



2023

Sarina Beach Local Coastal Plan Summary and Highlights

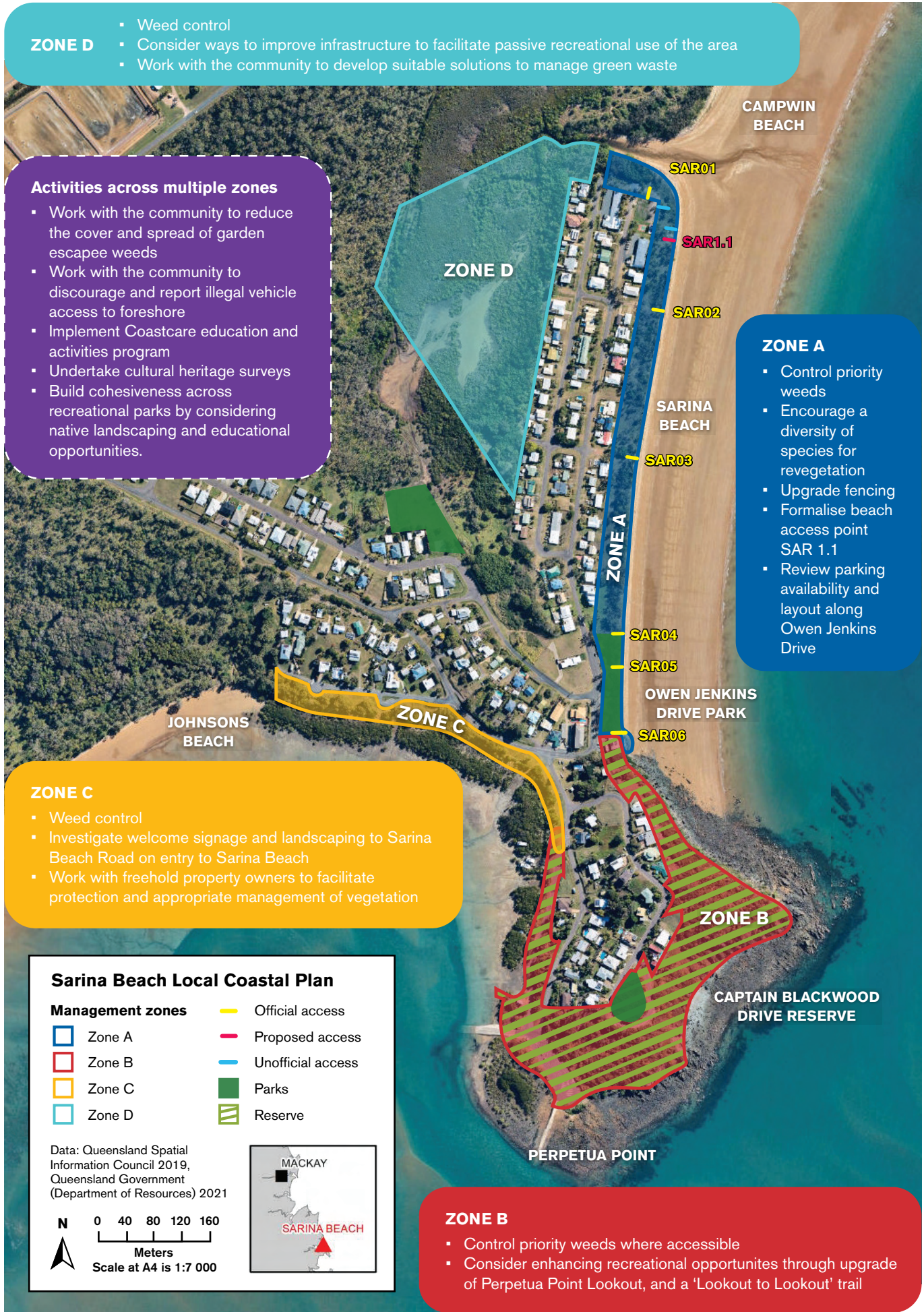


Figure 1: Visual summary of recommendations

About Sarina Beach

The Sarina Beach coastal unit supports a diverse complex of vegetation communities, a known turtle nesting beach, and a range of rare and threatened species. Offshore, the Sarina Inlet - Ince Bay Aggregation is listed as a Nationally Important Wetland. Sarina Beach is also a popular recreational area for locals and visitors to our region, providing a range of outdoor recreational activity options.

