



Shelly Beach to Moffat Beach Coastal Study (focus on Tooway Lake, Moffat Beach and Headland, and George Watson Park)

21st April 2023
Project Information Sessions

Introductions

Purpose of the meetings

To provide key stakeholder groups and the wider community with a project update

Date	Time	Schedule of meetings
19.04.23	14.00 – 16.30	Key stakeholder groups – Shelly Beach Focus
	17.30 – 20.00	
21.04.23	14.00 – 16.30	Key stakeholder groups – Moffat Beach Focus
22.04.23	09.00 – 13.00	General community drop in session – with presentations at 9am & 11am

Introductions

Session structure

Item No	Agenda topic	Mins
1.0	Introductions <ul style="list-style-type: none">- Welcome- Meeting objectives and protocols	5
2.0	Project presentation <ol style="list-style-type: none">1. Setting the scene2. The Project – A reminder3. Approach4. Finding common ground5. Presenting the complete picture and proposition6. Project findings – Tooway Lake, Moffat Beach, Moffat Headland and GWP7. Further investigations8. Advancing the Pilot Project9. Next steps	60
3.0	Facilitated Q&A	80
5.0	Next steps	10
6.0	Close and thanks	5

1.0 Setting the scene

1.0 Setting the scene

Why are we here?

The broader area and specifically Shelly Beach has been a focus for discussion and community tension for a number of years mainly focused on:

- Light impact on turtles
- Views (from private residences)
- Vegetation management and species choice
- Cottonwood Trees on the dune
- Culminating in Dec 2020 – Placement of shade cloth at William Street car park

Approaches have largely focused on addressing desired individual outcomes, for issues and opportunities that exist within and have influence across a whole system.

1.0 Setting the scene

Growing pains

- Our community is growing
- This growth generates competing interests in an increasingly constrained environment

How do we balance the often competing needs of our community and sensitive, highly valued landscape and flora and fauna?

1.0 Setting the scene

Our response

At the beginning of 2021 Council commenced a detailed study of the coastal strip from the southern end of Shelly Beach northward to Tooway Lake.

The study considered the public (not private) lands within this area, including the:

- i. Recreation open space (parks) including coastal path
- ii. Dune and conservation areas
- iii. Beach

The high ecological, amenity and landscape values of the area coupled with increasing recreation demands means the area requires careful consideration to ensure a sustainable balance can be struck between its significant natural values and community use/ expectations.

1.0 Setting the scene

Objectives

The study sought to:

- Resolve tensions between the community
- Resolve tensions between community and council
- Better understand community perspectives on what is valued about this section of coastline
- Better understand a diverse range of community views related to the management of the area's flora and fauna
- Better understand the challenges and opportunities associated with the areas management
- Explore strategies to ensure the best outcomes for residents, nesting turtles and coastal biodiversity for the future.

2.0 The Project – A reminder

2.0 The project

The study area

- 2km section of coastline between Moffat and Shelly Beach.
- Enjoyed as a series of individual destinations - Tooway Lake, Moffat Beach, George Watson Park, North Shelly Beach and South Shelly Beach.
- And as a series of connected experiences linked by The Coastal Path.



