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Current information provision rarely helps coastal households adapt to climate change

Supplementary Material

Section 1: Case study area profile

Table S1. Socio-demographic characteristics, City of Mandurah

	City of Mandurah	Western Australia
Land area	174 sq. km.	
Number of households (2016)	40,766	
Population (2016)	80,813	
Distance from major city centre	Approx. 70 km	
Single parent households (%)	16.1	14.5
Renting (%)	27.1	28.3
Single person households (%)	25.6	23.6
Household income <\$650/wk (%)	25.2	18.3
Household income >\$3,000/wk (%)	12.5	19.2
Median weekly household income (\$)	1162	1595
Household size (average)	2.4	2.6
Unemployment rate (%)	10.9	6.9

Source: Australian Bureau of Statistics, 2016



Plate S1: City of Mandurah estuary, coast and town. Photo credit: <http://www.mandjar.com/> Source: Elrick-Barr (2016).

Table S2. Socio-demographic characteristics, Moreton Bay Coastal Region

	Moreton Bay Coastal Region	Queensland
Land area	432 sq. km.	
Number of households (2016)	53,883	
Population (2016)	148,408	
Distance from major city centre	Approx. 30 km	
Single parent households (2016)%	18.6	16.5
Renting (2016) (%)	37.1	34.2
Single person households (2016) (%)	24.2	23.5
Household income <\$650/wk (2016) (%)	9.4	9.4
Household income >\$3,000/wk (2016) (%)	11.9	15.3
Median weekly household income	\$1,494	

Source: Queensland Government Statistics Office (2021)

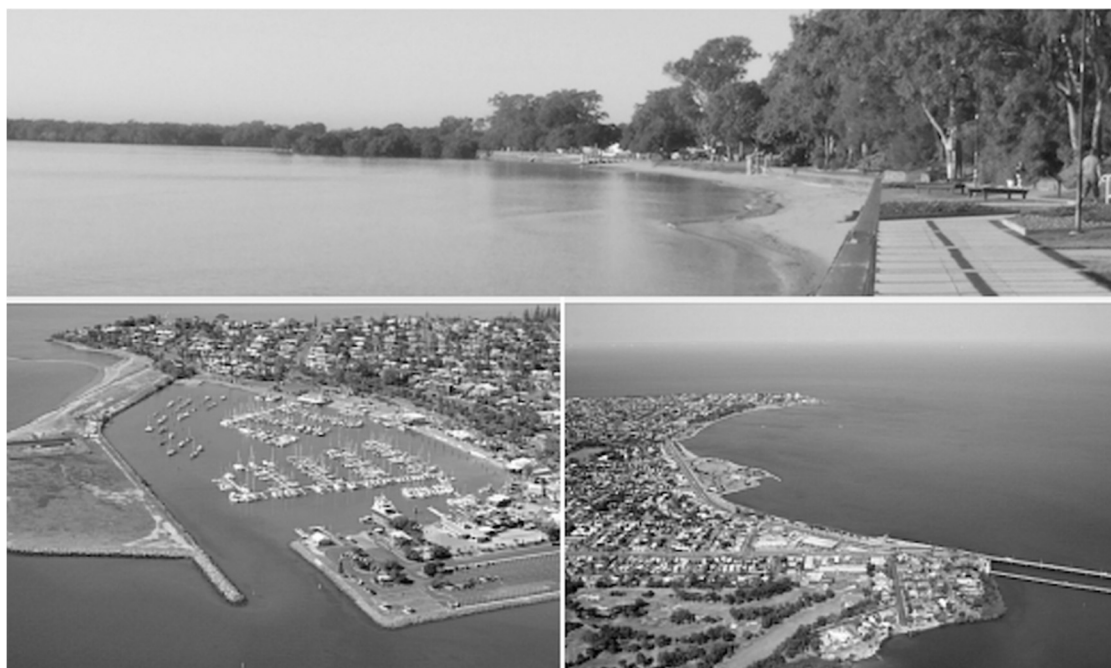


Plate S2: Moreton Bay marina and coast, Photo credits: <https://airviewonline.com/> and <https://www.embracia.com.au>; Source: Elrick-Barr (2016)

Section 2: Data collection

Table S3. Scenario hazards presented to interviewees.

Hazard	Scenario
Severe storm	A severe summer storm hits [Moreton Bay/Mandurah]. Storm impacts include high winds, loss of power, localized flooding, fallen trees and damaged power lines. Power is out until midday the following day and you experience minor roof damage, which results in limited water damage in the living room of your home.
Heatwave	There is a heat wave in [Mandurah/Moreton Bay]. The impacts include health issues such as heat stress, water restrictions, trouble sleeping at night and limited opportunities for outdoor recreation. During the heat wave, your household has a power blackout that lasts for several hours.
Sea-level rise	SLR in [Mandurah/Moreton Bay] creates gradual inundation in low-lying areas and will occur incrementally over time. SLR can also exacerbate coastal erosion through raised water levels that affect higher areas of the coastal dune. SLR may result in some areas of the region being 'cut-off' from others where roads and services are located in low-lying areas. In addition, there may be instances of damage to infrastructure located in low-lying areas or on the coastal fringe.

References

1. Australian Bureau of Statistics (2016) *Census QuickStats, Mandurah (C)*, Available from: https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA55110 [Accessed 11 November 2021]
2. Elrick-Barr (2016), *Understanding household adaptive capacity: case studies from coastal Australia*, University of the Sunshine Coast, Available: <https://research.usc.edu.au/esploro/outputs/99451136702621>

3. Queensland Government Statistician's Office, Queensland Treasury (2021), Queensland Regional Profiles: Resident Profile for Moreton Bay Coastal SA2 region, 2016. Available online from: <https://statistics.qgso.qld.gov.au/qld-regional-profiles> [accessed 11 November 2021]
Note: The region name Moreton Bay Coastal SA2 region is the customisable region name provided by the generator of this report and does not necessarily represent the current view of Queensland Treasury or the Queensland Government.