Disaster Risk in New Zealand
Cyclone/Extreme Weather Risks
National Risk: Sea Level Rise

- Assessment of all NZ communities exposure to future sea level rise scenarios

- Provides a ‘starting point’ for local government in New Zealand to engage with communities on this challenging issue

- Better direction and guidance is needed in three broad areas:
  - Scientific assessment of the impact of a rising sea on coastal hazards
  - The process of engaging with the community
  - The planning and management decisions that follow.
Auckland, New Zealand

- New Zealand Population: 4.6 Million
- Auckland City: 1.5 Million
Auckland, New Zealand
Case Study: Managing Auckland’s Coastal Inundation Risk
Case Study: Managing Auckland’s Coastal Inundation Risk

Storm Surge: High Tide + Pressure + Wave Effects

High Tide + Pressure Effects

High Tide
Orewa, North Auckland
1:5 Year Event
1,238
Orewa, North Auckland
1:100 Year Event + 1m SLR
5,844
Regulations for New or Existing Buildings

- For new dwellings & substantial modifications, additions or extensions. Finished floor must be above 1:100 year event + 1m sea level rise.

- **Avoid** subdivision and development in greenfield areas for a 1:100 year event + 2m sea level rise.
Regulations for New Infrastructure

- Allow construction of infrastructure in the 1:100 +2m sea level rise only where:
  - cannot be practically located elsewhere
  - does not increase inundation risk
  - designed to withstand 1:100 year events

- Auckland Infrastructure Agencies use maps and data to inform future infrastructure planning.
Applying New Zealand’s DRM Lessons: Building Capacity Internationally

- **Strengthened Indonesian Resilience: Reducing Risk from Disasters (StIRRRD) [www.stirrrd.org.nz](http://www.stirrrd.org.nz)**
  - Local government disaster risk reduction action and implementation plans
  - Local DRR regulations and cross-sectoral co-ordination
  - Connecting local government with local universities for research and support
  - Empowering women in DRR

- **Pacific Risk Tool for Resilience (PARTneR)**
  - Hazards impacts and modelling for the Pacific
  - Integrated disaster risk data management
  - Sustainable and targeted training
Thank You
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