



2017

Synthesizing and visualizing climate vulnerability assessments data for the Region of Peel

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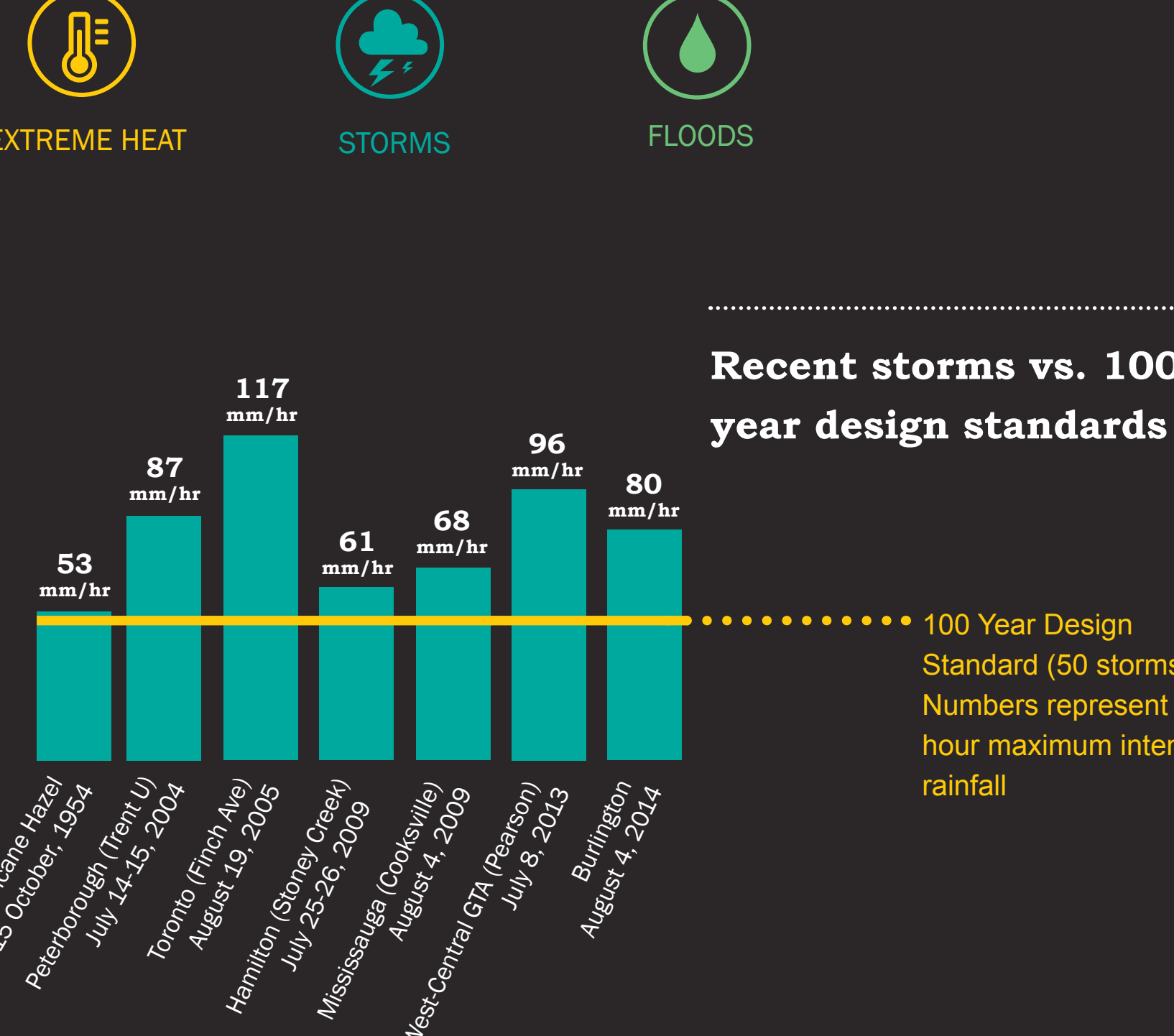
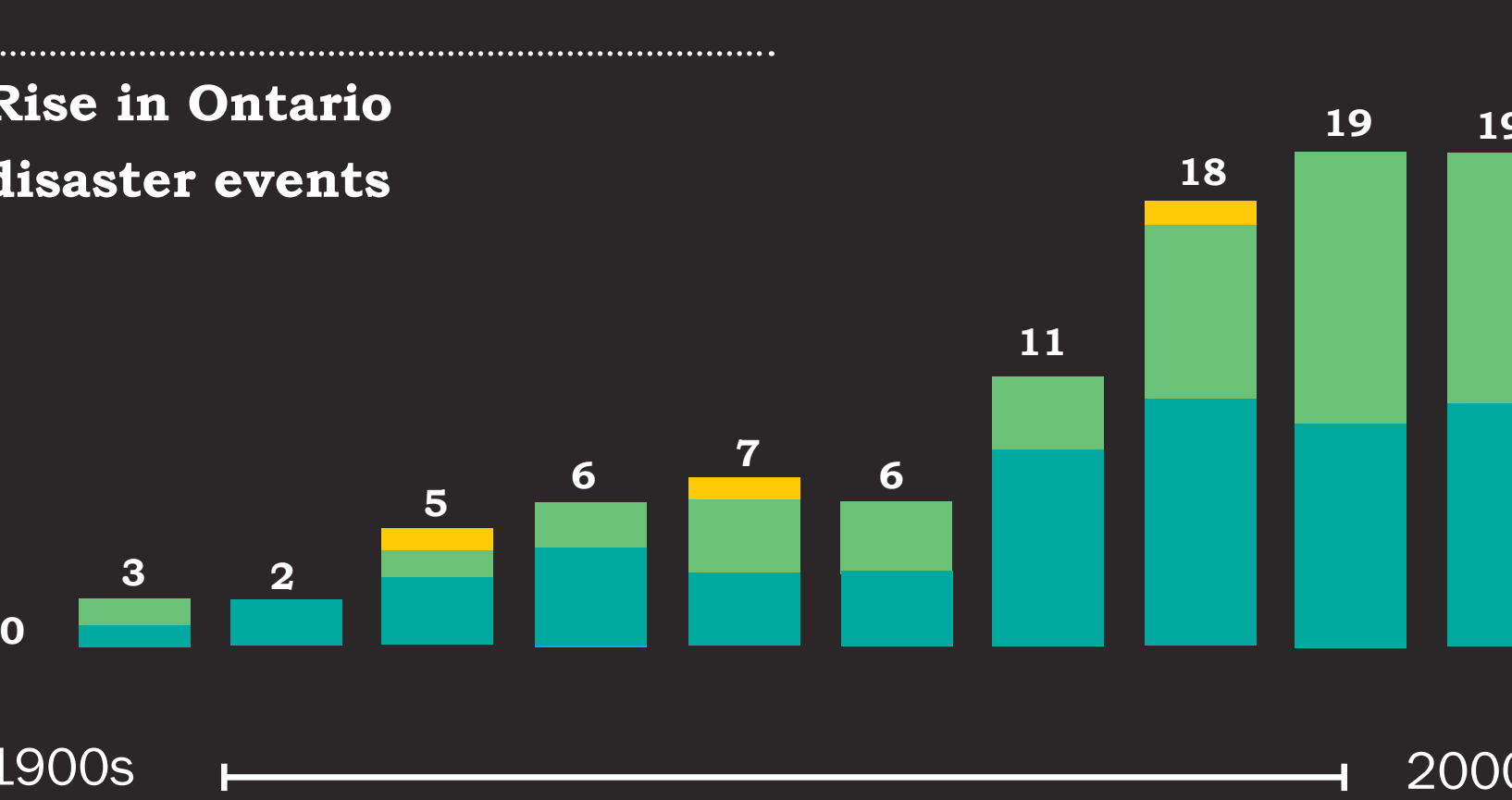
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What's up with the weather?