2.0 The project

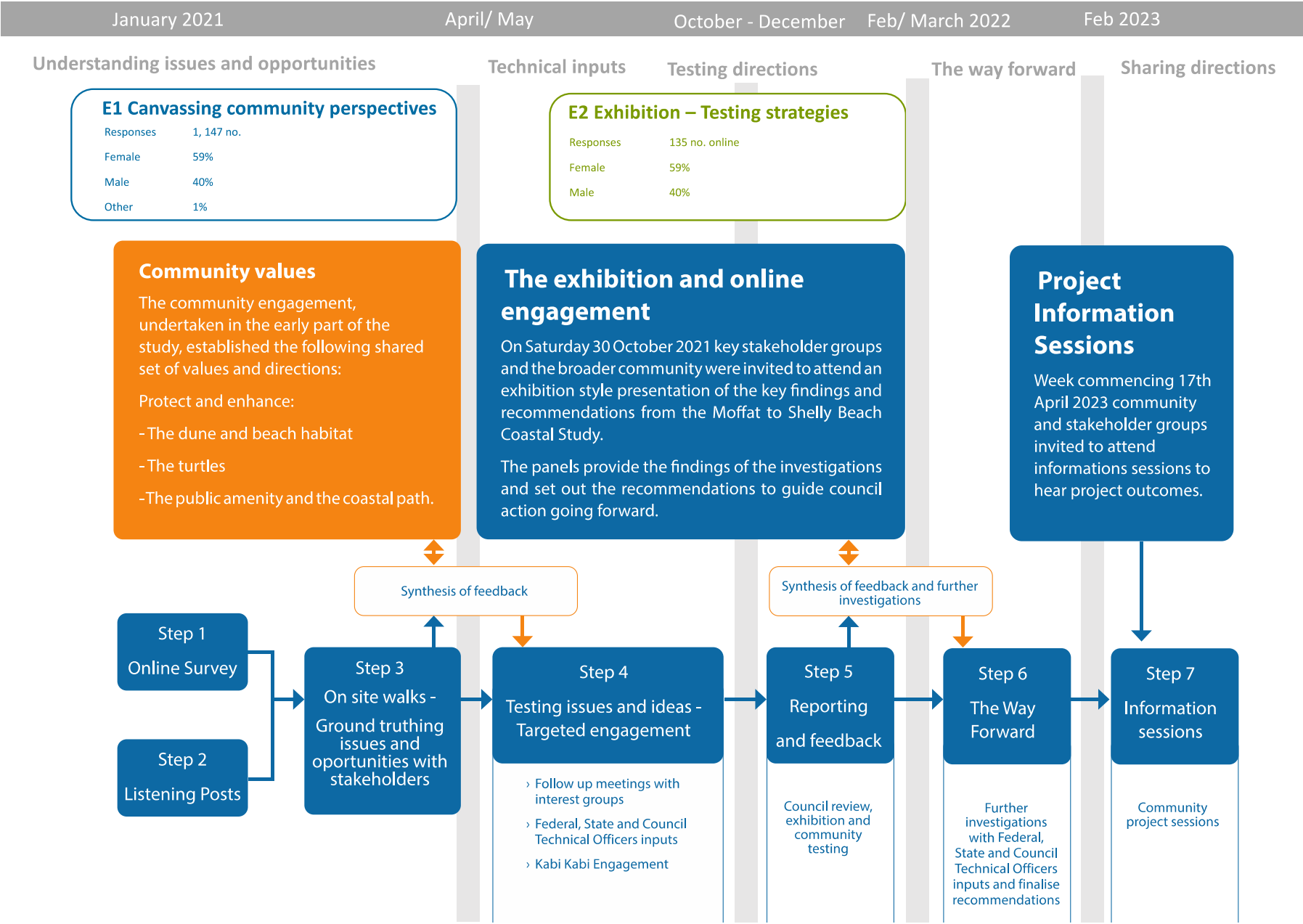
The brief

Map a way forward to guide the future evolution and management of this part of the coastal landscape, including the Coastal Path, to ensure the best outcomes for residents, the natural vegetation of the area and its wildlife.

The findings of the study will help inform council management of the area and will help provide clear and consistent direction to all.



3.0 Approach



3.0 Approach

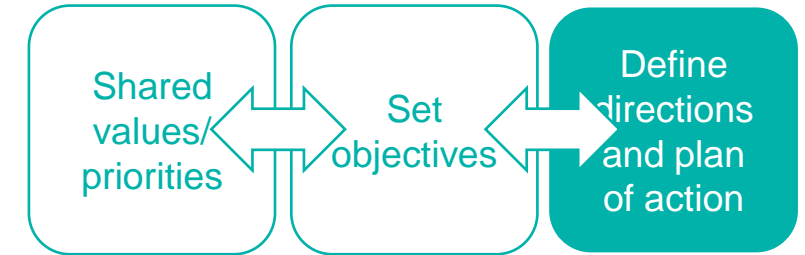
Key stakeholders

Significant time dedicated to an engagement process devised to better understand community perspectives on what is valued about this section of coastline and the challenges and opportunities associated with its management.

