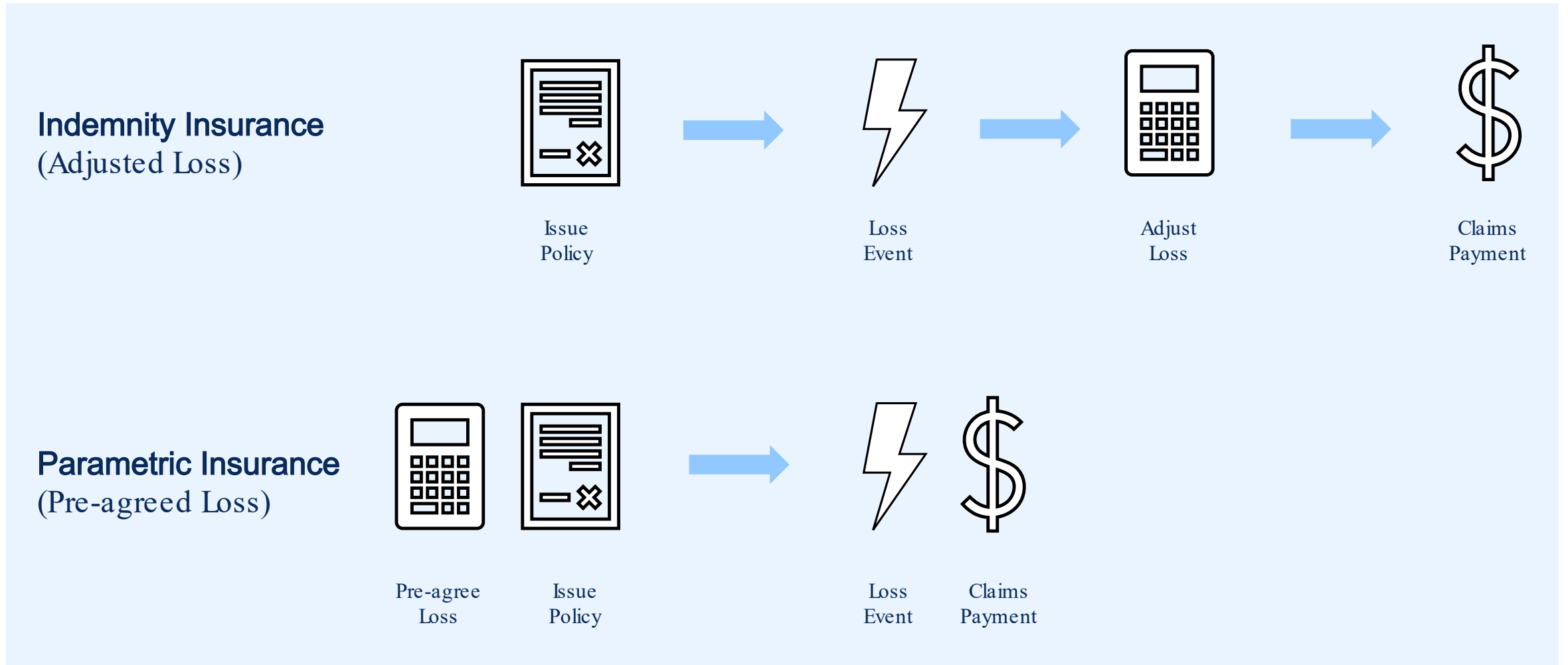
Definition of an independent 3rd party

EQ Magnitude	% of Limit
6.0	25%
6.5	50%
7.0	75%
7.5	100%

Pre-Agreed Loss Scheme

Based on the reported parameter

Parametric Insurance: Fast, Transparent and Flexible



Parametric Insurance and how it differs to Traditional Indemnity Insurance

	Parametric Insurance	Traditional Indemnity Insurance
Trigger	Event parameter exceeding pre-agreed threshold	Loss or damage to physical asset
Recovery	Pre-agreed loss based on event parameter	Reimbursement of adjusted loss sustained
Basis Risk*	Correlation of pre-agreed event parameter and with actual loss	Policy conditions, deductibles and exclusions
Loss assessment and Payment	Very transparent and settlement within 30 days	Months to several years, depending on complexity of loss
Term	Single or multi-year	Usually annual
Structure	Customized product with high structuring flexibility (single trigger, multi-trigger)	Standard products and contract wordings
Form	Insurance or Derivative	Insurance

*Risk that Client's collected payout is not equal to its actual loss.

