



ADAPT NOW!

Ian Burton

Adapting to Climate Change in Toronto

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Why “Adaptation?”

- United Nations Framework Convention on Climate Change – 1995
 - Mitigation AND Adaptation (not OR)
 - All countries need to adapt
 - Assistance to developing countries
 - Development of adaptation strategies, policies and measures
 - What is “adaptation science”?
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Definition

- “Adaptation refers to the adjustments in ecological, social, or economic systems in response to actual or expected climate stimuli, their effects or impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.”

IPCC 1996

Adaptation

- Reduces vulnerability, losses
 - Strengthens resilience, adaptive capacity
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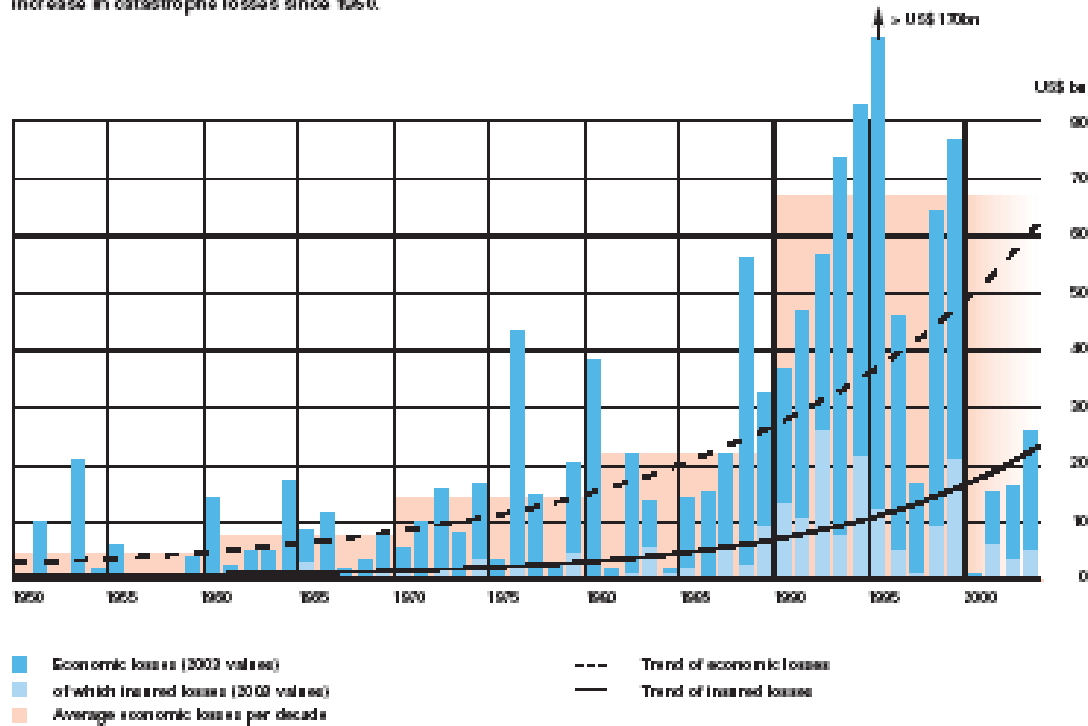
Importance of Adaptation