Online Community Survey	28 January 2021 to 1 March 2021			
Shelly Beach Community Listening Post	20 February 2021			
Moffat Beach Community Listening Post	27 February 2021			
General Community drop in session				22 April 2023
External Stakeholder Group	Site Tour	Follow up meeting	Exhibition 31 Oct – 29 Nov '21	Information session
North Shelly Beach Group	25 March 2021	5 May 2021		w/c 16 April 2023
North Shelly Beach Group 2	No Tour	11 May 2021		w/c 16 April 2023
Caloundra Residents Association	26 March 2021	29 June 2021		w/c 16 April 2023
Community of Beaches	27 March 2021	5 May 2021		w/c 16 April 2023
Marine Turtle Conservation Volunteers	27 March 2021	10 May 2021		w/c 16 April 2023
Friends of Shelly and Moffat Beaches Group	27 March 2021	14 June 2021		w/c 16 April 2023
Shelly Beach Conservation Group	26 March 2021	8 July 2021		w/c 16 April 2023
George Watson Park Bush Care Group	26 March 2021	3 June 2021		w/c 16 April 2023
Wildlife Preservation Society of QLD	25 March 2021	3 June 2021		w/c 16 April 2023
Tooway Lake Catchment Care group	25 March 2021	14 July 2021		w/c 16 April 2023
Sunshine Coast Environment Council	No Tour	5 October 2021		w/c 16 April 2023
Kabi Kabi - Brian Warner	28 July 2021			
Internal Stakeholder Groups	Initial Meeting	Follow up Meeting		
Environment Operations	21 May 2021	5 July 2021 & 6 October 2021		Ongoing
Parks and Gardens	2 June 2021	12 October 2021		Ongoing

4.0 Finding common ground

Early insights informing approach



Community	The context	Approach
<ul style="list-style-type: none"> • Strong interest / passion from local residents • Many diverse and interested stakeholders • Some interested community members not yet represented as stakeholders • Desire to preserve what is special – ensure next generations have same experiences 	<ul style="list-style-type: none"> • Complex, high value environment • Under pressure 	<ul style="list-style-type: none"> • Many hands • Many perspectives • Currently not well coordinated • Shared objectives/ approach not aligned
<ol style="list-style-type: none"> Pause Step back Listen to the community Rebuild trust Understand shared priorities/ values and use these to align action 	<ol style="list-style-type: none"> Understand and work with the complexity of the natural and human systems Take an integrated and whole of landscape approach. 	<ol style="list-style-type: none"> Take an evidence based approach Seek appropriate technical and scientific inputs Define objectives Support with a plan of action

4.0 Finding common ground

Shared community values

- The area is unique
- It has a natural character
- It is ecologically rich
- The turtles are highly valued
- The coastal path is highly valued
- The diverse sequence of experiences connected by the Coastal Path valued.
- Its relaxed and low-key character valued



4.0 Finding common ground

Priority Place Values:

Protect and Enhance

- I. The turtles*
- II. The dune and beach habitat*
- III. The public amenity of the area and the coastal path.*

A framework for decisions and action

These values establish an important framework to help align decision making and guide future enhancement and management activities in the area across council and community stakeholder groups.

5.0 Presenting the complete picture and proposition

Exhibition – Role and purpose

1. Synthesis of the **key findings** directly informed by all of the inputs received from online survey, site walks etc.
2. Provide a **spatial representation of the directions and actions** to address priority community concerns - to protect and enhance the dune and beach habitat, turtle habitat and the public amenity of the area and enjoyment of the coastal path.
3. Opportunity for the community to provide feedback on proposals **over 4 weeks**
4. Responses
 - Close to **100 people attended the exhibition** (3 sessions run through the course of one day to manage COVID requirements)
 - Received **135 online responses** post exhibition, including submissions from key stakeholder groups.