Parametric Weather / Nat Cat Product Offering

by peril / trigger types

Peril	Trigger types		
Precipitation	Rainfall	Hailstone size	Snowfall level
Flood	River discharge	Excess Rainfall	Flooded area index
Earthquake	Earthquake magnitude in pre-defined area	Shaking intensity	
Windstorm	Wind speed in pre-defined area	Wind intensity	Tornado category
Climate & agriculture	Temperature threshold	Drought indices ¹ : SPEI, NDVI, and SMI	Area yield index
Other	Storm Surge Height	Tsunami Height	Volcanic Explosivity Index

Renewable energy hedge (lack of water, wind, solar)

The Case for Parametric Insurance

01

Deductible in-fill & additional capacity

Some customers will look towards parametric insurance to reduce their **self retention** and address losses that fall within the **deductible**.

Some customers will look towards parametric insurance to **increase** their overall **limit** for certain perils.

02

Uninsured losses & difficult to insure risks

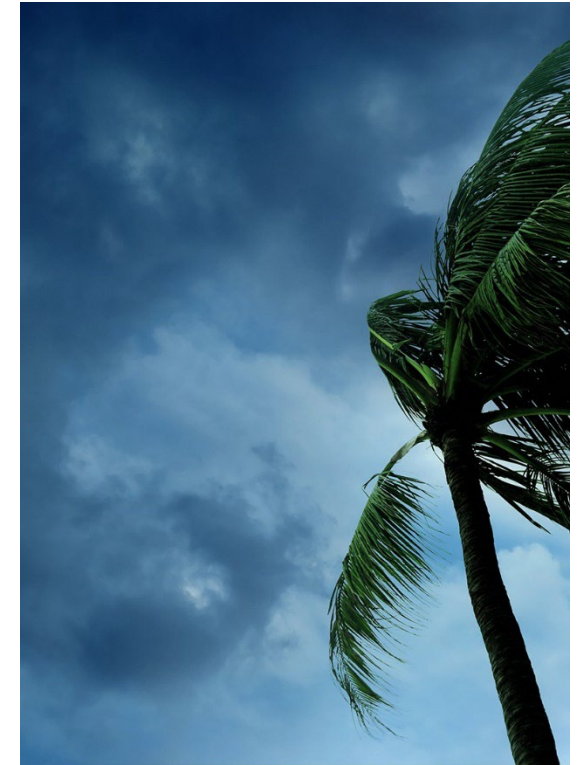
Some customers will look towards parametric insurance to obtain coverage for **losses** that are **excluded** from or **highly sub-limited** in traditional property programs.

Some customers have risks that are deemed **difficult to insure** traditionally, or their financial exposure is tied to intangible assets.

03

Fast & lean claims process

Some customers are looking for **fast** and hassle-free **claims** process, where the admin is at a minimum and where claims are paid within days to weeks, supporting a quick recovery.



Conclusion:

Customers have a variety of motivations to explore parametric insurance purchasing, based on their current property risk appetite and risk retention strategy.

INSURING ASSETS EXCLUDED FROM THE TRADITIONAL INDEMNITY POLICY

The challenge

- Like many cities, this Western Canadian municipality owned a network of buried utilities for drinking water, sanitary sewer, and storm water that were uninsured under the traditional indemnity policy.
- Western Canada has significant seismic exposure due to its proximity to the Cascadia subduction zone in the Pacific Ocean and many regional fault networks. There is a 37% chance that a Cascadia megathrust earthquake of 7.1+ magnitude in this fault zone will occur in the next 50 years.
- Buried utilities, particularly older pipes that are made with brittle materials, are highly susceptible to damage from seismic shaking and liquefaction. The City wanted protection from this unseen risk.

The solution

- The City purchased our parametric insurance product 'QUAKE' to supplement their traditional earthquake insurance and provide protection for these uninsured assets. The solution provides quick payment and flexibility in how funds can be used.
- The structure provides a dynamic payout that increases with the intensity of shaking across their entire utility network.
- The flexible, ground-up proceeds of the parametric cover can be used beyond the utility network, including extra emergency expenses or paying for the deductible of their traditional policy.

The impact



The City first purchased the parametric earthquake policy in 2024 and renewed the policy in 2025. A testament of value to the client as an effective risk mitigant.



The funds from a parametric cover can help address immediate expenses associated with a catastrophic earthquake, reducing financial stress on the community.



Swiss Re's QUAKE product can be customised to meet client specific priorities, budget and exposure. For this Western Canadian city, this is an affordable solution, providing more coverage and flexibility.



HELPING BAYLOR UNIVERSITY RECOVER QUICKLY FROM HAILSTORM-RELATED LOSSES

The challenge

- In 2023 there were almost 7,000 hail reports throughout the continental United States, with over 1,000 of those events occurring in Texas, a state particularly susceptible to severe hailstorms.
- Public entities and higher education institutions, such as Baylor University in Waco (Texas), often own large portfolios of high-value assets that are susceptible to property damage from hail events.
- In 2023, central Texas was impacted by severe thunderstorms with 'baseball-sized' hail stones, which caused physical damage to the university.

