

## Comparing risks to the GBR ecosystem over three Outlook Reports (2009, 2014 and 2019)

(the order within this table is based on the level of risk in 2019)

Influenc. factor(s)	Threats ++	Level of risk assessed in the three 5-yearly Outlook Reports			Derived trend **
		2009	2014	2019	
	Sea-temperature increase	Almost certain Catastrophic	Almost certain Catastrophic	Almost certain Catastrophic	↑
	Ocean acidification	Almost certain Catastrophic	Almost certain Catastrophic	Almost certain Catastrophic	↗
	Sea-level rise	Likely Catastrophic	Almost certain Major	Almost certain Major	↗
	Nutrient run-off	Almost certain Major	Almost certain Major	Almost certain Major	—
	Sediment run-off	Almost certain Moderate	Almost certain Major	Almost certain Major	↗
	Modifying coastal habitats	Almost certain Moderate	Almost certain Major	Almost certain Major	↗
	Illegal fishing and poaching	Almost certain Moderate	Almost certain Major	Almost certain Major	↗
	Incidental catch of species of conservation concern	Likely Major	Almost certain Major	Almost certain Major	—
	Outbreaks of crown-of-thorns starfish	Possible Major	Almost certain Major	Almost certain Major	—
	Altered weather patterns	Possible Moderate	Almost certain Major	Almost certain Major	↗
	Pesticide run-off	Almost certain Major	Almost certain Moderate	Almost certain Moderate	—
	Extraction of predators	Almost certain Major	Almost certain Moderate	Almost certain Moderate	—
	Discarded catch	Almost certain Moderate	Almost certain Moderate	Almost certain Moderate	—
	Marine debris	Likely Moderate	Almost certain Moderate	Almost certain Moderate	↑
	Barriers to flow	Almost certain Minor	Almost certain Moderate	Almost certain Moderate	—
	Damage to reef structure	Almost certain Minor	Almost certain Minor	Almost certain Moderate	↗
	Extraction of particle feeders	Almost certain Minor	Almost certain Minor	Almost certain Moderate	↗
	Altered ocean currents	Unlikely Major	Unlikely Major	Almost certain Moderate	↗
	Artificial light	Not assessed	Likely Minor	Almost certain Moderate	↗
MANY	Outbreak of disease	Possible Minor	Likely Moderate	Likely Major	↑
	Extraction from spawning aggregations	Likely Moderate	Likely Moderate	Likely Moderate	—

++ Note, not all threats are shown; only the **Very High** or **High** risks for the ecosystem in 2019

### Legend:

#### Influencing factor(s)

	Climate change
	Land-based runoff
	Coastal development
	Direct use

These four influencing factors are copied directly from the GBRMPA 2019 Outlook Report

#### Overall level of risk

	Very High
	High
	Medium
	Low

Risk is based on two measures:

- **Likelihood:** *Almost certain; Likely; Possible; Unlikely; Rare*
- **Consequence:** *Catastrophic, Major; Moderate; Minor; Insignificant*

#### Derived trend \*\*

↑	Evidence indicates increasing trend of particular concern
↗	Evidence of increasing trend
—	No clear evidence of a trend

\*\* The Derived trend as shown is not from the 2019 Outlook Report; however, it has been derived by the authors based on information provided in the Outlook Report or from other published research