5.0 Presenting the complete picture and proposition

Proposed directions presented for community feedback 31 October 21 – 29 November 2021



6.0 Project findings

In summary

From the online and in-person submissions received there is significant community support for the proposed directions and actions.

Additional narrative in the feedback from the community provided valuable advice and information in response to proposed directions – including detailed insights into vegetation planting and management, as well as ideas for general improvements to enhance the amenity of the area.

Council Directions

- General support provided in progressing and advancing the the detailed planning and key findings of the Shelly to Moffat Beach Coastal study, undertaken between January 2021 and February 2022.
- Recognition of the requirement to lodge EPBC referral and receive approval prior to commencement of works at Shelly Beach.

6.0 Project findings

Directions – Tooway Lake, Moffat Beach and Headland, GWP

Figure 1: Coastal Zones 1A and 1B

The figure consists of three main parts: a map, a satellite image, and a table of key issues and actions.

Map: A map of the coastal area with zones 1A and 1B highlighted. Zone 1A is the area between the coastline and the urban area, and Zone 1B is the area between the coastline and the urban area.

Satellite Image: A satellite image of the coastline showing the urban area and the coastal zone.

Table: A table with two columns: **Key Issues** and **Key Actions**. The table is divided into two sections: **Zone 1A** and **Zone 1B**.

Key Issues	Key Actions
Zone 1A	Zone 1A
Key Issues	Key Actions
<ul style="list-style-type: none"> • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. 	<ul style="list-style-type: none"> • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding.
Zone 1B	Zone 1B
Key Issues	Key Actions
<ul style="list-style-type: none"> • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. 	<ul style="list-style-type: none"> • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding. • The coastal zone is a highly sensitive area and is vulnerable to a range of threats, including sea level rise, coastal erosion, and flooding.

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Moffat Beach & Headland

DIRECTIONS

Zone 1A – Tooway Lake Bridge (south side) to Tooway Lake Mouth

Q's1-10 Improvements to condition and management of Tooway Lake and its associated infrastructure supported.

Zone 1B – Eleanor Shipley Park & Moffat Beach

Q's11-25 Improvements to condition, management and amenity of the Eleanor Shipley Park and surrounds to support environmental values, and community enjoyment and safe use of the area.

Zone 1C – Moffat Beach to Moffat Headland (including Queen of Colonies Parade)

Q's 1-10 Improvements to condition, management and amenity of the Moffat Headland and surrounds to support environmental values, and community enjoyment and safe use of the area – including issues of traffic and vegetation management and cliff safety.