The solution

- Swiss Re's parametric insurance product 'HAIL' was leveraged to increase Baylor University's hail coverage and budget certainty at affordable rates.
- Supported by CoreLogic's hail verification technology, our HAIL product considers the maximum hail size at each covered location.
- Funds are disbursed based on customized payout functions that address the particular and unique needs of Baylor University.

The impact



Baylor University received a payment from Swiss Re in less than 14 days after receiving the hail event notice. This allowed the university to recover from the losses much quicker, leading to less stress and more budget certainty.



The benefits of parametric insurance coverage include flexibility of coverage, allowing the university to choose the exposed location/s and payout structure to best suit the needs of stakeholders.



Other benefits of a parametric product are the flexible use of the payout funds, which enables Baylor University to choose how they prioritize recovery efforts.



ASSISTING A MUNICIPALITY IN CALIFORNIA TO EFFECTIVELY RESPOND TO FLOOD DISASTERS

The challenge

- A mid-size city in California faces significant flood exposure. Flooding in the city damages property, disrupts critical infrastructure and emergency services, and reduces economic activity.
- Due to limited capacity in the traditional flood insurance market, the city was left with a significant retention of flood risk.
- The city sought a financial recovery solution that would cover non-property losses such as costs related to emergency response or economic inactivity, and would also help them buy down their traditional property insurance deductible.

The solution

- Swiss Re partnered with wholesale broker Amwins and the data provider Floodbase to develop a parametric flood insurance program that provides up to USD 2 million in emergency funding.
- The solution leverages a daily measurement of the maximum flooded area using satellite data and machine learning modeling. When a flood occurs, the maximum flooded area is measured across the city. If it exceeds the agreed threshold, a payment is issued to the city.
- Flexible, fast payouts allow the city to address the most pressing financial recovery concerns, whether that be supporting essential city operations, constituent services or municipal budgeting.

The impact



If the policy had been in place, it would have led to a USD 1.78m payout for a major flood event in 2017, and a USD 870k payout for a flood event in 1998.



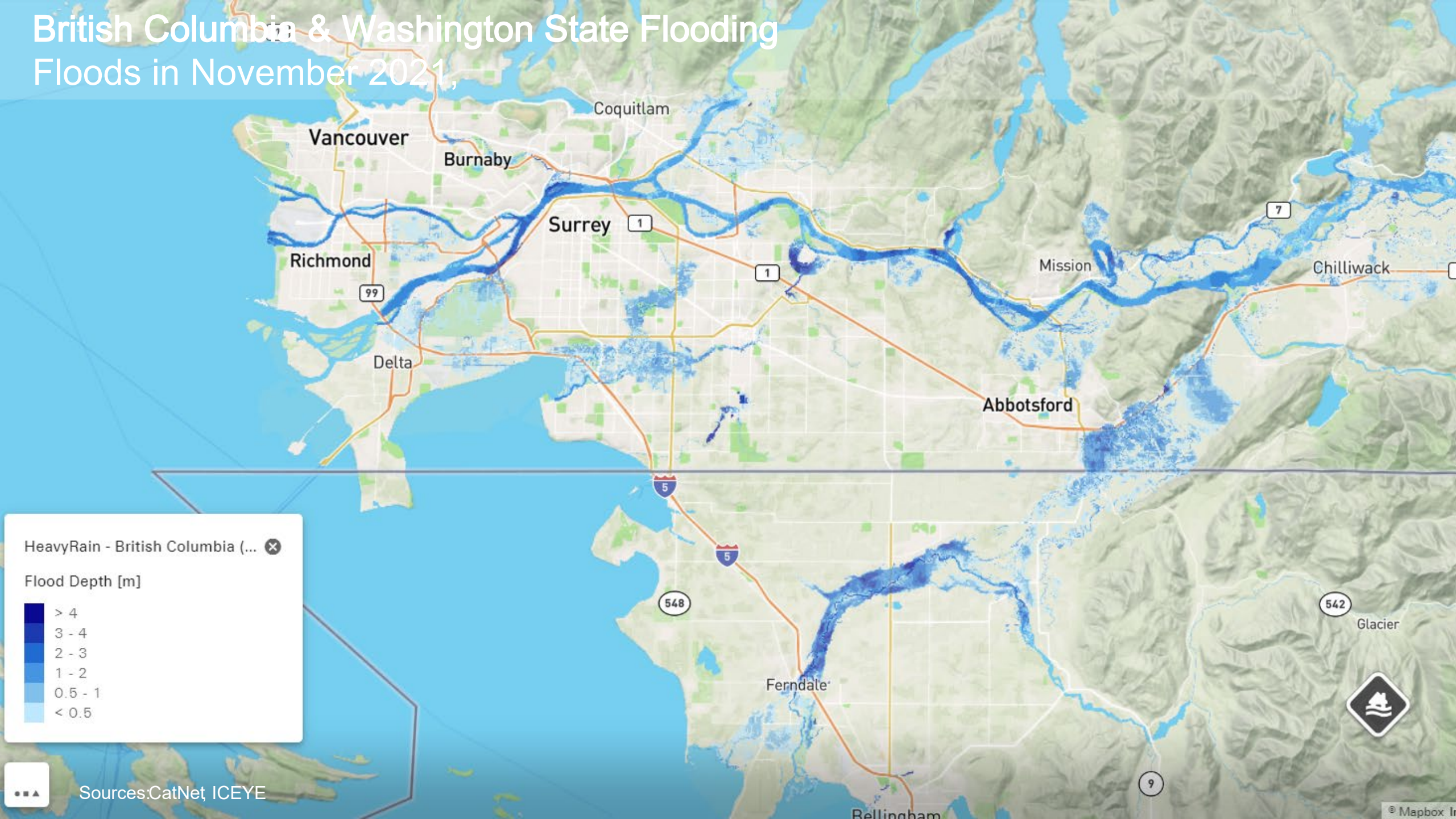
Residents and businesses can benefit from a faster, more efficient recovery because the city can deploy parametric proceeds more quickly and flexibly, to even include previously uncovered losses.



