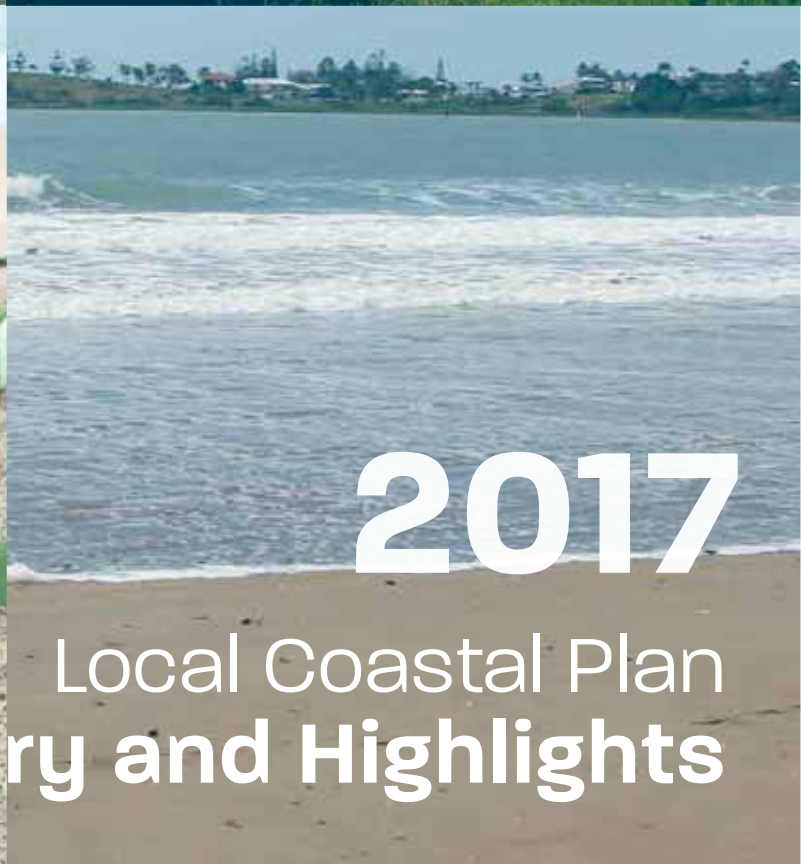




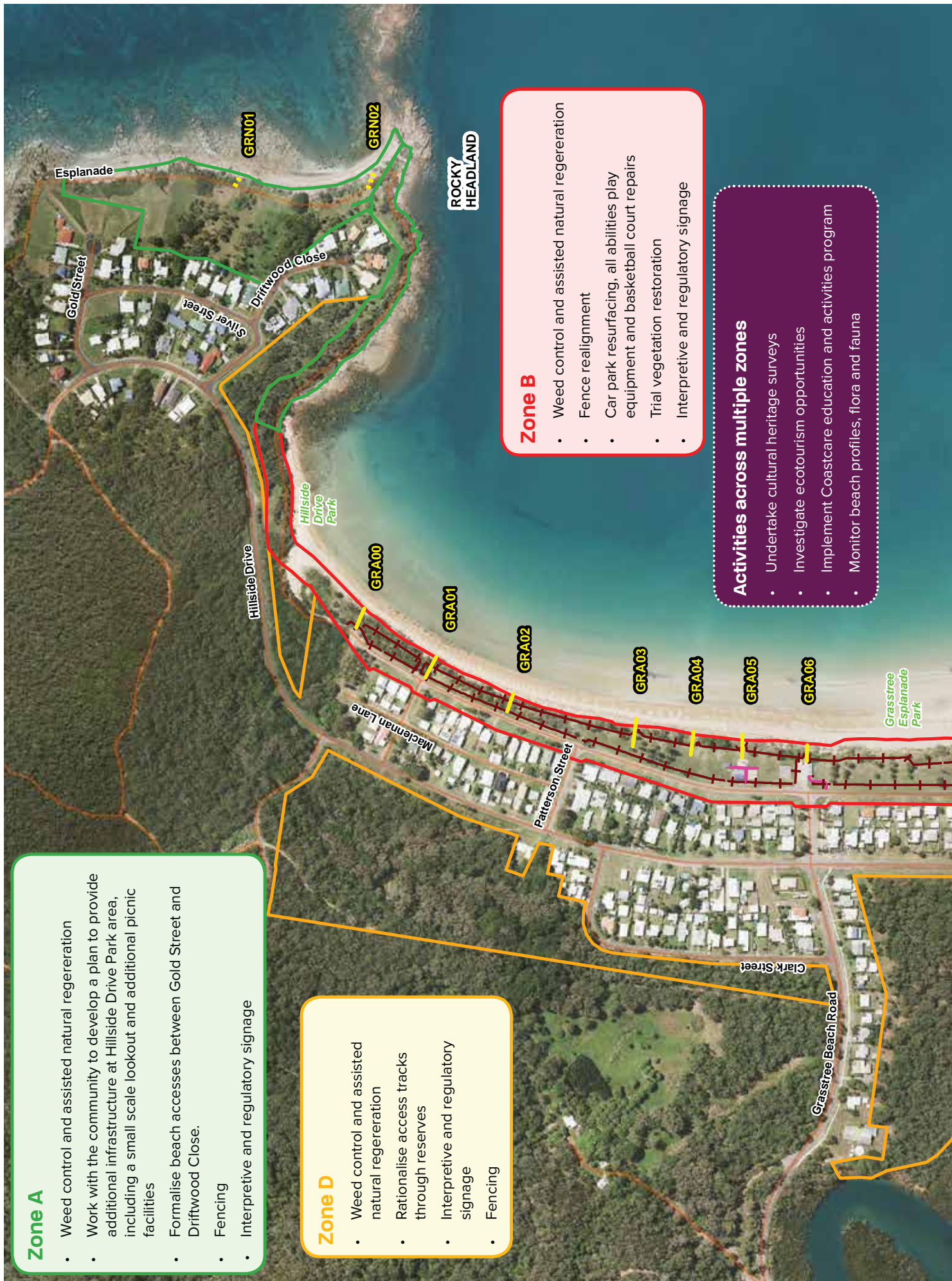
Grasstree Beach



2017

Local Coastal Plan Summary and Highlights





Zone A

- Weed control and assisted natural regeneration
- Work with the community to develop a plan to provide additional infrastructure at Hillside Drive Park area, including a small scale lookout and additional picnic facilities
- Formalise beach accesses between Gold Street and Driftwood Close.
- Fencing
- Interpretive and regulatory signage

Zone D

- Weed control and assisted natural regeneration
- Rationalise access tracks through reserves
- Interpretive and regulatory signage
- Fencing

Zone B

- Weed control and assisted natural regeneration
- Fence realignment
- Car park resurfacing, all abilities play equipment and basketball court repairs
- Trial vegetation restoration
- Interpretive and regulatory signage

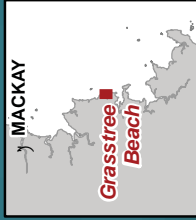
Activities across multiple zones

- Undertake cultural heritage surveys
- Investigate ecotourism opportunities
- Implement Coastcare education and activities program
- Monitor beach profiles, flora and fauna



Zone C

- Weed control and assisted natural regeneration
- Fence realignment
- Investigate additional recreational opportunities at the southern end of the coastal unit
- Interpretive and regulatory signage



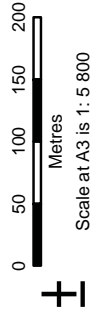
Grasree Beach Local Coastal Plan

Management Zones

- A █
- B █
- C █
- D █
- Official access ---
- Access to be formalised ---
- Boat ramp (
- Fence +
- Footpath ---
- Road ---

Zone boundaries are based on government tenure data and may not accurately reflect work zones.

Data:
Mackay Regional Council Imagery 10 cm Mosaic 2015, Mackay Regional Council 2016



About Grasstree Beach

The Grasstree Beach coastal unit supports rare and threatened species including migratory shorebirds, marine turtles and critically endangered beach scrub vegetation. It is also a popular recreational area for locals and visitors to our region.