View north west from Moffat Headland



Moffat Beach & Headland

ACTIONS

Moffat Beach Seawall

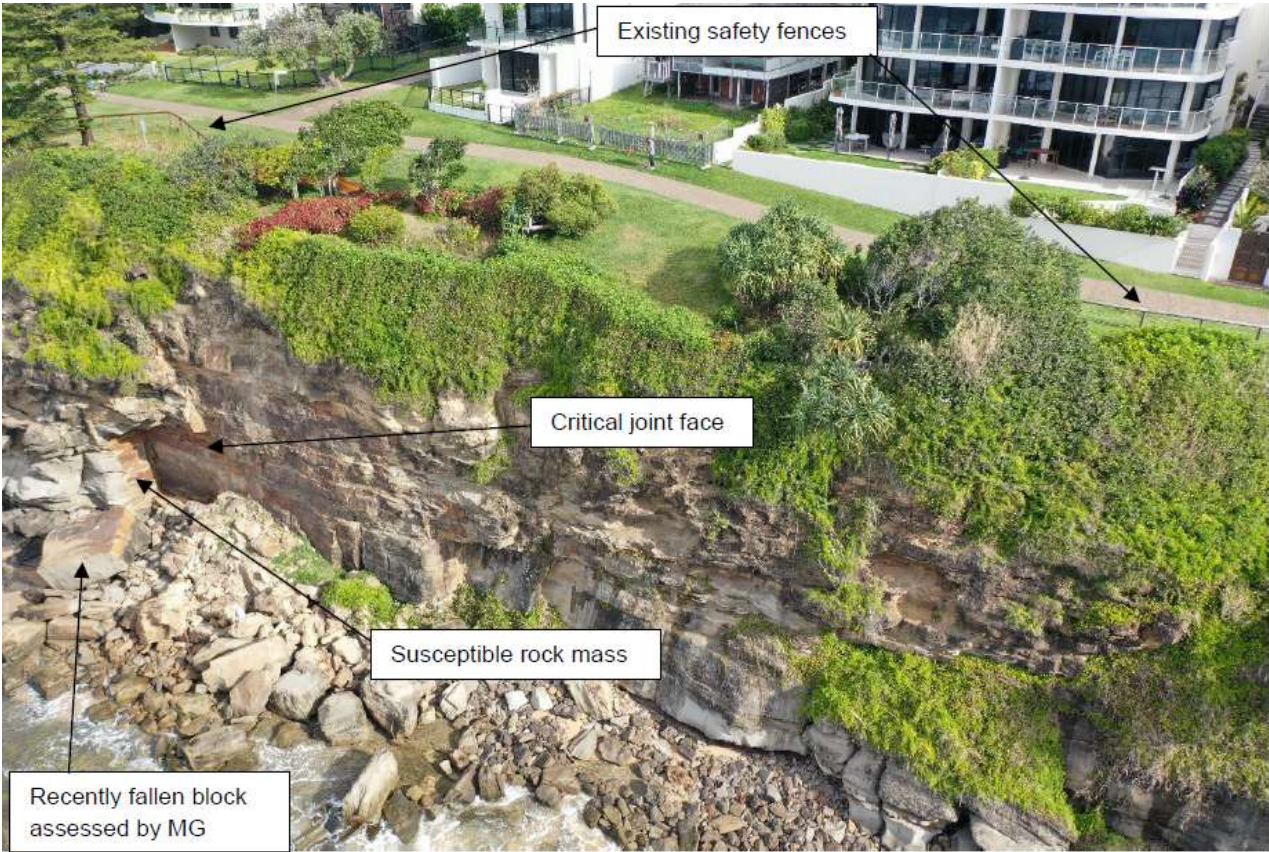
- Awaiting outcome of QRA funding submission. Once advised of outcome more detailed timelines for completion will be provided.

Moffat Headland

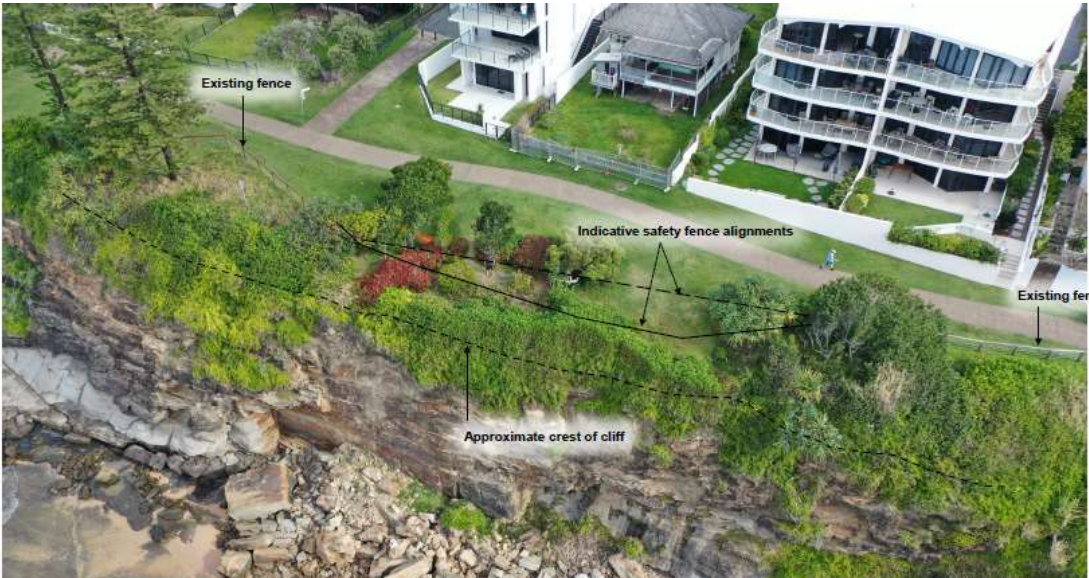
- Slope Stability Assessment conducted in November 2022. The report recommends additional safety fencing be installed in certain areas of the headland for safety and conservation of the cliff / rock face . Community consultation will be undertaken relating to the fencing once appropriate options regarding the fencing placement and type is determined.
- Restoration works recently undertaken to manage the erosion and vegetation impacts of the informal track through the steep section of the Queen of Colonies Foreshore Reserve. Revegetation work undertaken to condition and stabilise soil, close out informal access trails, protect and enhance habitat and contribute to ecological functionality of the area. Species selection in this area was compatible with adjoining vegetated parcels.
- Three-monthly scheduled pruning of vegetation to maintain headland public viewshed areas

