ICNZ Insurance Council of New Zealand
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Strengthening Resilience to Shocks and Stresses

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Te Waihanga *Looking Ahead* Symposium 15 May 2023

Extraordinary events or a new normal?

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Insurance cost of weather events - pre 2023

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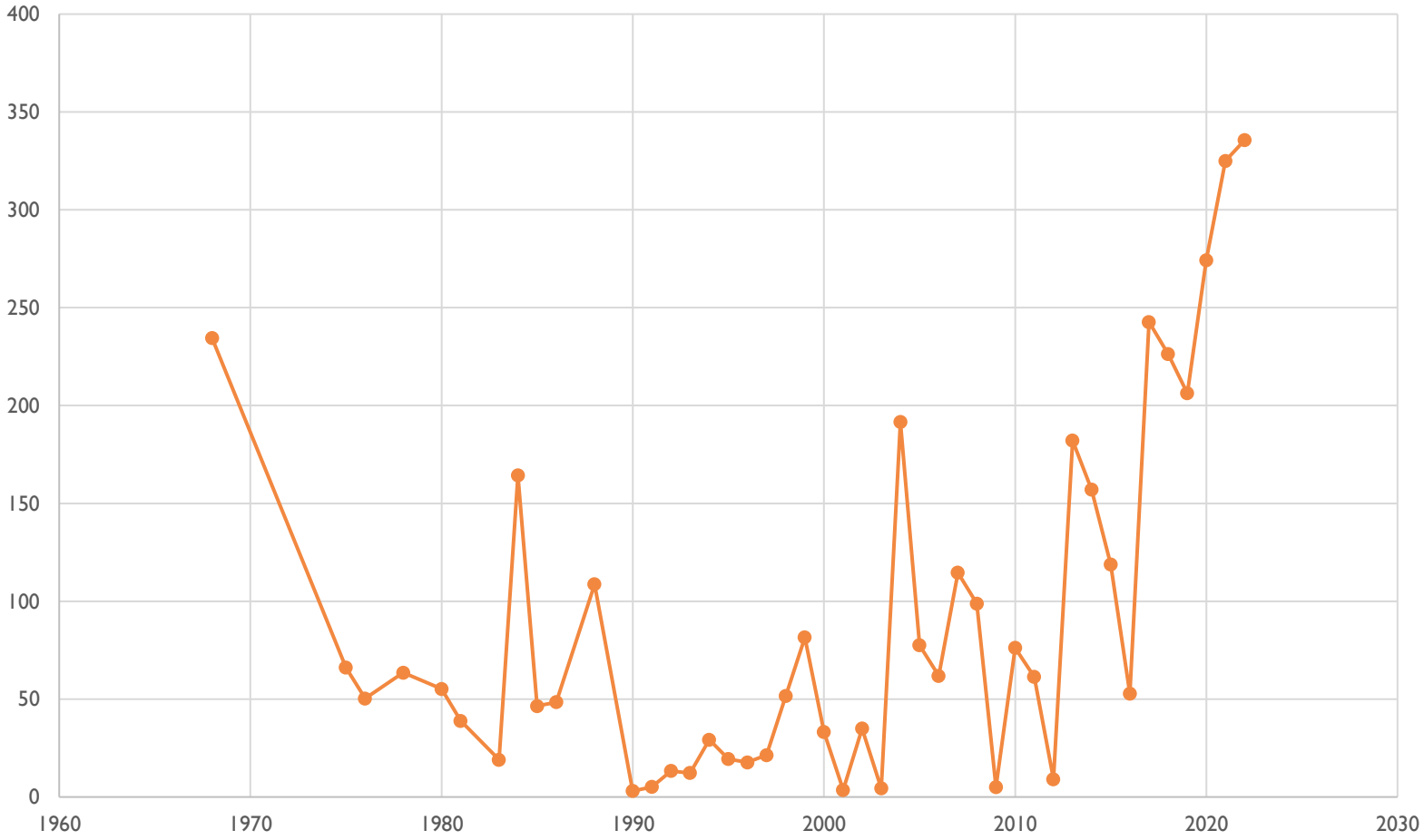