Council manages its coastal land at Grasstree Beach through an integrated program of planning, on-ground works, monitoring and community engagement known as the *Coasts and Communities Program*. As part of this program, Coastal Management Guidelines have been developed to provide a framework for management decisions and activities for coastal land under Council's jurisdiction. Individual Local Coastal Plans, such as this plan for Grasstree Beach, provide site-specific recommendations for individual beach units.

The *Grasstree Beach Local Coastal Plan* describes the environmental and social values of the coastal unit, as well as the key threats and management issues. Key pressures include the presence of non-native vegetation, the removal

of native vegetation, waste dumping, erosion and climate change. Recommendations to manage these threats include weed control, revegetation, fencing and access management. Social values are also described and opportunities to improve recreational facilities and values have been identified, including additional beach accesses, pathways, interpretive signage and infrastructure such as bike racks. The recommended activities will be implemented on a prioritised basis as resources become available. Community engagement is recognised as a critical part of the success of on-ground works and opportunities for the community to learn about coastal ecosystems and get involved in management activities at Grasstree Beach will be provided through the Coastcare program.

UNDERSTANDING YOUR LOCAL COASTAL PLAN (LCP)

The activities recommended in this Local Coastal Plan will help protect and improve the condition of assets in the coastal unit, ensure best-practice management principles are implemented and on-ground activities are prioritised and undertaken in a coordinated and strategic way. This plan will help attract additional funding to the region (including from State and Federal sources) to protect coastal resources and improve recreational opportunities for our community.



Environmental Values and Management Issues:

Vegetation and Wildlife Values

Grasstree Beach is a 1.8km stretch of shoreline located within Zelma Bay. The residential area is surrounded by remnant vegetation, including critically endangered beach scrub (R.E. 8.2.2). These remnant vegetation communities provide habitat for native fauna including a wide array of reptile, amphibian and mammal species including monitors, frogs and melomys. Grasstree Beach is a known turtle nesting beach and supports a number of migratory and non-migratory bird species. Grasstree Beach also contains habitat for the rare northern quoll, and the vulnerable coastal sheath-tail bat and mangrove mouse.

Key threats to remnant vegetation at Grasstree Beach include development, weed invasion, mowing and disturbance. These threats interrupt natural vegetation zonation and reduce the resilience of coastal ecosystems. Threats to wildlife include habitat loss and degradation and disturbance to nesting or roosting sites. Climate change is likely to place additional stresses on coastal vegetation and wildlife.

Protecting existing native vegetation, re-establishing vegetation zonation and improving vegetation quality through weed control are key ways this plan seeks to protect and enhance the vegetation and wildlife values in this area. Providing opportunities for the local community to learn about

coastal ecosystems and wildlife through Coastcare events and interpretive signage will raise awareness about coastal values at Grasstree Beach.

Coastal Processes and Erosion

Coastal environments are dynamic, experiencing periods of erosion and accretion. Well-vegetated coastal dunes help protect coastal infrastructure during intense wind, storm and cyclone events. Human induced changes such as coastal development and vegetation loss can reduce the protective capacity of dune systems and coastal recession can occur.

At present, the northern end of Grasstree Beach is stable, with little change in shoreline position over the last 15 years. The central section is susceptible to erosion from storm events, but has the capacity to rebuild between events. Improving the coverage of dune vegetation in this area will improve the rate of recovery after storm events and minimise the erosion potential. The southern section of the beach has also eroded in recent years and maintaining and improving vegetation in this area will be key to minimising future erosion.

Climate change and sea level rise is likely to worsen the extent and impact of erosion in coastal areas. Monitoring of beach profiles will provide early indication of changes.

Social Values and Management Issues:

Cultural and Recreational Values

Grasstree beach is located within Zelma Bay and is a sheltered and popular swimming area. Grasstree Esplanade Park provides a long, grassy recreational area, with a playground, exercise equipment, a public toilet, beach showers and picnic facilities. The recreational facilities provide a range of social benefits including opportunities for active and passive recreation, tourism, education and social interaction, as well as supporting community well-being and providing opportunities for improving general health through outdoor recreation.