Council manages its coastal land at Sarina Beach through an integrated program of planning, on-ground works, monitoring and community engagement. 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 Sarina Beach, provide site-specific recommendations for individual coastal units.

The *Sarina 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 climate change, sea level rise, the presence of non-native vegetation and impacts to the dune system which serves as a buffer between residential settlements and the beach itself. Recommendations to manage these threats include weed control, revegetation and protection of the dunes through

fencing and access management.

Social values are also described and opportunities to improve recreational facilities and values have been identified, including upgrading existing infrastructure and enhancing existing recreational areas with new facilities. 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 Sarina 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

The Sarina Beach coastal unit covers the stretch of sandy foreshore along Sarina Beach and extends south and west around Perpetua Point, where the foreshore is predominantly a rocky headland. A small creek forms the northern boundary of the coastal unit, and the southern end abuts Johnsons Beach. Residential area backs the whole coastal unit. Sarina Inlet, south of the coastal unit, empties into the Sarina Inlet – Ince Bay Aggregation, a Nationally Important Wetland.

Within the coastal unit there is 12.7ha of remnant vegetation, predominately within Zones B, C and D of the coastal unit, comprising largely *Eucalyptus* woodland (RE 8.12.22 and 8.3.5) and mangrove communities (RE 8.1.1 and 8.1.2).

The mangrove communities within Sarina Beach provide essential habitat for the highly-specialised and regionally-vulnerable mangrove mouse, and serve as important breeding grounds for many marine fish species. The Sarina Inlet - Ince Bay Aggregation provides additional wildlife value for the area and includes a range of different marine and intertidal habitat types which support marine turtles and shorebirds.

The coastal vegetation types provide essential habitat and foraging opportunities for the near-threatened coastal sheath-tail bat and vulnerable mangrove mouse. Additionally, the sandy foreshore of Sarina Beach is a known turtle nesting area.

Key threats to remnant vegetation communities at Sarina Beach include mowing, inappropriate access and weed incursion. These impacts interrupt natural vegetation zonation and reduce the resilience of coastal ecosystems. Singapore daisy and a range of garden escapee weeds have been identified as high priority weeds for removal. Lantana and prickly pear currently only exist as isolated plants, and these species are also priorities for continued control by council.

Key threats to wildlife include habitat loss and disturbance to nesting sites. For turtle nesting, lighting from residential areas is as a key concern. Climate change and sea level rise 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 and revegetation 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 will raise awareness about coastal values at Sarina 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.

Sarina Beach is one of two east-facing beaches bounded by Coral Point to the north and Perpetua Point to the south. Since the establishment of residential properties in the late 1960s, the overall shoreline has been relatively stable with little recession and accretion over the last 31 years (1988 to 2019). However, with a changing climate and projected sea level rise, the area prone to erosion and tidal inundation, and the magnitude of erosion resulting from storm events, is expected to increase.

A substantial extent of Sarina Beach and Johnsons Beach shoreline and settlement is situated within an Erosion Prone Area (EPA). The EPA does not represent a predicted loss of coastal land, however, it does indicate that these areas will be increasingly prone to erosion and inundation, and where planning will be required to mitigate coastal hazard impacts. Since the beach has a very limited supply of sediment from longshore sediment transport from the south and from Sarina Inlet, it is vitally important to retain existing sand by protecting and enhancing coastal dune systems through rehabilitation of coastal vegetation and access management.

Social Values and Management Issues

Cultural and Recreational Values

Sarina Beach is a popular beach located less than one hour's drive south from the Mackay city centre. The area offers a quiet, relaxing atmosphere, and is valued by locals and visitors for its diverse nature-based recreational opportunities. 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 interaction.

Owen Jenkins Drive Park is an important recreational area and is situated in front of Owen Jenkins Drive within Zone A, and contains most of the recreational facilities within the coastal unit, including a playground, barbeque equipment, toilets and a beach shower. Additional recreational assets exist within Zone B and C.

The *Sarina Beach Local Coastal Plan* considers the provision of adequate facilities that cater for a range of interests and abilities. Extension and installation of fencing and

upgrading existing infrastructure and enhancing recreational areas through the provision of facilities and signage are recommended throughout the coastal unit. Nature-based activities should be explored including establishment of native landscaping across all recreational parks, and opportunities for connections between Perpetua Point lookout and Campwin Beach lookout.

Sarina Beach is included within the Native Title determination of the Yuwibara People. To protect the cultural significance of the area, it is important to discuss any proposed activities with the Traditional Owners. It would also be beneficial to facilitate additional on-Country visits by Traditional Owners to survey for sites or items of cultural significance and set clear management objectives.

