

Planning with uncertainty: Sea level rise

16 February 2011



Chris Cameron
Wellington City Council

Climate Change Impacts

- Government guidance material
- Responding with high uncertainty
- Precautionary principle
- Lacking a national adaptation framework
(eg identification of key infrastructure)
- Local responses are important
- Sea level rise – a natural hazard?



Sea level rise

- More GHG emissions > SLR
- MfE advice and uncertainty
- Risk management approach using scenarios
- Wellington: Kilbirnie work
- Consideration of potential social / cultural impacts
- Process for awareness raising and community participation



Kilbirnie pilot study

Key Findings:

- Degradation of the level of service from the storm-water system
- Rising ground-water levels
- Need to evaluate impacts and prioritise response options across the city
- Need for early decision-making for response planning
- Interactions and interdependency between assets



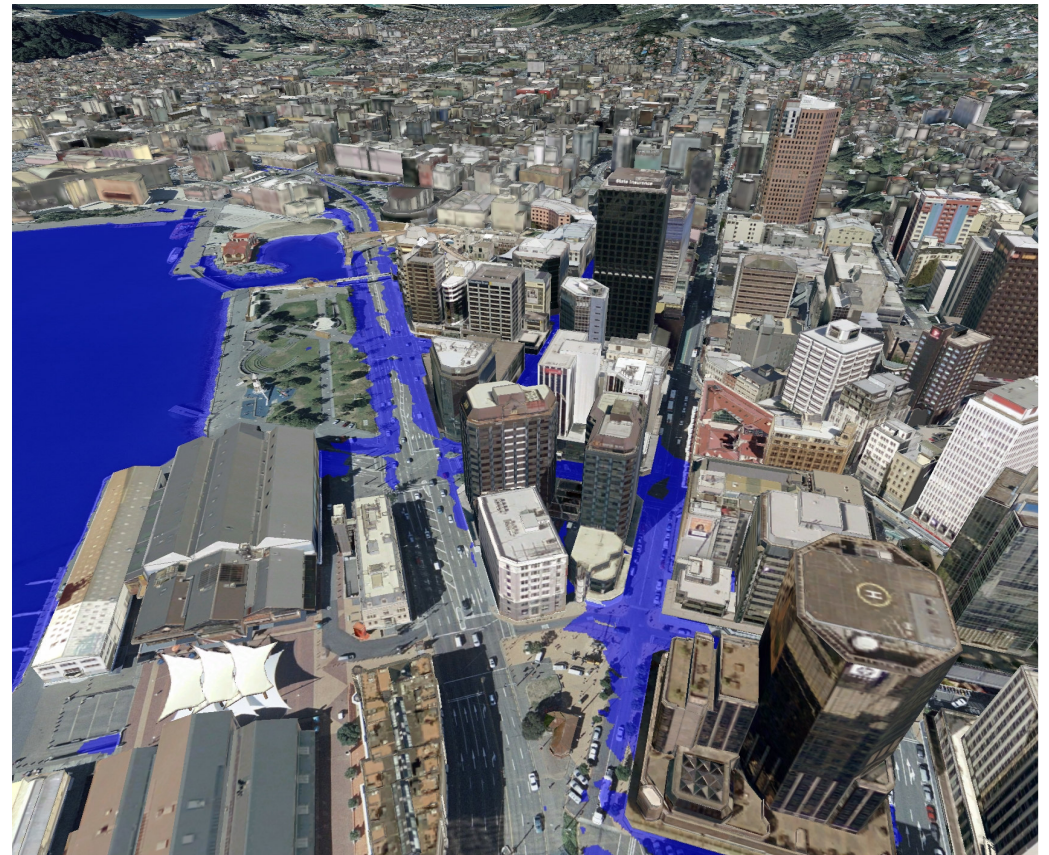
An Adaptation Framework

Evaluates an area based on:

- Value of land (incl social, environmental, cultural, economic)
- Infrastructure “ease of relocation”
- Threshold levels for decision making
- Protection, accomodation or abandonment
- Design considerations
- Cost of response
- Ongoing: control of activities / monitoring

Key issues

- Not an urgent response, **BUT** starting early allows for best outcome
- Central government, regional and local government all play a part
- Crucial to inform and involve the community
- Guidance needed on how to assess and respond to climate change impacts



Discussion