The Local Coastal Plan considers the extent and state of built assets, including access points, play equipment, signage, toilet facilities, boat ramps, paths and fencing. Opportunities for improving built assets to meet community needs and improve recreational opportunities in the area are identified. The plan recommends development of key recreational 'activity nodes'. High intensity use zones, such as between access points GRA04 and GRA06, could be improved with updated signage and facilities. An activity node is proposed at the southern end of the beach with additional infrastructure. This will

include working with the State Government to secure funding for the construction of additional upgrades to the boat ramp including a floating pontoon and car parking as recommended in the Queensland Recreational Boating Facilities Demand Forecasting Study 2016.

Working with the community to develop a plan to enhance the recreational opportunities at Hillside Drive Park through the provision of additional infrastructure, including a small-scale lookout and additional picnic facilities is also recommended. Other recommendations include resurfacing of the car parking area, the installation of all abilities play equipment in the existing playground and repairs to the basketball court.

Key management issues at Grasstree Beach include waste dumping in Reserve and coastal areas, unofficial access points through Council-managed land, unrestrained dogs, 4wds, quad bikes and motorbikes on the beach and removal of coastal vegetation. Closure of unofficial tracks to limit disturbance and waste dumping is recommended, together with community education and enforcement activities, as required.



KEY RECOMMENDATIONS FOR IMPLEMENTATION

- ▶ Weed control across all zones, targeting major weeds including Guinea grass and lantana, and revegetation to replace weeds, stabilise dunes and supplement native vegetation.
- ▶ Beach access upgrades and additional park infrastructure, such as a viewing platform, at Hillside Drive following additional consultation and park planning.
- ▶ Installation of regulatory and interpretive signage where appropriate.
- ▶ Investigating additional recreational opportunities at the southern end of the coastal unit.
- ▶ Removing waste and preventing future waste dumping through fencing and closing tracks on Reserve land.
- ▶ Providing the local community with opportunities to learn about coastal ecosystems and assist with the management of coastal land at official Coastcare events.
- ▶ Undertaking a trial vegetation restoration project.

The full suite of recommended activities can be found at the end of this document.



STATUTORY OBLIGATIONS

There are a range of statutes at the Regional, State and Federal level that are relevant to, and may guide the management of natural resources and recreation within the Mackay area. These are shown below.



FEDERAL GOVERNMENT

- *Biosecurity Act 2015* provides management principles for diseases and pests that may cause harm to human, animal or plant health or the environment, and for other related purposes
- *Environmental Protection and Biodiversity Conservation Act 1999* provides a high level of protection for Matters of National Environmental Significance (MNES). In particular it provides protection for important populations of migratory species.
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* provides for the preservation and protection of areas and objects in Australia and in Australian waters that are of particular significance to Aboriginals in accordance with Aboriginal tradition.



INTERNATIONAL AGREEMENTS

- *China and Australia Migratory Bird Agreement (CAMBA)*, the *Japan and Australia Migratory Bird Agreement (JAMBA)*, and the *Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA)* provide for conservation of shorebirds (waders) across the migratory flyway for these species.



STATE GOVERNMENT

- *Land Act 1994* provides for the designation of the reserves and assignment of Trustees for the protection of environmentally and culturally valuable and sensitive areas and features.
- *Recreation Areas Management Act 2006* provides for the establishment, maintenance and use of recreation areas; and aims to coordinate, integrate and improve recreational planning, recreational facilities and recreational management for recreation areas.
- *Vegetation Management Act 1999* provides management principles for vegetation within Queensland.
- *Coastal Protection and Management Act 1995 (Coastal Act)* provides a comprehensive framework for the coordinated management of the Queensland Coast, and establishes the Queensland Coastal Plan 2012 as the primary statutory instrument under the Coastal Act.
- *Nature Conservation Act 1992* provides management principles for wildlife within Queensland.
- *Native Title (Queensland) Act 1993* identifies the presence of Native Title over land.
- *Land Protection (Pest and Stock Route Management) Act 2002* provides the regulatory basis for control of pest species. In particular the Act classifies pest species and provides obligations for landholders.
- *Fisheries Act 1994* provides protection for marine plants including mangroves and saltmarshes, and provides the regulatory environment for control of recreational fishing activities.
- *Sustainable Planning Act 2009* provides the regulatory background for the development of planning schemes.
- *Environmental Protection Act 1994* regulates environmentally relevant activities, including release of emissions on land, air or water and noise.
- *Marine Parks Act 2004* regulates use of Marine Park to protect marine environment.
- *Waste Reduction and Recycling Act 2011* provides regulatory regime for management of litter and illegal dumping.
- *Queensland Coastal Plan 2012* provides policy guidance to coastal land managers including best practice coastal management principles which support the development of local management plans.