KEY RECOMMENDATIONS INCLUDE:

- ▶ Targeted weed control across all zones, prioritising Mother of Millions, Singapore Daisy and Prickly Pear (restricted matter under the *Biosecurity Act 2014*).
- ▶ Formalise an additional beach access point between SAR01 and SAR02 and extend post and rail fencing from Owen Jenkins Park and esplanade area to the northern end of Zone A to define tenure, designate access points and maintain dune stability against erosion.
- ▶ Revegetation that considers view sensitivity to assist dune stabilisation and enhance native vegetation cover, diversity and connectivity along the coastal corridor.
- ▶ Investigate additional recreational opportunities such as upgrades to lookout facilities at Perpetua Point, design and installation of additional interpretive signage, and improving landscaping and signage along Sarina Beach Road to welcome visitors on arrival to Sarina Beach.
- ▶ Work with neighboring Freehold property owners and local residents to reduce illegal vehicle access to Sarina Beach and Johnsons Beach.



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



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.
- *Planning Act 2016* established an efficient, effective, transparent, integrated, co-ordinated and accountable system of land use planning, development assessment and related matters that facilitates the achievement of ecological sustainability.
- *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 Policy - Open Space* 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.

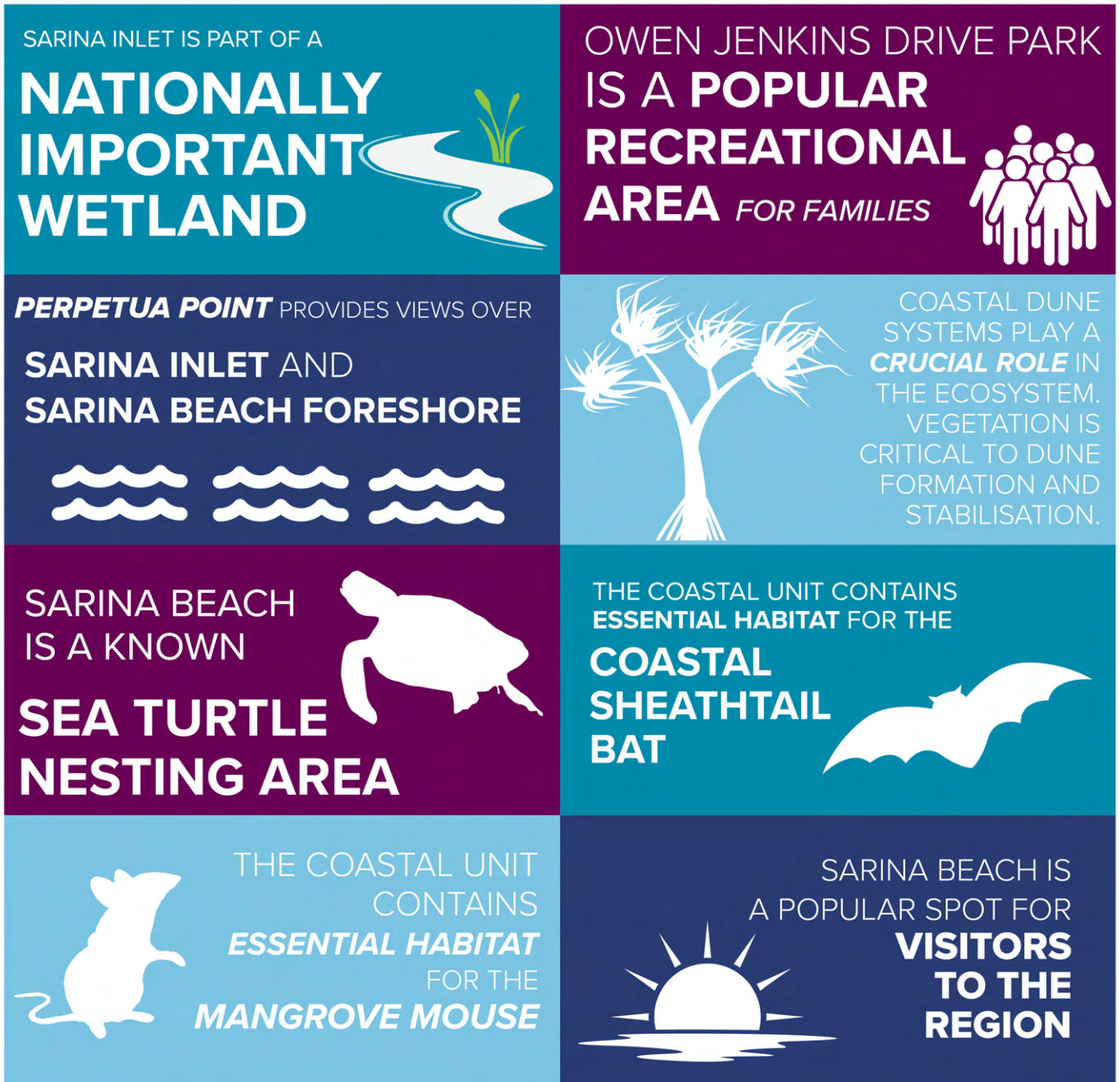
Table 3: Prioritised Actions for the Sarina Beach Local Coastal Plan