With 2023... a shock that stressed system resilience

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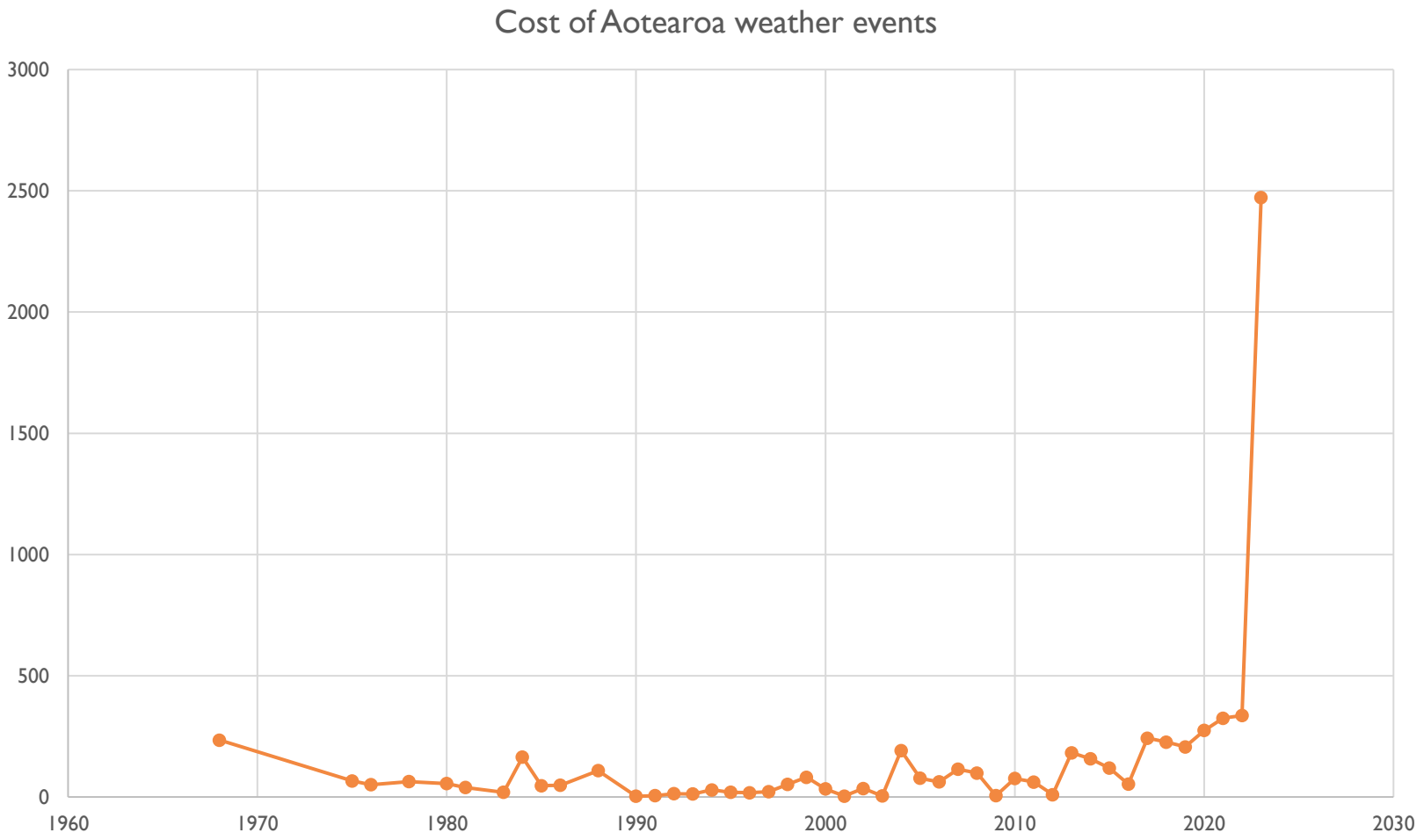


Insurance losses (ICNZ members)

Claims: >102,000 **Value:** >$3billion?