What it means for citizens

60% Of extreme weather events that happened in Ontario since the beginning of the century occurred since the 1980s.

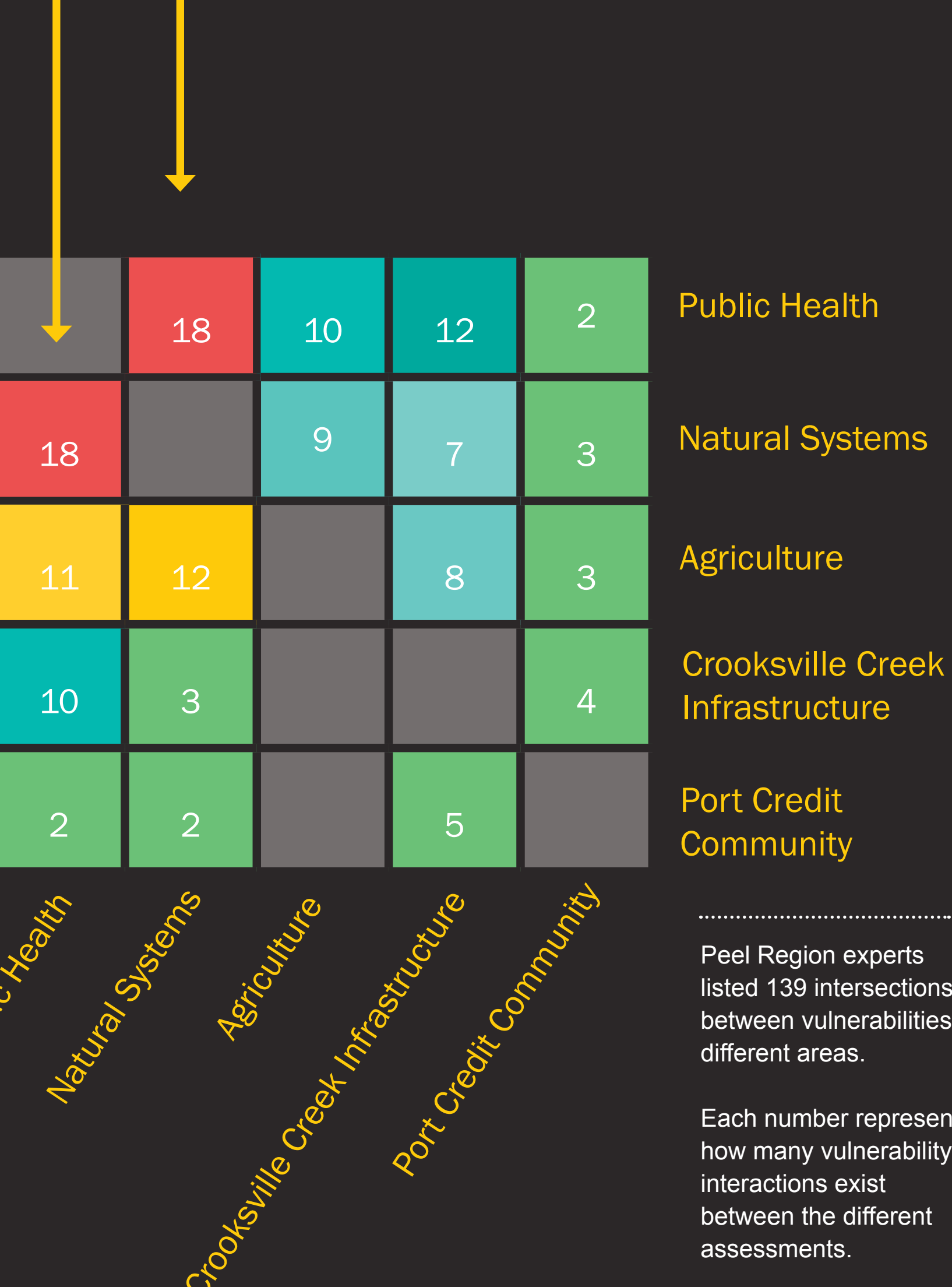


How vulnerable are we?

Looking at the root causes

139 Vulnerability interactions

Highest interaction found between *Natural Systems* and *Public Health*.



Energy

80% Of customers without power in Mississauga

Energy

2,000 Customers without power in and around Orangeville.

Health

10,000 Canadians will be infected annually by 2020

Natural Systems

25,000 Street and park trees lost

Government

\$171 million Spent on ice storm in Toronto

Business

\$850 million In insurance property damage

Agriculture

5,000 Reports of crop damages

Power outage in Mississauga affects thousands for hours

City News, July 8, 2013

Caledon power outages stretch into 6th day

CTV Barrie, December 27, 2013

Doctors concerned, cases of Lyme Disease increase in Ontario

The Weather Network - July 25th, 2015

Brampton's ice storm cost could reach \$51.3 million

Brampton Guardian, Jan 08, 2014

Toronto ice storm cost expected to soar to \$106 million, as extreme weather costs city \$171 million

The National Post, Jan 8, 2014

Toronto's July flood listed as Ontario's most costly natural disaster

The Star, Aug 14, 2013

Crop insurance claims skyrocketing in Ontario

Toronto Sun, 01 Aug 2012

"The water was about up to my stomach in the car and the power just shut off."