LOCAL GOVERNMENT

- *Mackay Regional Council Local Law No. 4 (Local Government Controlled Areas, Facilities and Roads) 2011* provides for the management of Council controlled lands by enabling the prohibition of vehicle access and protection of vegetation and infrastructure.
- *Mackay Regional Council Local Law No. 2 (Animal Management) 2011* provides for the management of animals in the natural environment,

including ensuring that they are under effective control and requiring removal of faeces in a public place.

- *Coastal Management Guidelines 2012* provides a framework for management decisions and activities for land under Mackay Regional Council jurisdiction in the coastal zone.
- *Mackay Regional Council Planning Scheme Open Space Strategy No. 12* outlines Mackay Regional Council's commitment to provide a balanced

mix of public open space that in turn will provide for a range of active and passive recreational opportunities for the community.

- *Reef Guardian Council program* Recognises Council's commitment to protect, conserve and enhance the values of the Great Barrier Reef for future generations through effective and responsible land-based management practices. The *Coasts and Communities Program* is a key initiative under this project.

Recommended Activities

Recommended Activities for the Grasstree Beach Local Coastal Plan

RECOMMENDED ACTIVITIES

Zone A | Northern headland (4.53ha)

1 Vegetation management

- 1.1 Control major target weed species including lantana and Guinea grass.
- 1.2 Undertake assisted natural regeneration.
- 1.3 Monitor and where suitable, manage other problematic weed species including, but not limited to: Chinese burr, corky passionflower, snakeweed and stinking passionflower.
- 1.4 Control weeds on and around beach access tracks including highly dispersive weeds such as cobbler's peg and Seaforth burr.

2 Recreational opportunities

- 2.1 Working with the community, develop a plan to enhance recreational opportunities at the Hillside Drive Park area through the provision of additional infrastructure, including a small-scale lookout and additional picnic facilities.

3 Access management

- 3.1 Install post and rail fencing to clearly define areas for conservation and recreational purposes.
- 3.2 Formalise beach accesses between Gold Street and Driftwood Close.

Zone B | Esplanade (11.05ha)

4 Vegetation management

- 4.1 Control major target weed species including lantana, Guinea grass, coconut palms, mother of millions and agave.
- 4.2 Undertake assisted natural regeneration.
- 4.3 Monitor and where suitable, manage other problematic weed species including, but not limited to: tridax daisy, pink periwinkle, prickly starwort, corky passionflower, siratro, cobbler's peg, mother-in-laws tongue, painted spurge, crows foot grass, Seaforth burr, snakeweed and buffel grass.
- 4.4 Monitor and use available legislation to protect existing native vegetation on Esplanade and Reserve tenure as required. Install additional surveillance cameras near revegetation works in the middle of Zone B, where there is evidence of tree poisoning.
- 4.5 Control weeds on and around beach access tracks including highly dispersive weeds such as cobbler's peg and Seaforth burr.
- 4.6 Undertake a trial vegetation restoration area in consultation with the community, to demonstrate the benefits of native vegetation and a well-vegetated dune system.

5 Recreational opportunities

- 5.1 Distinguish intense use zones and priority restoration areas for planning purposes. Suggested zones include the playground and toilet facilities near GRA05 and the southern end of the beach (Zone C). Provide shade to picnic tables in these zones.
- 5.2 Support resurfacing the car parking area, the installation of all abilities play equipment in the existing playground and repairs to the basketball court.

6 Access management

- 6.1 Reconstruct and realign post and rail fence along the foredune where necessary.
- 6.2 Realign bollard fencing closer to the road where appropriate to maximise recreational land.
- 6.3 Upgrade all access tracks over time.