	Auckland Anniversary	Gabrielle
No. of claims received	54,000	**48,000**
Total estimated $ value	$1.5 billion	**$1.3 billion**
$ value paid to date	**$405 million (27%)**	**$295million (23%)**

Claims lodged	Auckland Anniversary (91% claims Auckland Council area)	Gabrielle (NB Gabrielle columns for the 3 regions do not sum to NZ total as rest of NZ column would be needed)			
		Hawke's Bay	Tairāwhiti	Auckland	Total NZ
Domestic House	28,784	4,558	784	8,822	22,475
Domestic Contents	11,359	4,525	702	2116	10,217
Business	5,202	3,014	550	1,341	8,823
Marine	43	59	3	27	192
Motor	8,008	3,254	298	646	5,772
Crops	0	67	0	0	69
Other	469	116	37	60	465
TOTAL	53,865	15,593	2,374	13,012	48,013
EQCover	3,565	1,082	197	848	2,704

Impacts

Lives lost: 11

Social disruption and trauma:

- no power, transport, communications, accommodation, schools closed
- temporary or permanent loss of employment, loss of livelihood
- silt, sewage and other contamination
- many months and for some businesses years to get back to 'normal'

Cultural and Amenity Value Loss:

- Marae severely damaged, urupā unearthed
- fishing, recreation, seashore….

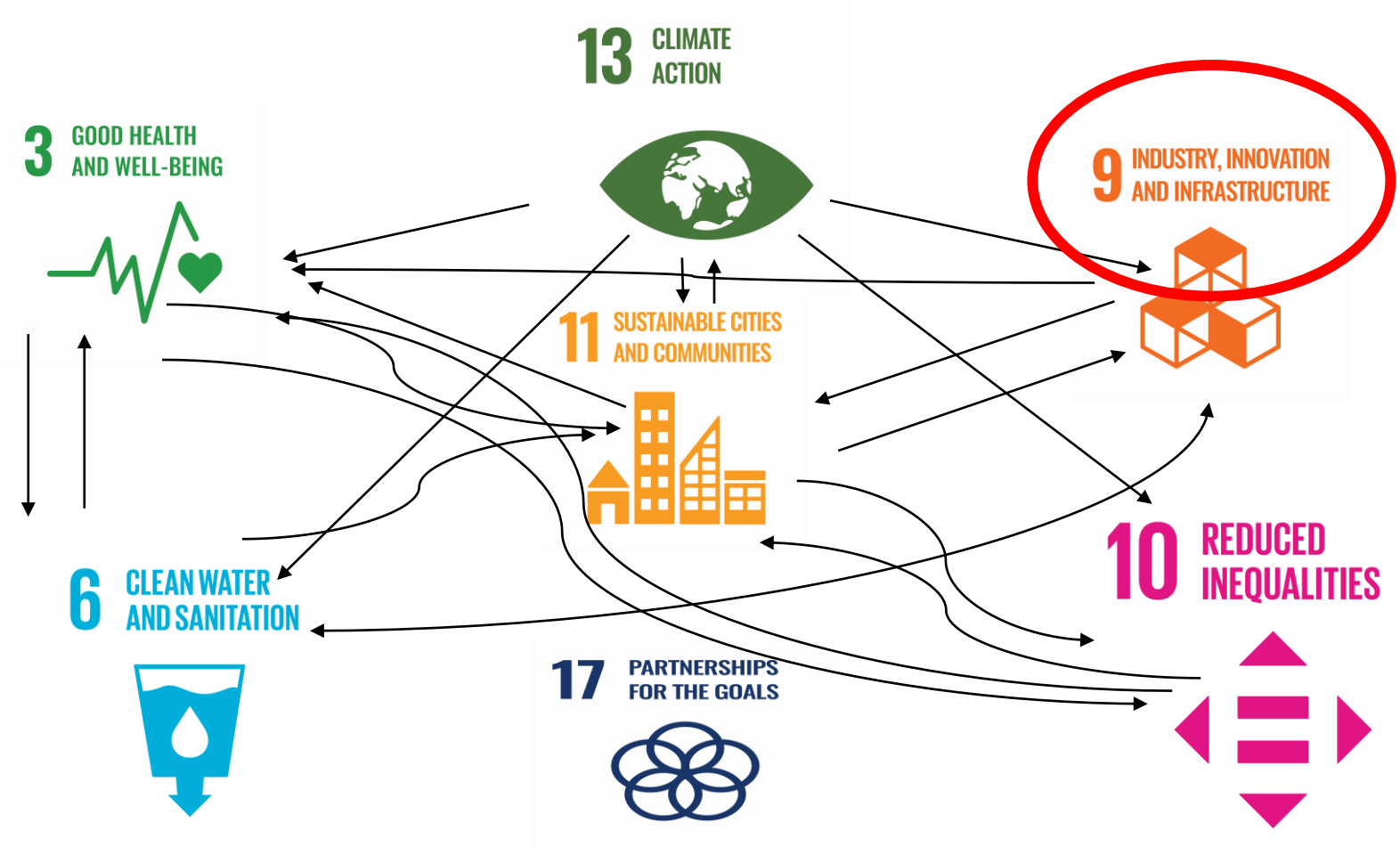
Environmental loss:

