

INTEGRATED URBAN PLANNING FOR NATURAL HAZARD MITIGATION

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Increased Challenges on Human Settlements due to Extreme Events

Context of Complex Interactive Systems Cascading Events and Settlement Change

- Increased Density of Building and People
- Rapid Population Growth without scenario testing
- Reliance on Electrical / Mechanised Systems
- Focus on Coasts and Rivers
- Legacy Building and Settlement Patterns
- Sprawl and Poor Design in Wildfire Prone Areas
- Loss of Natural Cooling eg Trees and Green Space
- Increased Social Isolation and Disconnection

Direct Interactions with the Built Environment & Complex Event Scenarios Possible

- Heatwave
- Storm Surge and Erosion
- Bushfire
- Overland Flow and Flood
- Storms and Loss of Power



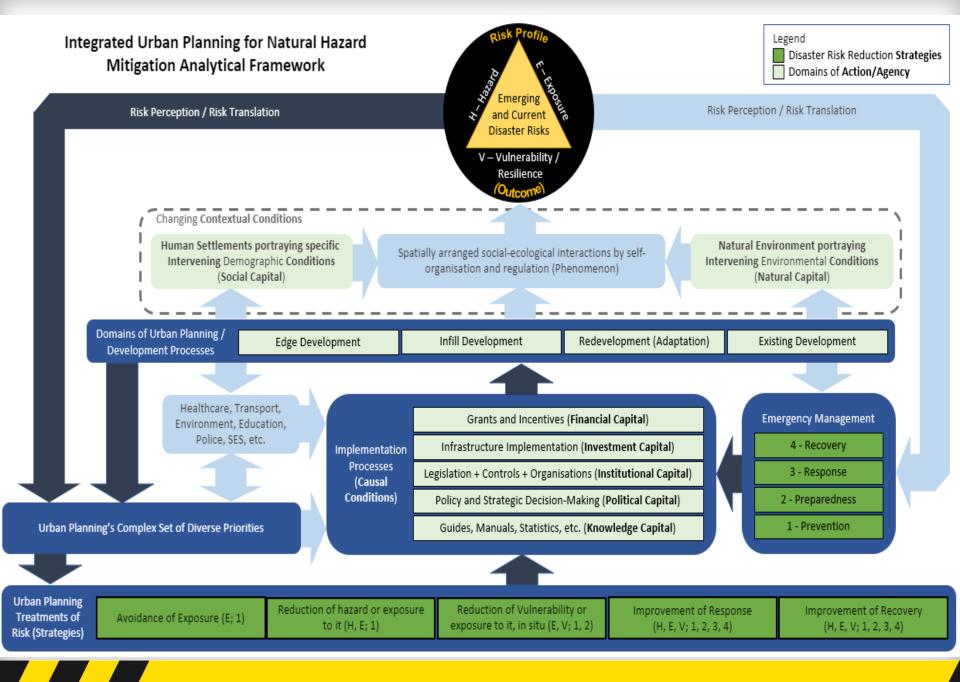
Melbourne Dust Storm 1983



Issues and Opportunities: Short Term and Long Term Decisions

- 1. Integration of planning and risk assessment processes
- 2. The need for shared forums at appropriate levels and sequencing improvements
- 3. Use of a wider range of planning tools.
- 4. Planning actions across the whole range of PRR / PPRR.
- 5. Terminology inconsistency
- 6. Major and fast track "extraordinary" processes?
- 7. Uncoordinated funding allocation for projects
- 8. Long term risk assessment and strategic forward planning
- 9. A need for ideals and **best practice approaches** in urban planning acknowledging risk
- 10. Uncertainty regarding municipalities' role
- 11. Lack of attention to equity and diverse social capabilities
- **12.** Exclusion of transport and infrastructure
- 13. Political and ministerial executive control of urban planning
- 14. "Ignored" hazards : heatwave, landslip, storm, storm surge, food security and extreme events, and environmental crisis.
- 15. Higher **density** and high rise settlements
- 16. Legacy risks
- 17. Improved education





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