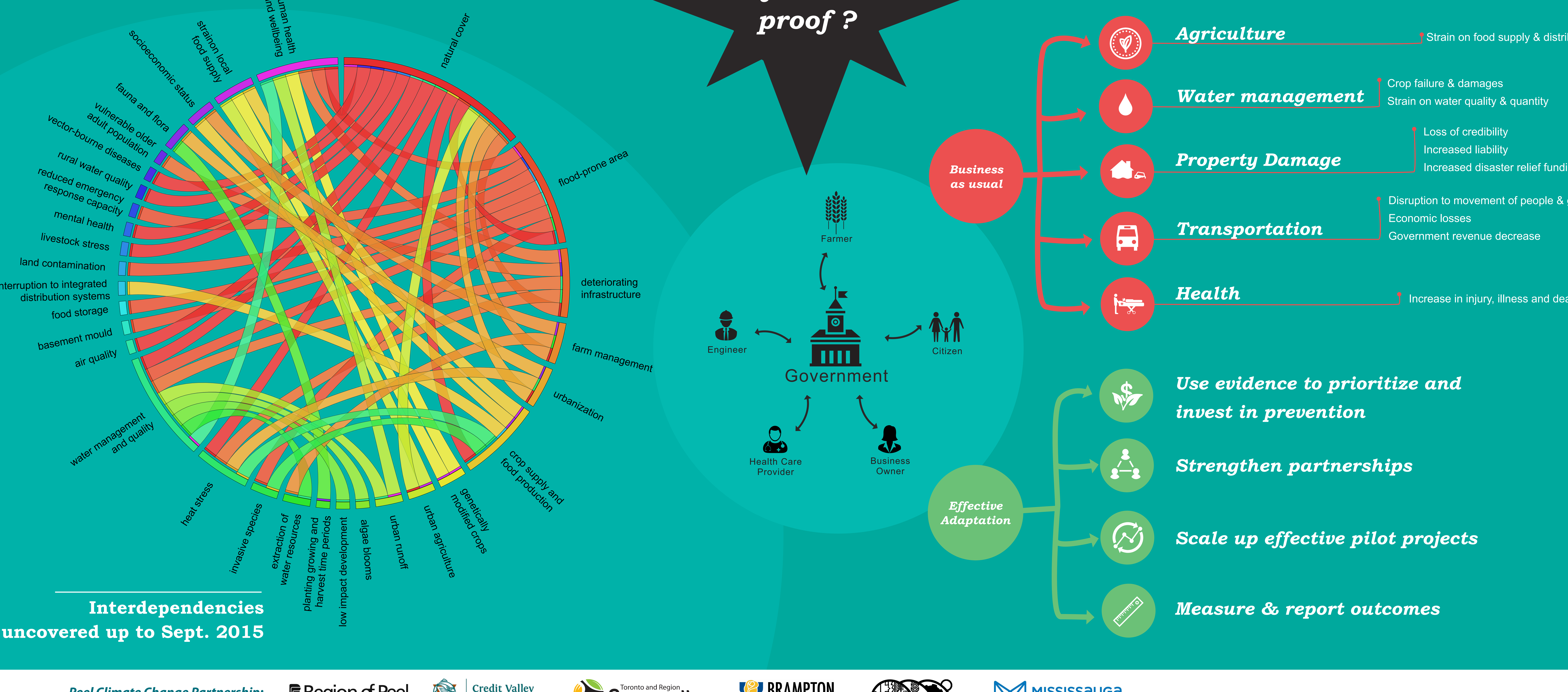
"Huge trees even older than me believe it or not and they have snapped like match sticks and come down."

"The prudent thing now is to plan for the worst and hope for the best."

"And of course I'm more fearful about the next few years. We've had these hundred-year storms almost back to back and we need a partnership amongst all three levels of government."