- Land, flora and fauna….

Economic:

- $12 billion loss? Inflation impact? GDP loss? Regional economy?
- **Future mitigation costs** ✓

Interconnected goals and cascading impacts



Climate Future IPCC 6th Assessment Report

- *Multiple climate hazards will occur simultaneously, and multiple climatic and non-climatic risks will interact, resulting in compounding overall risk and risks cascading across sectors and regions. Some responses to climate change result in new impacts and risks*. (**high confidence**)
- *Unavoidable sea level rise will bring cascading and compounding impacts resulting in losses of coastal ecosystems and ecosystem services, groundwater salinisation, flooding and damages to coastal infrastructure that cascade into risks to livelihoods, settlements, health, well-being, food and water security, and cultural values in the near to long-term* (**high confidence**)
- *Inclusive, integrated and long-term planning at local, municipal, sub-national and national scales, together with effective regulation and monitoring systems and financial and technological resources and capabilities foster urban and rural system transition* (**high confidence**).

Partnerships

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Working together to reduce risks

- Roche taskforce terms of reference seek input from infrastructure, utilities and finance (insurance and banking)
  - initial focus on recovery
  - planning for future resilience/lessen natural hazard risks

- insurers have provided fact based data on claims overlayed with flood and landslip modelling

- not a complete picture – local council assessments of risk and mitigation etc

- need holistic approach

- insurers only provide a part of the picture – they are not and never should be the de facto consenting authority – elected community representatives have that role

Causes of losses

Hazards

- pre-saturated ground
- atmospheric rivers
- ex-Tropical Cyclones
- floods, landslips, wind, slash and silt

Vulnerability

- Choices were made to build
    - in flood plains
    - on cliff tops
    - beneath old landslips
- infrastructure unable to cope
- activities that made things worse (forestry slash)
- insufficient warning (Auckland Anniversary Weekend)

Flood types

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Pluvial

- when flooding occurs independent of a body of water (river, lake, sea)
- heavy rain saturates stormwater systems
- run-off from hills/slopes that can't absorb water
- flash flooding often difficult to model
- development in localsied depression areas

Riverine/Fluvial

- rivers overflow
- can be modelled
- complicated by secondary hazards - landslips, debris flow and slash

Storm Surge

- coastal flooding/king tides/high winds bring water ashore
- sea level rise will amplify over time due to climate change
- can be modelled

Origins:

- prolonged rainfall over a long time
- heavy, intense rainfall in a short time
- debris build-up forcing rivers to breach their banks
- snowmelt (Lake Whakatipu, Queenstown)

Current levels of resilience

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- infrastructural design for many councils is for a 1:100 year event.
- 1% chance of a particular strength flood occurring in the next year. Possible to have three such intensity flood occurring three years in a row e.g. Houston for 1:500 year events. Do the public understand this?
- some properties have been flooded multiple times.
- severity and frequency of extreme events will increase.
- atmospheric rivers carry more rain and can move more slowly.
- infrastructure needs to adjust to a long view from what 1:100 intensity looks like today to what it will look like in 50 years or more properties built today will still be there.