Zone C | Southern tip of coastal unit (4.14ha)

7 Vegetation management

- 7.1 Control major target weed species including lantana and Guinea grass.
- 7.2 Undertake assisted natural regeneration.
- 7.3 Monitor and where suitable manage: tridax daisy, pink periwinkle, prickly starwort, corky passionflower, siratro, cobblers peg, mother-in-laws tongue, painted spurge, crows foot grass, Seaforth burr, snakeweed and buffel grass.
- 7.4 Control weeds on and around beach access tracks including highly dispersive weeds such as cobbler's peg and Seaforth burr.

8 Recreational opportunities

- 8.1 Investigate the development of an activity node and/or the installation of infrastructure as appropriate.
- 8.2 Work with the State Government to secure funding for the construction of additional upgrades to the boat ramp including a floating pontoon and car parking as recommended in the Queensland Recreational Boating Facilities Demand Forecasting Study 2016.

9 Access Management

- 9.1 Offset post and rail fencing further landward to encourage native vegetation establishment.

Zone D | Reserves (32.66ha)

10 Vegetation management

- 10.1 Control major target weed species including lantana and Guinea grass.
- 10.2 Undertake assisted natural regeneration.
- 10.3 Monitor and where suitable, manage other problematic weed species including, but not limited to: Chinese burr, Blue couch, corky passionflower, tridax daisy, and annual stylo.
- 10.4 Control weeds on and around access tracks including highly dispersive weeds such as cobbler's peg and Seaforth burr.

11 Access management

- 11.1 Rationalise unofficial vehicular tracks throughout the Reserves. Retain one vehicular track leading to Cabbage Tree Creek for public access.
- 11.2 Establish a post and rail fence to delineate conservation and recreation areas.

12 Signage

- 12.1 Install regulatory and interpretive signage where appropriate along the length of the Reserves to reduce unofficial access and waste dumping.

13 Waste management

- 13.1 Remove green waste and regulate hot spot locations with signage.

Other activities across multiple zones

14 Cultural heritage

- 14.1 Engage Traditional Owners to undertake cultural heritage surveys of the area to outline clear management objectives for the preservation of cultural heritage within the coastal unit.

15 Signage

- 15.1 Install signage at the landward end of each beach access point that clearly identifies the beach access number, restricted activities, hazards present and provides information on the appropriate first aid treatment for marine stingers.
- 15.2 Install beach access numbering signage at the seaward end of each beach access point.
- 15.3 Rehabilitation areas should be accompanied by signage detailing its purpose and any regulatory mechanisms in place.

16 Access Management

- 16.1 Install regulatory signage to protect shorebird and marine turtle populations.
- 16.2 Consider pathway linkages in neighbouring areas to improve connectivity between Parks and Reserves.

17 Waste management

- 17.1 Inform residents of appropriate waste disposal methods. Follow up with education, regulation and enforcement activities.
- 17.2 Educate the community on the impacts of waste on native vegetation, dune health, and wildlife.

18 Tourism

- 18.1 Investigate opportunities for increased tourism visitation to the beach. Facilitate low impact events such as the Grasstree Beach Races. Provide in-kind assistance where possible to generate interest and visitation to the area. During events, ensure there are adequate rubbish disposal facilities and that the foredunes are temporarily fenced off to prevent access and minimise disturbance to native vegetation.

19 Education

- 19.1 Partner with Coastcare and others to deliver education programs about:
- Local weed species and the use of local native species in residential gardens.
 - Garden waste and general waste disposal.
 - Responsible pet ownership including having dogs on leads at all times, unless in a designated dog off leash area, where they must still be under effective control and respond to the owner's commands.
 - The ecology and threats to native wildlife including marine turtles and shorebirds.

20 Monitoring

- 20.1 Undertake beach profile monitoring to record and assess change over time and monitor the impacts of sea level rise and the changing dynamics of coastlines to guide future coastal planning and works.
- 20.2 Consider a regional study on the long-term sediment (sand) supply for the Mackay coastline.
- 20.3 Monitor, or in partnership with others, assist with the monitoring of shorebirds and turtles.

