

## Appendix M – Natural Hazards Risk Reduction Measures

The most appropriate solution to avoid or reduce natural hazard risk will likely be specific to the natural hazard and to the locality in which it occurs. However, there are various options available. The following list is not exclusive and included here for information purposes only.

- (a) Ensuring new subdivision and development avoids specific hazard locations;
- (b) Replacement or modification of existing development over time to reduce potential consequences.
- (b1) Promoting the use of natural defences against coastal hazards and discouraging hard protection structures;
- (c) Providing only for low intensity activities in specific locations;
- (d) Setbacks and undeveloped buffer land within areas of new subdivision and development;
- (e) Use of relocatable or recoverable structures;
- (f) Restoration, retention or enhancement of natural defences against natural hazards (e.g. dunes and wetlands) as part of development proposals and promotion of the sustainable functioning of such natural defences to reduce the risk to existing development;
- (g) Property-specific works (e.g. debris nets and slope stability works) as part of development proposals (excepting that community scale hard protection structures should be avoided in the coastal environment);
- (h) Smart urban and building design (e.g. heights of building platforms, retention or reinstatement of stormwater overland flow paths, hazard resilient buildings and construction materials); and
- (i) Ensuring new development anticipates possible hazard event emergencies and provides means to enable effective responses by people and communities including requiring:
  - (i) Hazard warning systems; and/or
  - (ii) Urban form and transport infrastructure (including for motor vehicles, cycles and pedestrians) that enables rapid and efficient evacuation; and/or
  - (iii) Provision for, and safeguarding of, safe and accessible evacuation routes and zones (including, where appropriate, vertical evacuation zones).