Infrastructure and a slippery slope

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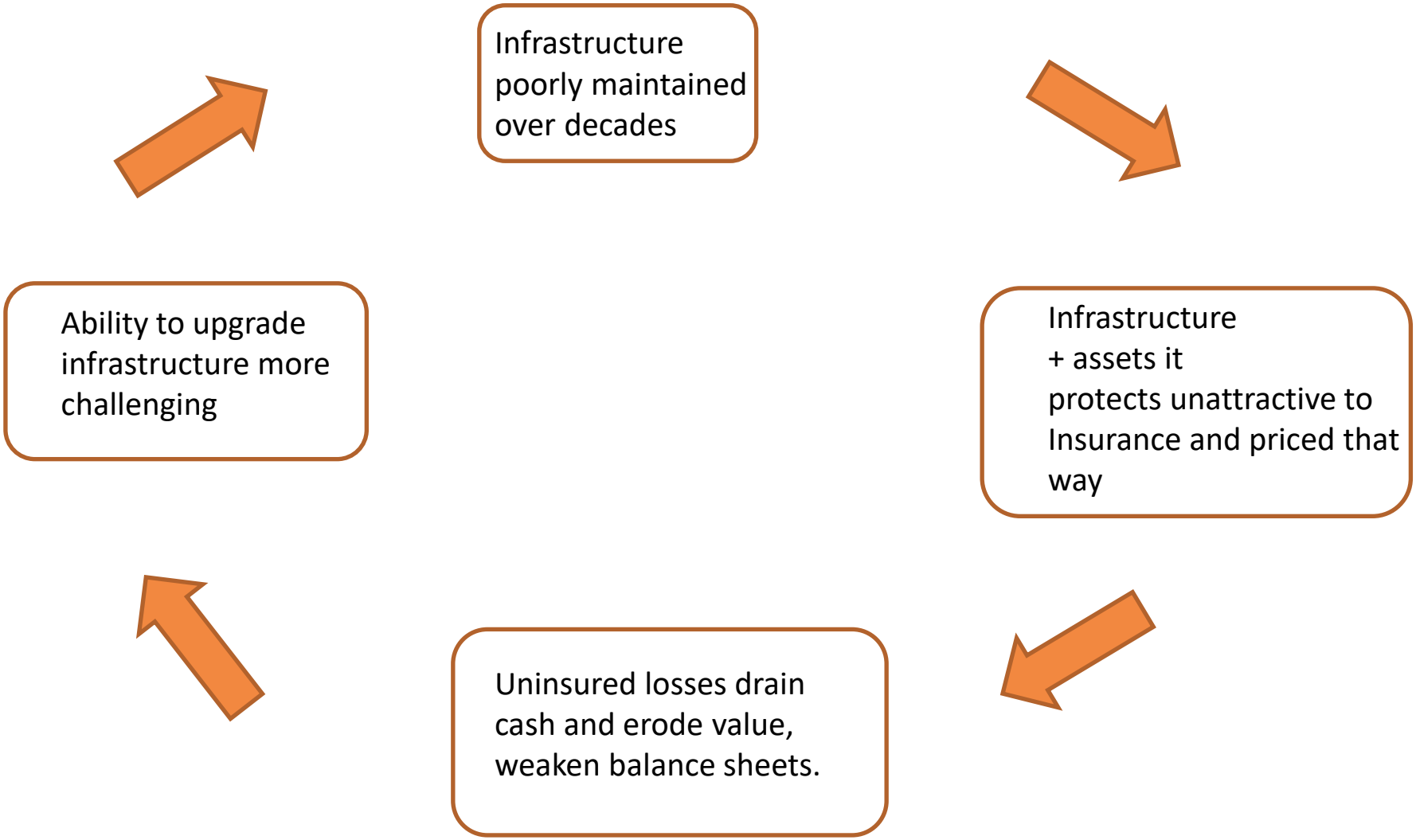