- Mitigation is economically, technically, and politically difficult
 - Mitigation will take time
 - Impacts are increasing and will continue to grow
 - Adaptation planning is essential. Better to plan and implement in timely fashion than to wait and react in haste
 - Adaptation deficit
 - A little theory!
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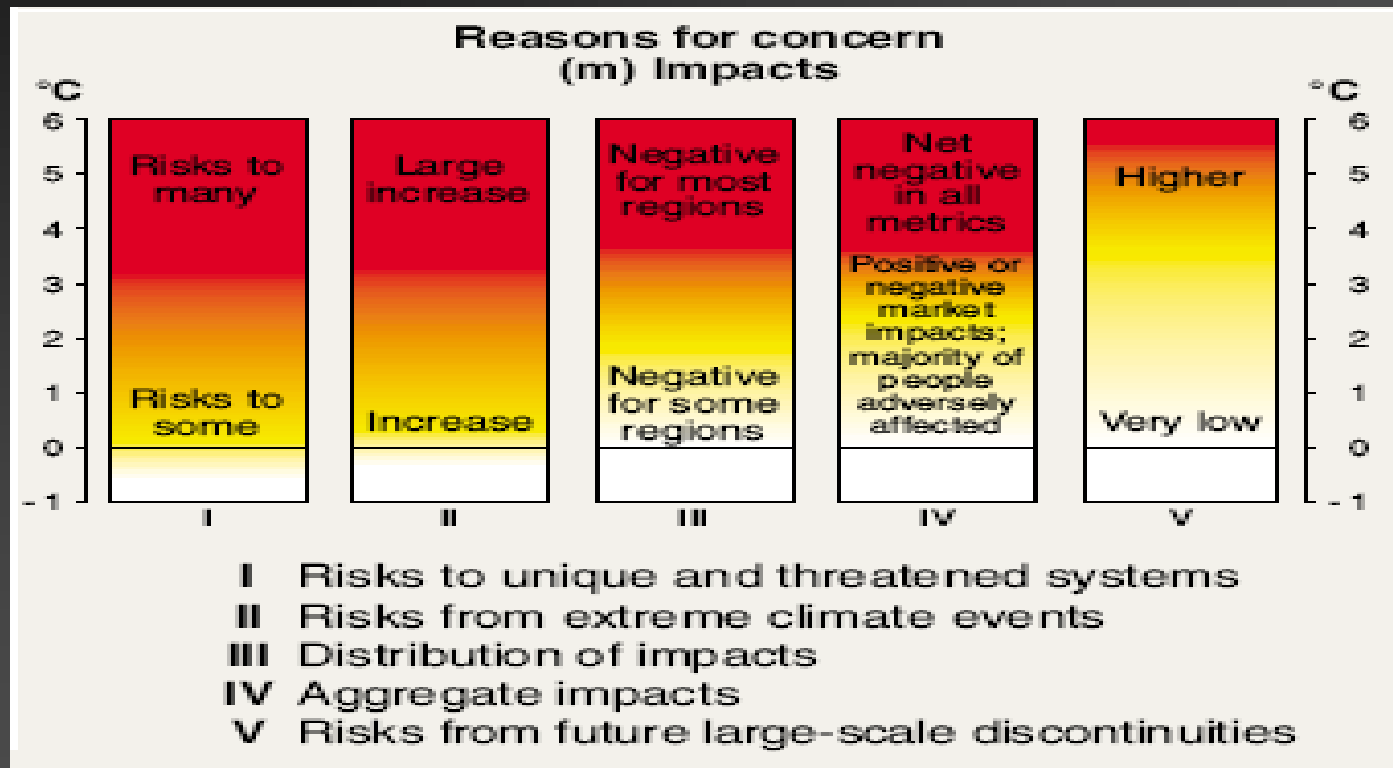
Adaptation Deficit