PRIORITISED ACTIONS		PRIORITY
ALL ZONES		
1	Vegetation Management	
1.1.	Undertake detailed weed mapping for each zone to guide control measures outlined in 1.2	High
1.2.	Control with the intent to eradicate invasive weed species across all zones with specific targeting in accordance with the following. Measures are to include supplementary planting of local native species, where appropriate, to infill areas of sizable disturbance: <ul style="list-style-type: none"> ▪ Mother of millions (<i>Bryophyllum sp.</i>), Singapore Daisy (<i>Sphagneticola trilobata</i>) and Prickly Pear (<i>Opuntia sp.</i>) ▪ Periwinkle (<i>Catharanthus roseus</i>), spurge (<i>Euphorbia</i>), Siratro (<i>Macroptillium atropurpureum</i>) Cobbler Peg (<i>Bidens pilosa</i>), joy weed (<i>Alternanthera brasiliana</i>), coral creeper (<i>Barleria repens</i>), Chinese violet (<i>Asystasia gangetica</i>), agave (<i>Agave attenuata</i>), Mock orange (<i>Murraya paniculata</i> “Exotica”), Leucaena (<i>Leucaena leucocephala</i>), Balsam Pear (<i>Momordica charantia</i>), Eastern cassia (<i>Senna pendula</i>), Seaforth burr (<i>Cenchrus echinatus</i>). ▪ Gazania (<i>Gazania tomentosa</i>), Mother-in-law’s tongue (<i>Sansevieria trifasciata</i>) Devils Horsewhip (<i>Achyranthes aspera</i>). 	High Medium
1.3.	Revegetate the Sarina Beach foreshore with species suited to the Regional Ecosystem, and with consideration of view-sensitivity.	Medium
1.4.	Develop a community education program to develop a better understanding of local ecology and addressing issues associated with garden escapees and green waste dumping.	Medium
1.5.	Work with the Freehold property owners to facilitate protection and appropriate management of native vegetation on Freehold land.	Continuous
1.6.	Engage with relevant stakeholders such as fire brigades, Queensland Fire Emergency Services, Queensland Fire and Biodiversity Consortium, and Queensland Parks and Wildlife Services, to assess fire risk of vegetation and work together to develop a fire management plan.	High
2	Erosion management	
2.1.	Minimise disturbance to dunes and vegetation along all shoreline areas and, encourage vegetation establishment to provide additional resistance to erosion (accretion).	Continuous
3	Cultural heritage	
3.1.	Consult with Traditional Owners regarding proposed actions within the Native Title determination area.	High
3.2.	Engage Traditional Owners to undertake cultural heritage surveys of the area and outline clear management objectives for the preservation of cultural heritage within the coastal unit.	Medium
3.3.	Work with Traditional Owners to facilitate connection to Country.	Continuous
4	Signage	
4.1.	Audit signage across the coastal unit to determine gaps and needs to ensure proper identification of beach accesses, ensure adequate warning of hazards and first aid treatments, improve wayfinding and to regulate and report prohibited activities.	High
4.2.	Identify opportunities for additional interpretive signage across the coastal unit to enhance sense of place and promote local attractions and history.	Medium