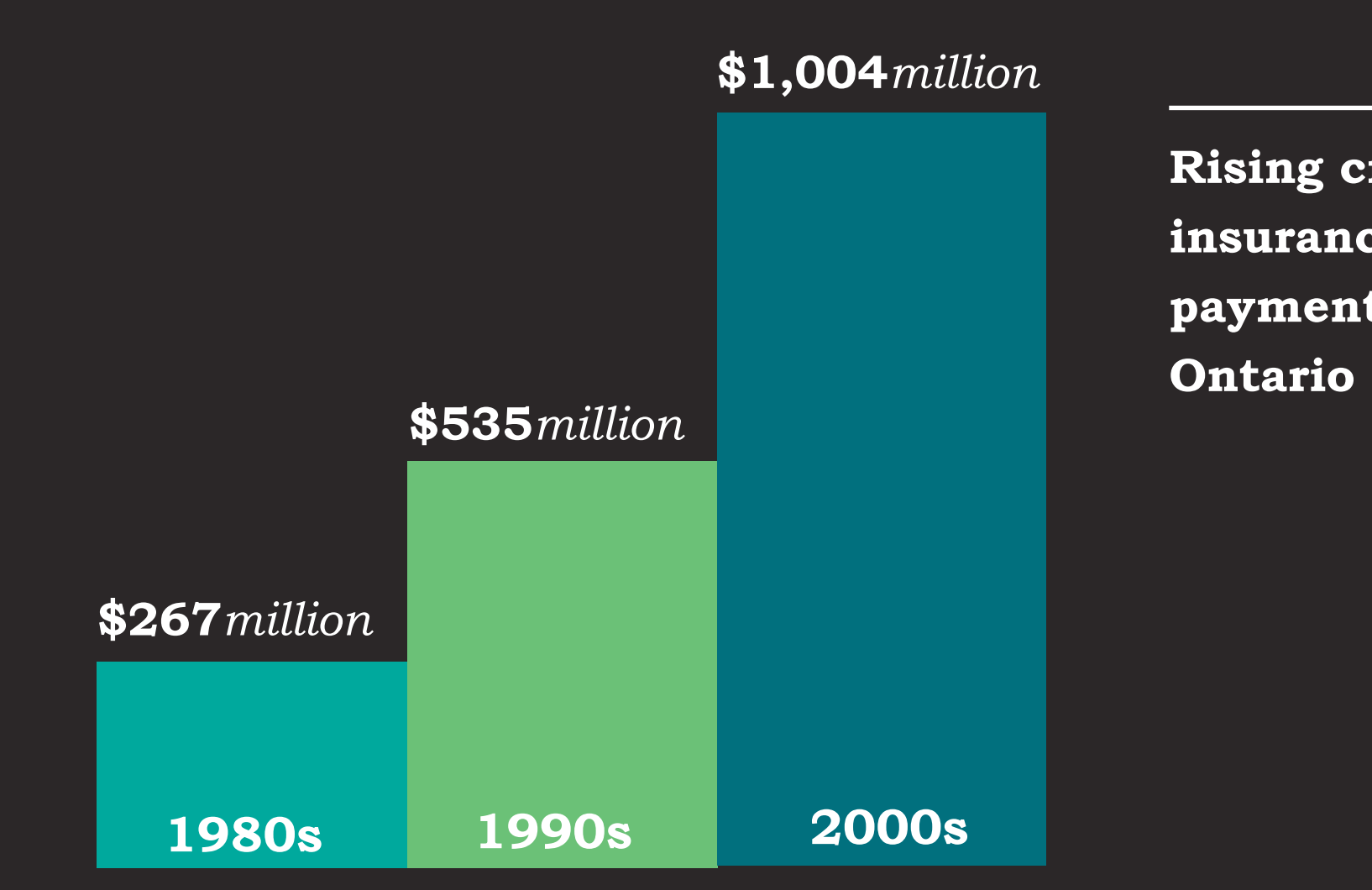
"The cleanup the next day was the really sobering moment. There were a couple of thick inches of mud on our basement floor and a really horrible smell. That's when the reality kicked in."

"Although it's still too early to assess the overall impact to Ontario crops, we know that some crops will not survive."

