6.8 Reporting region 8: Offshore Islands

Landscape

Reporting region 8 includes three of the islands located off the coast of the Gladstone region - Heron Island, One Tree Island and Lady Elliot Island (Figure 15). These islands are located within the Great Barrier Reef Marine Park.

Heron Island is the northernmost island in this group and is a declared National Park. A research station and a resort are located on the island. Heron Island is an important island for turtle nesting and is a popular tourist destination for the region.

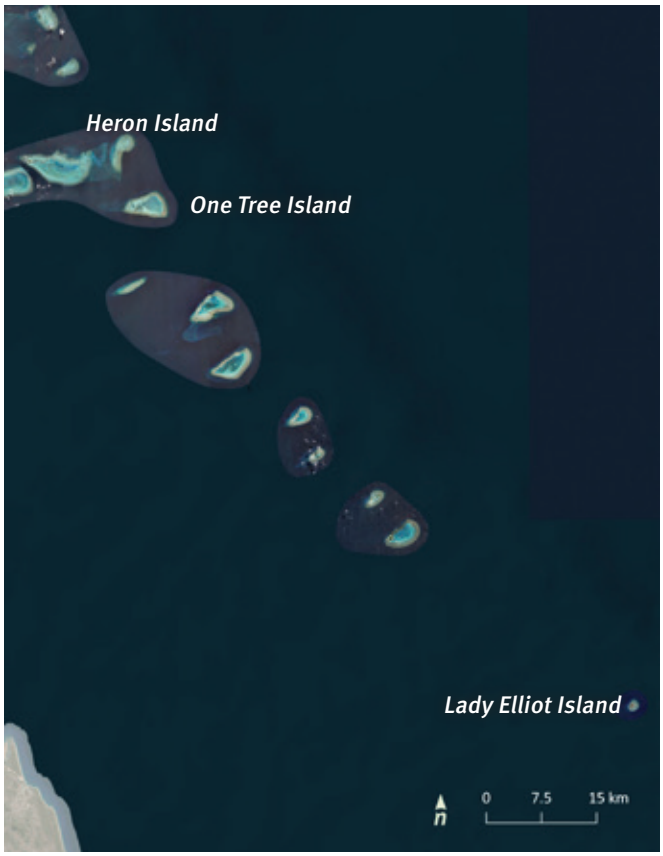


Figure 15. Reporting region 8 (Offshore Islands)

One Tree Island is also a National Park and has research station while Lady Elliot Island, the southernmost island, has a resort.

Coastal hazards exposure and implications

Low-lying areas of Heron and One Tree Island are exposed to periodic storm tide and tidal inundation, and are likely to be increasingly exposed in the future. Lady Elliot Island is at low risk to coastal hazard exposure.

Assets that may be increasingly at risk from inundation include buildings, roads and foreshore facilities on One Tree Island and Heron Island. By 2100 the level of inundation exposure for the settlement area may be beyond tolerance levels for current land uses on One Tree Island and low-lying areas of Heron Island.

The present day adaptation response for Reporting region 8 is to monitor the coastal hazard risk. Active mitigation of coastal hazard risks and preparations for transition of some areas (land use / assets in inundation areas) may be required in the longer term (Table 20).

The adaptation pathway for this area focusses on dune protection and maintenance, enhancing community adaptive capacity, updating disaster management arrangements, maintaining and upgrading existing infrastructure while undertaking location-based transition planning for the long-term (2100). Region-wide actions also apply as applicable.

	Present Day	2060	2100
Adaptation response	Monitor	Mitigate	Transition*
Adaptation actions			
1. Capacity building	As per region-wide actions		
1.2 Knowledge sharing and collaboration	Enhance community adaptive capacity to coastal hazards, including awareness of increasing coastal hazard exposure and risk (particularly inundation) and ways to improve individual preparedness and adaptive capacity		
2. Planning updates	As per region-wide actions, including:		
2.1 Land use planning	Develop approach, including triggers, for a transition response for targeted areas of region in response to increasing long-term inundation exposure and risk. Includes all of One Tree Island, limited areas of Heron Island		Implement transition plan
2.2 Disaster management	Update local disaster management planning for this locality based on updated coastal hazard maps		
3. Modifying infrastructure	As per region-wide actions, including:		
3.1 Build resilience	Promote resilient homes within the community		
		Review and update asset management plan to incorporate upgrades to inundation prone assets and other relevant infrastructure where practical.	
4. Coastal management and engineering	As per region-wide actions		

** A transition response may be appropriate for limited areas*

Table 20. Reporting region 8 adaptation pathway