Infrastructure & Insurance

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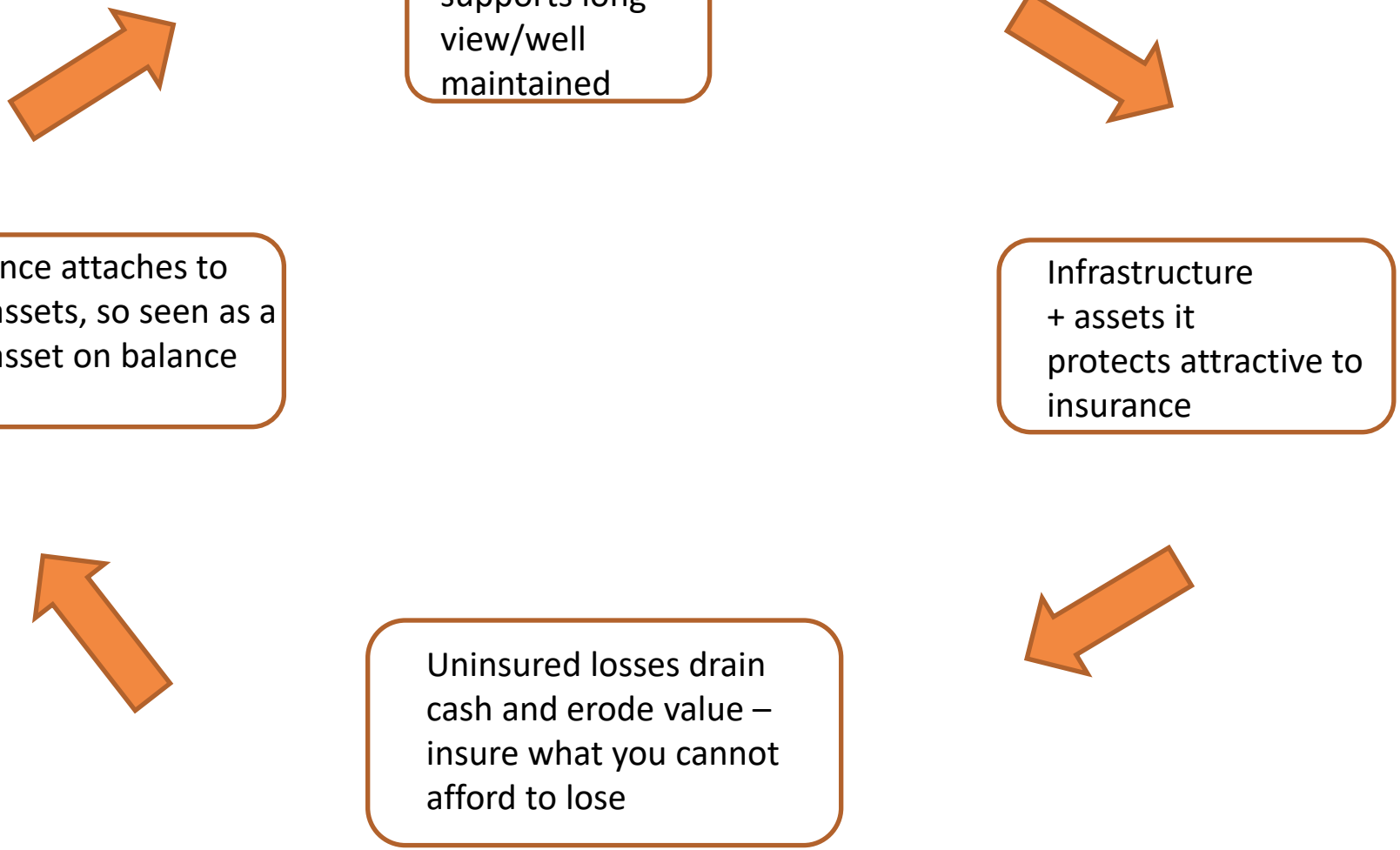

Reinsurance Markets and local insurance

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- Cyclones and Severe Convective Storms – Northern Europe (2021), Pakistan (2022) NSW and Queensland (2022), Hurricane Ian Florida (2022) and NZ (2023) – Nat Cat and secondary perils (flood/landslip) on the rise

- post-pandemic inflation has increased values and losses at a time of greater uncertainty around climate trends and increased demand for cover

- RI sector capital has fallen in response to rising interest rates too

- RI market the hardest in a decade - requiring insurers to retain more risk and pay more for the risk they transfer.

