

Coastal hazard risk assessment

Overview

Coastal hazards, both now and in the future have the potential to have adverse impacts on Bundaberg Region communities, assets, buildings and the services that keep our settlements functioning. The risk assessment component of the Coastal Hazard Adaptation Strategy helps us to understand the level of risk over a range of sea level scenarios. It also helps us identify settlements subject to intolerable risks and prioritise a broad range of adaptation options to reduce these risks to acceptable levels.

Understanding risk

1. Identify assets exposed to coastal hazards
2. Prioritisation of key assets
3. Risk assessment
4. Risk Analysis and evaluation
5. Identify series of triggers where potential risk becomes intolerable

Rating of a given risk: Risk = Consequence x Likelihood

Low	Medium	High	Extreme
Acceptable	Tolerable		Intolerable

Example



Consequence

e.g. communities may become isolated as roads become permanently inundated



Likelihood

e.g. a 1-in-100 year storm event can trigger coastal erosion and permanent sea water inundation. This is likely to occur within our lifetime.



Finding the risk rating

Using the rating for consequence and likelihood, find the risk rating from the risk matrix:

Consequence	Major	Medium	High	Extreme
	Moderate	Low	Medium	High
	Minor	Low	Low	Medium
		Unlikely	Possible	Likely
		Likelihood		

The distribution of exposure, vulnerability and risk across the Bundaberg region has shown that the impacts of coastal hazard affect the settlements in each locality in differing ways.

More information on coastal adaptation can be found at coastadapt.com.au or qcoast2100.com.au