The speed and flexibility of parametric proceeds further increases the city's financial resilience and ability to recover quicker from flooding events.



British Columbia & Washington State Flooding Floods in November 2021,



HeavyRain - British Columbia (...)

Flood Depth [m]

- > 4
- 3 - 4
- 2 - 3
- 1 - 2
- 0.5 - 1
- < 0.5

Sources: CatNet, ICEYE

© Mapbox

SUPPLEMENTING A STATE'S TRADITIONAL EARTHQUAKE INSURANCE TO PROVIDE BETTER COVERAGE

The challenge

- Each year, the Utah region experiences about 700 earthquakes (including aftershocks). Most of those events produce no visible shaking, but an average of 13 earthquakes of magnitude 3.0 or larger occur in the region every year.
- In 2020, the Salt Lake City area was hit with a 5.7 magnitude earthquake, which was the state's strongest earthquake in nearly 30 years.
- The event caused significant economic losses, exacerbating the impacts of the global COVID-19 pandemic that had already hurt the region's economy.

The solution

- The State of Utah bought our parametric insurance product 'QUAKE' to supplement their traditional earthquake insurance and cover deductible expenses. The solution provides quick payment and flexibility in how funds can be used.
- The structure provides a dynamic payout that increases with the intensity of shaking and geographic spread of extreme energy, providing cover to various locations within the state.
- The parametric cover provides protection against economic losses, covering costs that the U.S. Federal Emergency Management Agency (FEMA) will likely not reimburse.

The impact



The State of Utah first purchased the parametric earthquake policy in 2017. Less than 30 days after the 2020 earthquake, Swiss Re issued payment to the State of Utah.



The funds received from the parametric cover helped address immediate expenses associated with the losses, reducing financial stress on the community.



Swiss Re's QUAKE product can be customised to meet client specific priorities, budget and exposure. For the State of Utah, this is an affordable solution, providing more coverage and flexibility.





Legal notice

©2026 Swiss Re. All rights reserved.

You may use this document and the information contained herein for private or internal purposes only, and any copyright or other proprietary notices must not be removed. You are not permitted to modify, reproduce, create any derivative works of this document, or distribute or use it for commercial or other public purposes, without the prior written permission of Swiss Re.

This document is for informational purposes only and is not advice or a recommendation to engage in any transaction with or use services provided by Swiss Re or any other person. The information and opinions contained herein are provided as of the date of the presentation and may be subject to change at any time without notice. Although the information is taken from reliable sources, Swiss Re shall not be liable for any loss or damage arising in connection with its use, or from any inaccuracy or incompleteness, nor is it under any obligation to update it. Swiss Re further undertakes no obligation to publicly revise or update any forward-looking statements, whether as a result of new information, future events or otherwise.

This document and its contents are not directed to, or intended for use by, any person or entity in any jurisdiction where such distribution, publication or use would be unlawful or where it would require licences or authorisations that have not been obtained.

This document does not constitute or form part of an offer, solicitation, or invitation to buy or sell any securities, derivatives or (re)insurance or transact with, or use services provided by, any member of the Swiss Re Group. It is not an invitation or inducement to participate in investment activities described in any applicable financial promotion regime.

Go to
www.menti.com

Enter the code

2625 1329

Join at menti.com | use code 2625 1329

Mentimeter



Or use QR code



MC

Menti

Insuring the Future: Inno...



Choose a slide to present