- to alleviate affordability issues, we must reduce the risk in a comprehensive manner. For far too long climate adaptation has played second fiddle to GHG emissions mitigation.

When do you want to pay?

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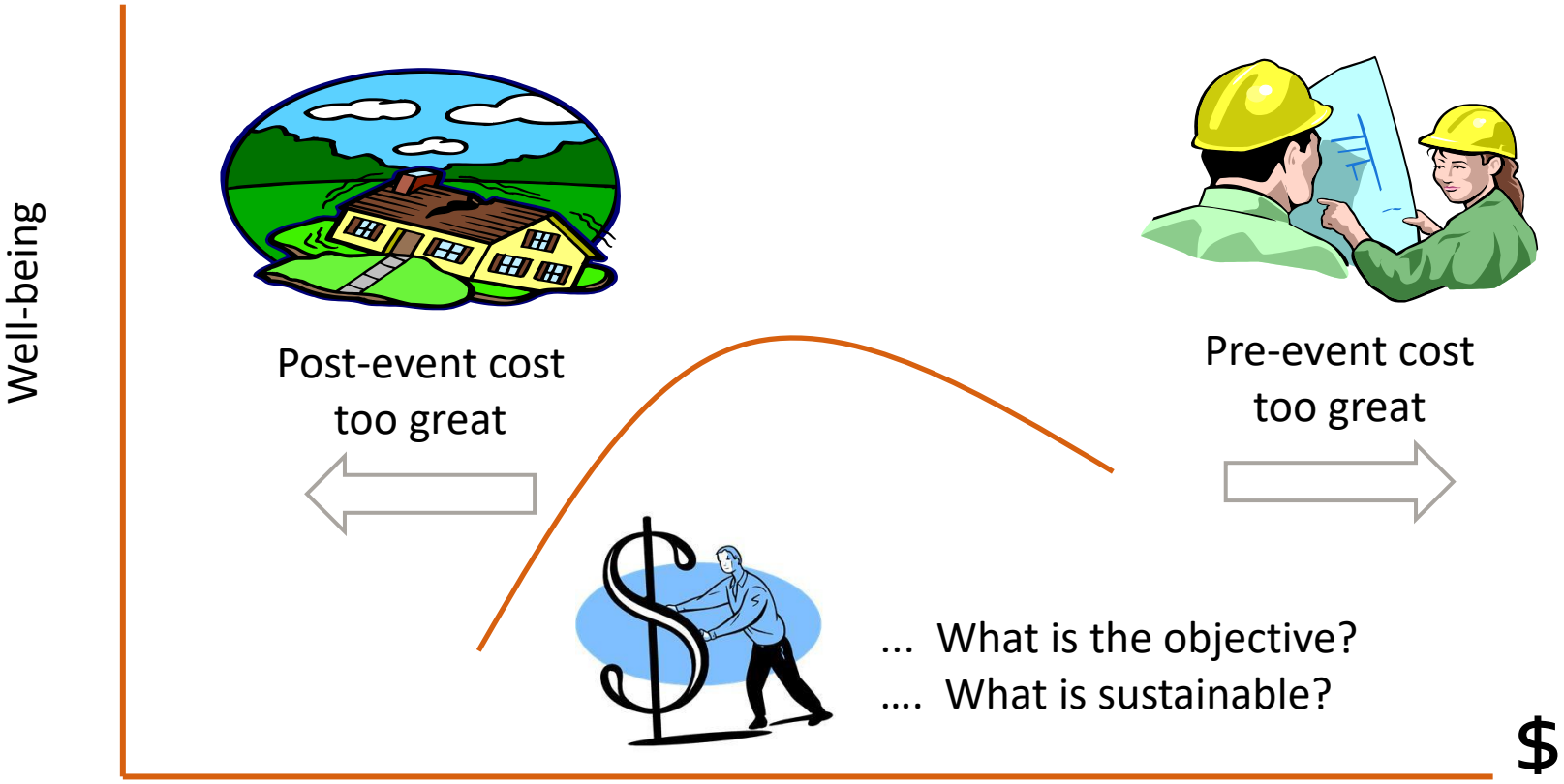
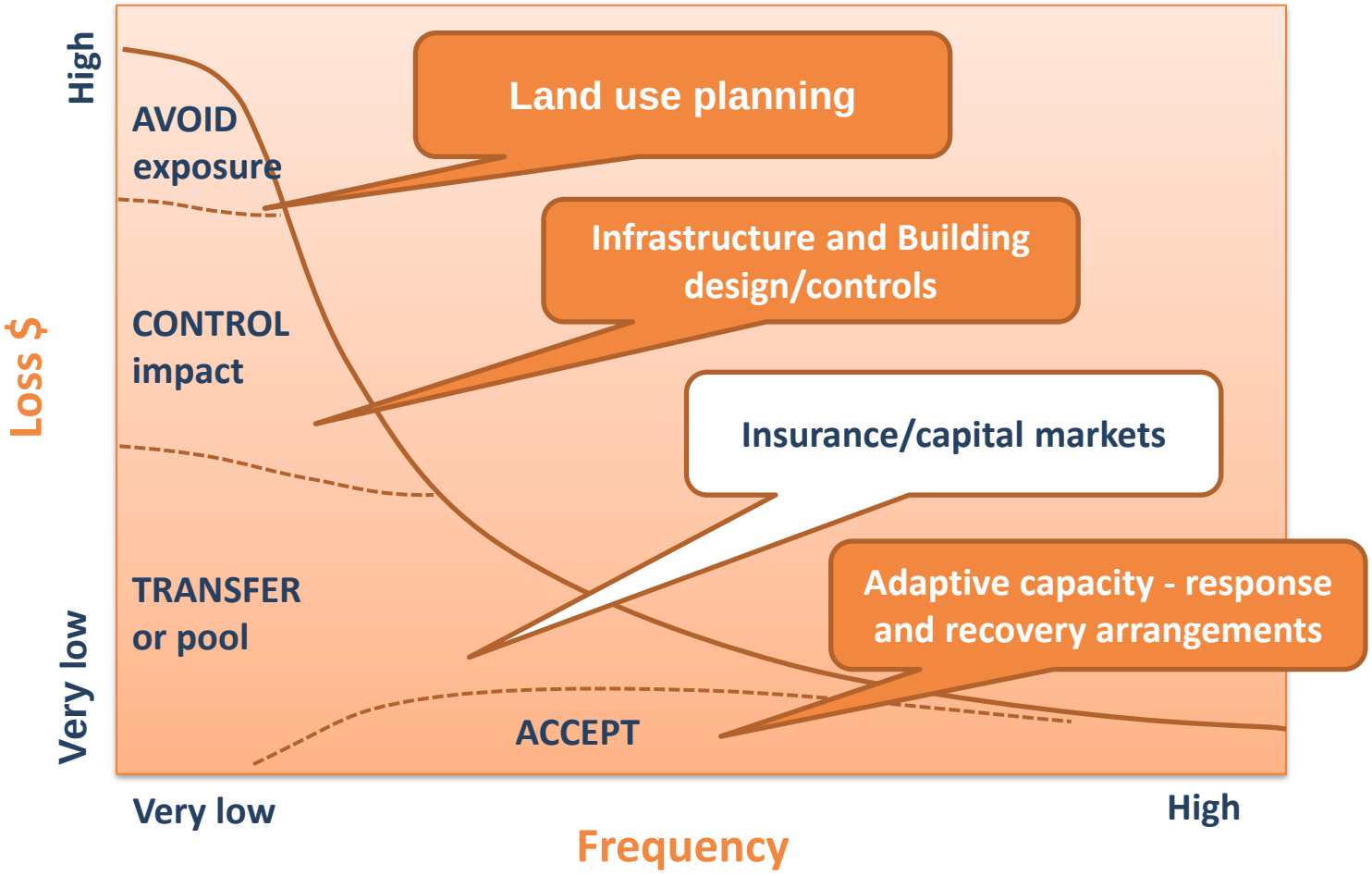


A more holistic view of risk



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Ngā Mihi

Thank You