Economic and insured losses with trends

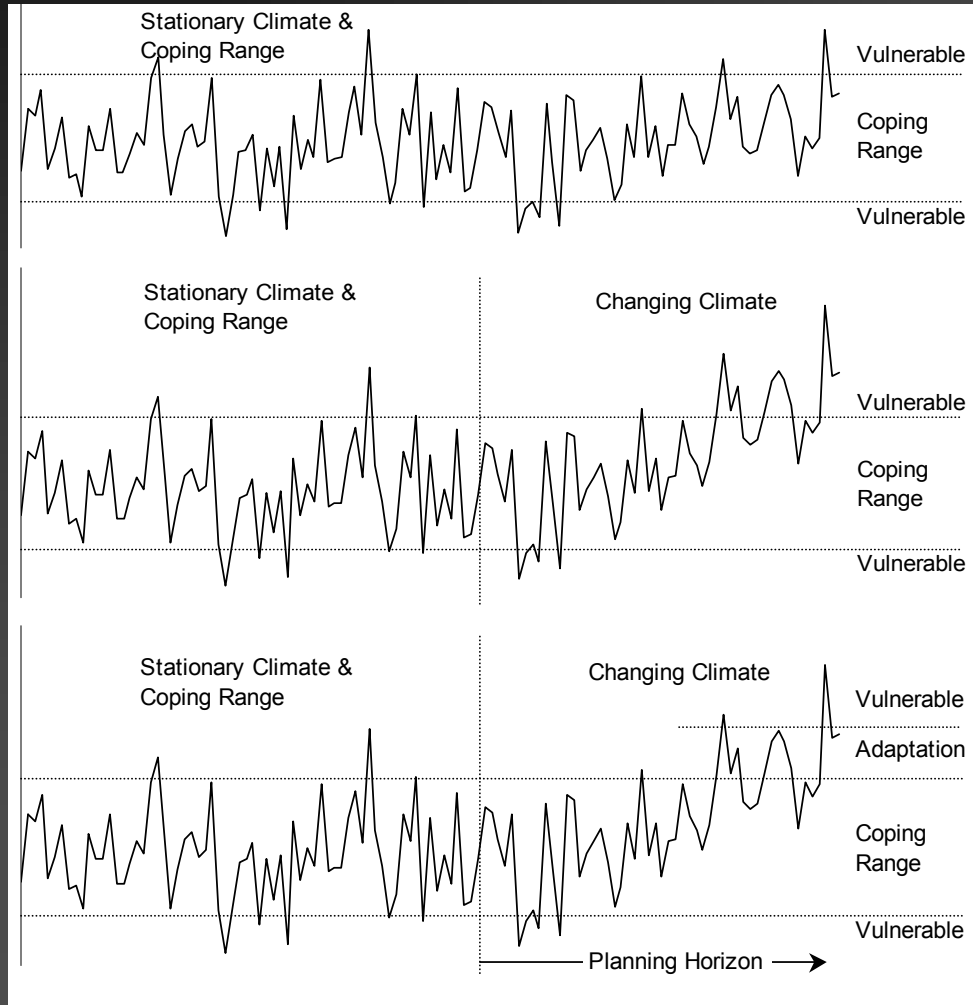
The chart presents the economic losses and insured losses – adjusted to present values. The trend curves verify the increase in catastrophe losses since 1950.



Reasons for Concern



The Coping Range



Everyone's Business

- Public, private
 - Local, national, global
 - Ecosystem conservation, species at risk
 - Infrastructure standards and design
 - Human health (heat, floods, droughts, infectious and vector borne diseases)
 - Agriculture, forests, water
 - Coastal zones
 - Insurance, finance, markets
 - Much more
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A BIG DANGER!

- Everybody's business is nobody's business
 - How to engage the community, the policy process, the private sector, the stakeholders?
 - The fox and the hedgehog: many little things and the one big thing
 - Many clever adaptations, and a culture shift
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Adaptation not new

- Engineers and architects – building codes and standards
 - Agronomists – agricultural productivity (soils, water, crops, pests)
 - Public health – surveillance, disease control
 - Engineers and planners – flood and storm damage control
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What IS new?

- Climate is no longer stationary
 - Not moving from one climate regime (30 years normals) to another, but now a process of continuous change with no end in sight
 - Adaptation is not a “fix it once and for all” game, but is an ongoing process of adjustment
 - Importance of time horizon
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Adaptive Capacity Requires

- \$\$\$\$ (but not necessarily all that much)
 - Institutions and organisational skills
 - Leadership – political, community, BINGO, ENGO
 - Skills, and trained human resources
 - Stakeholder awareness
 - Bottom up and top down
 - Local, national and global
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What do we need?

- ***ADAPTATION!***
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When do we need it?

- ***NOW!***
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Who will do it?

- ***WE WILL!***

Thank you!