<p>5 Climage change</p> <p>5.1. Identify options to increase community resilience and understanding of hazards including sea level rise, coastal erosion, fire and other hazards anticipated to impact the coastal unit.</p> <p>5.2. Plan for a coastal area erosion (retreat) as required.</p>	<p>Continuous</p> <p>Medium</p>
<p>6 Legislation and local laws</p> <p>6.1. Use available legislation to assist in protecting existing remnant vegetation within the management zones of the coastal unit.</p> <p>6.2. Review and update this document in line with changing legislation.</p>	<p>Continuous</p> <p>Continuous</p>
<p>7 Partnerships</p> <p>7.1. Identify potential partner organisations with an interest in facilitating community programs to assist with:</p> <ul style="list-style-type: none"> ▪ Local weed species and the use of local native species in residential gardens. ▪ Garden waste and general waste disposal. ▪ Responsible pet ownership and how to protect native wildlife. ▪ Threats to turtles nesting such as lighting and unauthorised vehicle access ▪ Education about the impacts of activities to fragile coastal environments. 	<p>Continuous</p>
<p>8 Monitoring</p> <p>8.1. 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.</p> <ul style="list-style-type: none"> ▪ Review profile changes where different protection works are implemented – including the rock seawall, dune re-building, and vegetated areas. ▪ Use monitoring results to inform future coastal management works for Sarina Beach (adaptive management). <p>8.2. Consider a regional study on the long-term sediment (sand) supply for the Mackay coastline.</p> <p>8.3. Monitor, or in partnership with others, assist with the monitoring of shorebirds and turtles.</p> <p>8.4. Monitor and inform the community on progress made in delivering the management activities outlined in the LCP.</p>	<p>High</p> <p>High</p> <p>Continuous</p> <p>Continuous</p>
<p>9 Waste management</p> <p>9.1. Work with the community to develop suitable solutions to manage green waste.</p> <p>9.2. Promote services available at the Sarina Rural Transfer Station and council’s dump voucher system.</p>	<p>High</p> <p>Medium</p>

PRIORITY ACTIONS		PRIORITY
Zone A Owen Jenkins Drive Park and esplanade area north to Stewart Grove (3.39ha)		
10	Vegetation management	
	10.1. Manage coastal vegetation to reconcile competing demands for beach views and access with shoreline and habitat protection.	High
	10.2. Increase view-sensitive vegetation cover at the northern end of the zone. The planting palette should be appropriate to the relevant Regional Ecosystem, and consider species which will support turtle nesting and be view-sensitive.	High
	10.3. Promote diversity of native vegetation within the dune areas to maximise the capacity of this vegetation to protect the foredunes.	Continuous
	10.4. Undertake a staged renewal of existing beach protection fencing	Continuous
11	Recreational opportunities	
	11.1. Complete planned works in Owen Jenkins Park to improve the barbeque facilities.	High
	11.2. Review appropriateness of car parking throughout Zone A, particularly near SAR01 and Owen Jenkins Drive Park.	Low
	11.3. Maintain viewing corridors from picnic shelters in Owen Jenkins Drive Park.	Low
12	Access management	
	12.1. Formalise an additional beach access between SAR01 and SAR02.	
	12.2. To align the LCP with the policy requirements of the Queensland Coastal Management Plan (2014) and Mackay Regional Council Coastal Management Guidelines (2012), post and rail fencing will be extended from Owen Jenkins Park and esplanade area to the northern end of Zone A to define tenure, designate access points and maintain dune stability against erosion.	High
	12.3. Install temporary fencing to protect dunal areas during events that result in high visitor numbers, such as the Sarina Beach Coconut Festival and Surf Lifesaving carnivals.	Medium
		Continuous
13	Signage	
	13.1. Additional interpretive signage to be installed to direct people to the new beach access.	Medium
Zone B Captain Blackwood Drive Reserve (7.49ha)		
14	Vegetation management	
	14.1. Manage vegetation where required to maintain views from the lookout.	High

Zone C Road reserve on Sunset Drive and coastal strip adjoining Ferries Terrace (1.1ha)		
16	Vegetation management	
16.1.	Work with neighbouring Freehold property owners to facilitate protection and appropriate management of native vegetation along Johnsons Beach, to prevent the reintroduction of weeds into council land.	Medium
16.2.	Support the ongoing management of native vegetation along the Sarina Inlet Trail by Sarina Landcare Catchment Management Association (SLCMA).	Medium
17	Recreational opportunities	
17.1.	Improve presentation of the Sarina Beach Road on arrival to the township. Consider use of welcome signage and landscape improvements.	Medium
Zone D Road reserve behind Poole Street (9.18ha)		
18	Vegetation management	
18.1.	Consider fire risk within the road reserve parcel behind Poole Street, and work with residents to ensure the fire break is maintained.	High



Infographic 1.



How to view the **Local Coastal Plan**

Visit www.mackay.qld.gov.au

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