21 Climate Change

- 21.1 Consider how to manage future predicted reduction in coastal land to retain buffer above the high tide mark (e.g. rolling boundaries).
- 21.2 Review existing revegetation list to ensure that species reflect diversity of all Regional Ecosystems present in coastal unit and in preparation for future predicted climates.

22 Erosion mitigation

- 22.1 Investigate the potential for appropriate integrated erosion mitigation options such as sand scraping and subsequent dune stabilisation.

23 Legislation and local laws

- 23.1 Use available legislation to protect existing native vegetation on Esplanade and Reserve tenure as required.
- 23.2 Using existing laws, undertake enforcement and compliance activities across the area, particularly relating to unrestrained dogs and motor vehicles in park and beach areas.
- 23.3 Review and update this document in line with changing legislation.

24 Community involvement

- 24.1 Provide opportunities for community members to be involved in coastal management activities at formal Coastcare events.

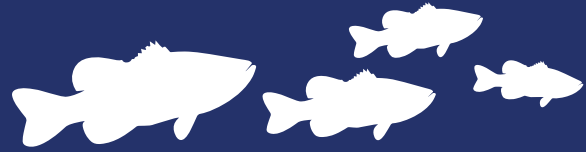
25 Enhancement of surrounding areas

- 25.1 Implement a tree succession plan across the length of the coastal unit.
- 25.2 Implement a roadside vegetation program to increase the amount of street trees along roads.

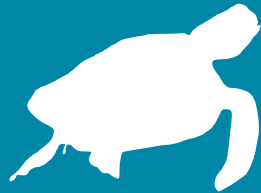
GRASSTREE BEACH
CONTAINS
ESSENTIAL
HABITAT FOR
**MANGROVE
MOUSE**



THE CABBAGE TREE CREEK ESTUARY SUPPORTS
MANGROVES WHICH PROVIDE ENVIRONMENTAL SERVICES
INCLUDING **HABITAT FOR JUVENILE FISH, SEDIMENT
TRAPPING AND CARBON SEQUESTRATION**



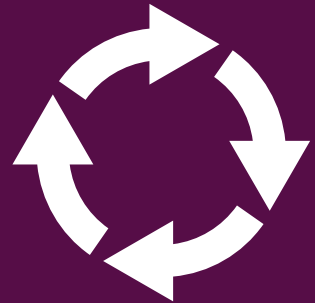
A KNOWN
**TURTLE
NESTING
BEACH**



THERE ARE

6

REGIONAL ECOSYSTEMS
WITHIN AND BORDERING
THE COASTAL UNIT



GRASSTREE BEACH
SUPPORTS PATCHES OF
CRITICALLY ENDANGERED
BEACH SCRUB

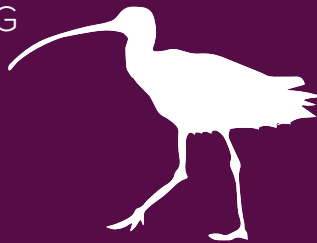


1.8km

OF BEACH



**HOME TO RARE AND THREATENED
SPECIES** INCLUDING
**MIGRATORY
SHOREBIRDS AND
MARINE TURTLES**



2 **NEW**
BEACH
ACCESSES
BUILT
IN 2016



THE NEARBY
CREEKS AND REEFS
MAKE IT **A POPULAR
FISHING AND
RECREATION AREA**



24 ha

OF WEED CONTROL AND MAINTENANCE WORKS
HAVE OCCURRED SINCE 2010



**How to view the
Local Coastal Plan**

Visit www.mackay.qld.gov.au

Acknowledgements: The project is supported by Reef Catchments and Mackay Regional Council through funding from the Australian Government *National Landcare Programme* and Mackay Regional Council's *Natural Environment Levy*. Local Coastal Plans are based on Mackay Regional Council's *Coastal Management Guidelines* (MRC 2012). Technical geomorphic assessment of the *Grasstree Beach Local Coastal Plan* area was provided by Alluvium. Images supplied by Reef Catchments, Mackay Tourism, Mackay Regional Council.