

Figure 9: Example of interdependent planning assumptions

Linked and Compound Risks

For reasons of practicality, the NRA largely focuses on single events. However, it is important for planners to take into account the risk of multiple events occurring which may stretch existing resources or otherwise affect their response. In recognition of this, consideration is given to linked and compound risks in this iteration of the NRA. This in turn should inform discussions on capability building and help address any potential gaps.

- **Linked** risks are simultaneous or near simultaneous risks that share a cause or are caused by another e.g. Drought, heatwave and wildfires.
- **Compound** risks occur independently (they do not share a cause) but combine to provide a greater overall impact e.g. volcanic eruption in the Philippines which coincided with a tropical storm causing the ash to be heavier that in turn led to the collapse of buildings. If it was a dry day the impacts would have been much less severe. Compound risks are also highlighted where they would require the same limited response resources (e.g. decontamination equipment).

Longer term impacts

The NRA review found that in previous years, assessments had insufficiently captured impacts that might be seen many years after an event. Whilst a risk's overall impact score continues to be assessed only on the basis of impacts likely to be felt 'immediately,' the NRA now captures some information about longer term impacts that may arise in some instances, such as higher incidences of cancer. This demonstrates where longer term planning may need to take place.

Risk ranges

The reasonable worst case for each risk represents just one potential manifestation of that risk and is generally only identified by risk owners after considering a large range of potential alternative scenarios. In recognition of this and in order to provide further information to planners about variations in how a risk may manifest, the NRA now contains 'risk ranges.' Ranges set out relatively more impactful but less likely/plausible scenarios (upper ranges) and more likely/plausible but less impactful scenarios (lower

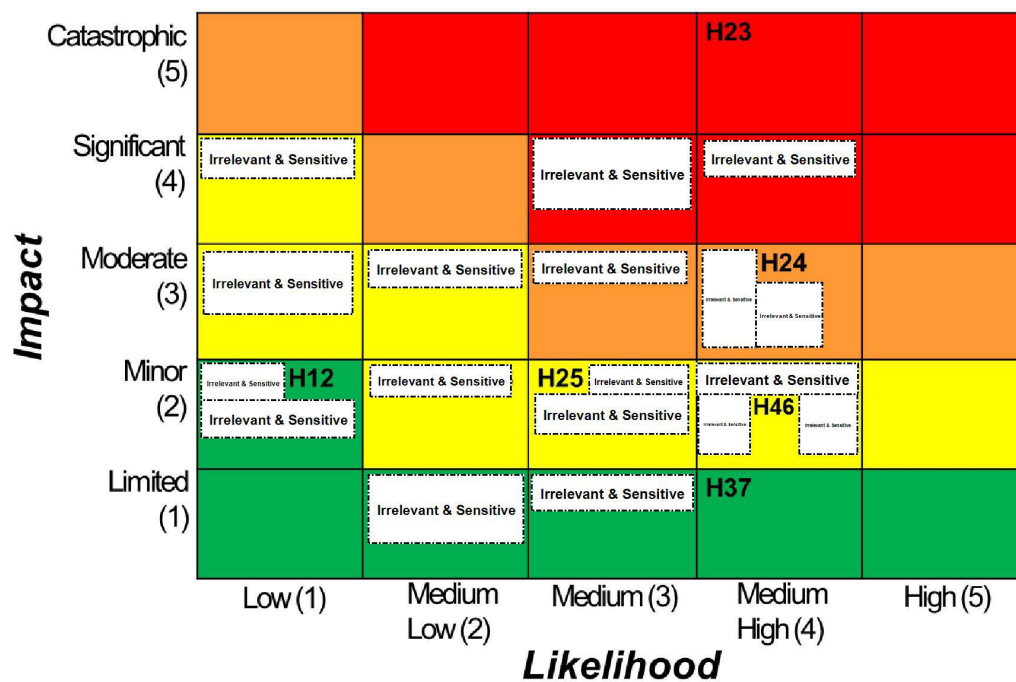
Hazards

Figure 10: 2016 Risk Matrix (Hazards)

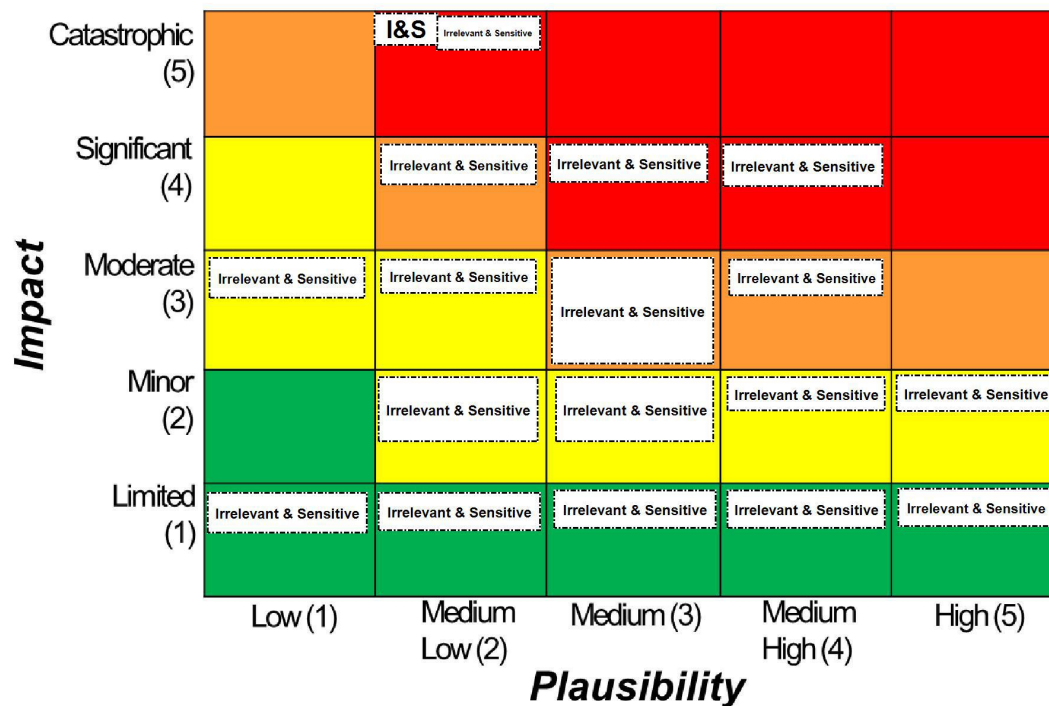
Threats

Figure 11: 2016 Risk Matrix (Threats)

Please note that the position of threat composite risks may be on the border between boxes. For the position of all threat risks, including those which comprise threat composites, please see *Detailed Risk Assessments*, Part II.