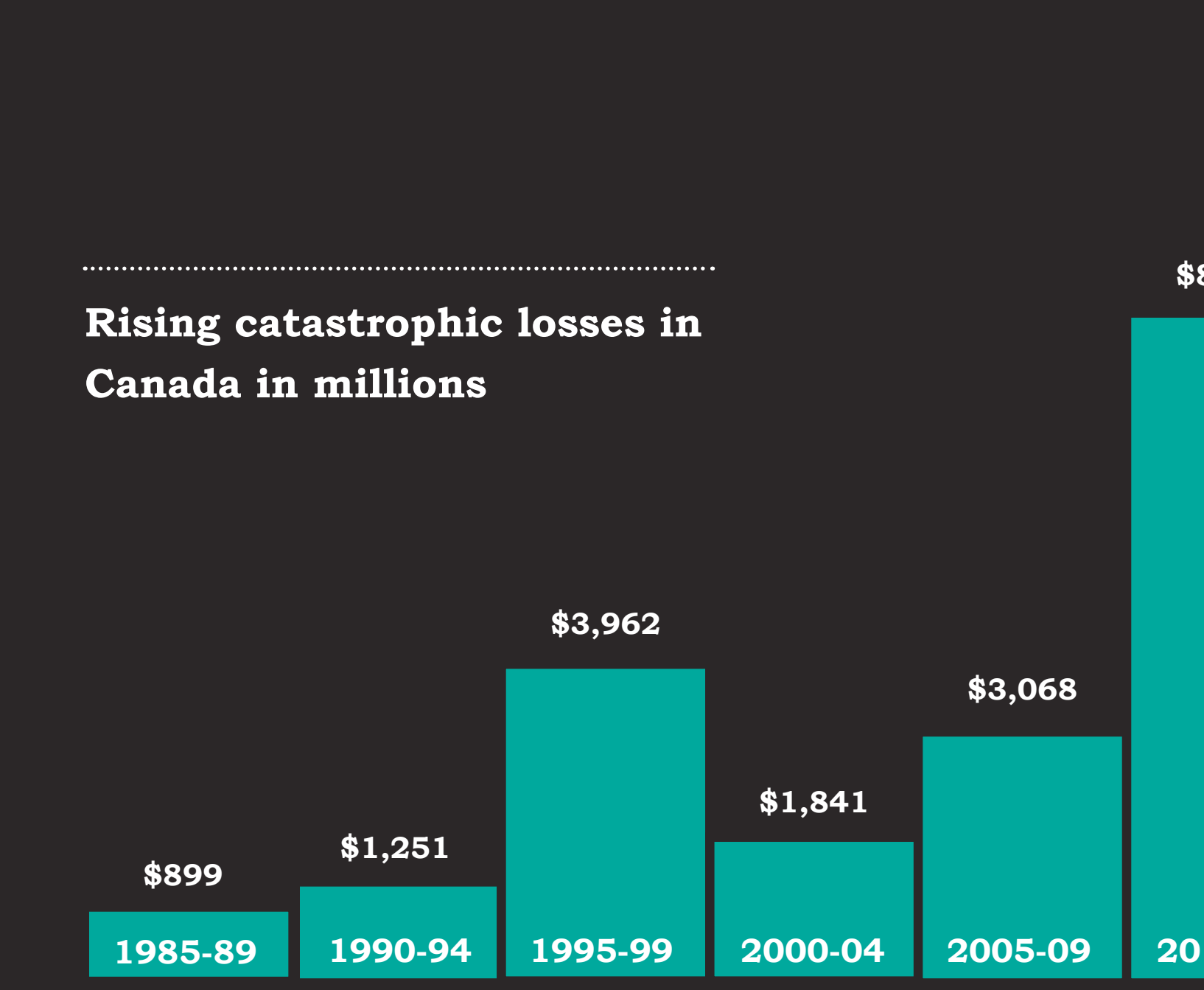


What are the true costs?

The cost of business as usual



50% of catastrophic losses in Canada since 1985, occurred in the last 7 years.



What can we do?

Business as usual is not an option



HAPPENING IN PEEL

- Mississauga Lakeview Neighbourhood**
 - Boulevard Bioretention Solution: Able to completely infiltrate 90 per cent of annual rain events.
 - The LID bioswale shows a load reduction of 89 per cent removal for total suspended solids and 84 per cent removal of total phosphorus.
- Mississauga IMAX Parking Lot**
 - Bioswales and permeable pavers to absorb and slow release rain water and filter out pollutants.
 - Industrial filters to remove pollution before reaching storm water.
 - Cleaner water flowing into Sheridan Creek and our drinking water source, Lake Ontario.
- Brampton County Court Boulevard**
 - Part of the right-of-way repair along a portion of County Court Boulevard.
 - Two vegetated filter swales constructed to receive and treat stormwater runoff from a 1.658 m area.
 - First LID retrofit project that the City of Brampton has undertaken.
- The Caledon Community Green Fund**
 - Awarded 19 Green Fund grants for important environmental work.
 - Recipients leveraged more than \$100,000 in federal, provincial and other relevant external funding.
 - Established a school green fund for all Caledon schools developing programs or projects that will help address climate change.