

FACT SHEET - CLIMATE VARIABILITY 1 of 1

An overview of potential climate change effects and their impacts on coastal communities.

POTENTIAL EFFECTS	POTENTIAL IMPACTS
Sea-level rise	Loss of beaches
Coastal erosion	Loss of Crown land
	Migration of sand dunes
	Infrastructure threat or damage
	Adverse impact on lifestyle or amenity values
	Loss of habitat and biodiversity loss
	Declining tourism values (especially iconic beaches such as Bells Beach)
Frequent storm events	Rising water tables close to the coast
	Loss of or threat to private property
	Insurance issues
	Damage to infrastructure (e.g. energy, water, roads, buildings, telecommunications, coastal ports, jetties, seawalls and access)
More intense storm events	Damage to marine and shoreline ecosystems from storm water and agricultural run-off
Decreased rainfall	Water shortages (during drought) and contamination (storm events, inundation, flooding, ground water salination or contamination)
Flooding and inundation	Agricultural industry impacts - sudden weather events and long-term events (e.g. drought)
	Tourism impacts (e.g. damage to tourism infrastructure, visitor perception of risk)
	Recreation impacts
	Public safety and evacuation capacity
	Capacity of emergency services - volunteers, infrastructure (i.e. hospitals, shelters, supplies)

Warming sea temperatures	Threats to marine biodiversity (e.g. mangroves, saltmarshes, sea grass)
Ocean acidification	Damage to estuaries - biodiversity, tourism and economic values
	Threat to fisheries and recreational fishing
	Threats to port functions
Increased temperatures	Damage to reefs
	Increased bushfire frequency and intensity
Increased humidity	Public health, especially aged community
	Disease vectors (insects)
	Food spoilage
	Capacity of health services
	Economic impacts of disease
	Rural industry readjustments
	Peak energy demand increases

Source: *Planning for climate change, National Sea Change Taskforce, 2008* (IPCC 2007a, Henessy et al. 2007, Voice et al. 2007)