Moffat Beach & Headland

Slope Stability Assessment report recommendations



Photograph 2: Drone view of cliff face carried out by Core



George Watson Park

DIRECTIONS

General

Q's 1 – 5 & 8 Improvements to wayfinding and general education concerning the ecological, cultural and heritage value of the area supported – Caution to not overwhelm the area with signage and look for innovation in the way information is provided.

GWP – East

Q's 6 Management of wetter areas in George Watson Park as a Melaleuca vegetation community supported.

GWP – West

Q's 7 Management and improvement to the safety and appropriate use of the coastal path supported.

Q's 9 Support for the sensitive design and installation of a low key activation space in the north-east corner of George Watson Park supported.

Q's 10 – 12 Support for increased environmental operations rehabilitation and management of this area in consultation with volunteers to enhance ecological values as a priority over walking

Focus area



Coastal path towards George Watson Park



Detail - GWP West



Detail - GWP East

7.0 Project findings – Shelly Beach

7.0 Project findings – Shelly Beach

Further investigations

The directions/ actions with the highest level of continued community sensitivity were associated with:

1. The appropriate land use of the North Shelly Beach area – [Land designations](#)
2. The treatment of the William Street car park – [Turtles](#)
3. The appropriate species mix on the dune - [Turtles and native ecologies](#)
4. The approach to be adopted to any vegetation removal on the dune - [Turtles and native ecologies](#)
5. The location and species choice for revegetation activity on the dune - [Turtles and native ecologies](#)

7.0 Further investigations

Technical inputs were sought from the relevant and recognised authorities at Federal, State and Local Government levels, and from Council professionals relating to current knowledge and contemporary best practice management for three key issues:

1. Land designation
2. Dune conditions and vegetation considerations
3. Considerations for Marine Turtles (at Shelly Beach)

These inputs were used to ensure:

- Issues and ideas could be ground-truthed and tested
- Contemporary and best practice inputs from technical experts informed the advancement of place-based directions.

7.0 Further investigations

1. Land designation

Long standing tension and difference of opinion with regards to what the land between William Street and Russell Street is to be used for and its appropriate maintenance in support of that use.

The recognised authorities on this issue are:

- Council
- Department of Environment and Science (Coastal Protection)
- Department of Resources (Land and surveying).



7.0 Further investigations

2. Dune conditions and vegetation considerations

Long standing tension and difference of opinion regarding the:

- Appropriate vegetation type on the dune
- Appropriate approach to revegetation work and vegetation management

Area 1. William Street to Russell Street

Area 2. William Street south to the drain

The recognised authorities on these issues are

- Vegetation – Queensland Herbarium, Department of Environment and Science
- Dunes – Department of Environment and Science

7.0 Further investigations

3. Considerations for Marine Turtles (at Shelly Beach)

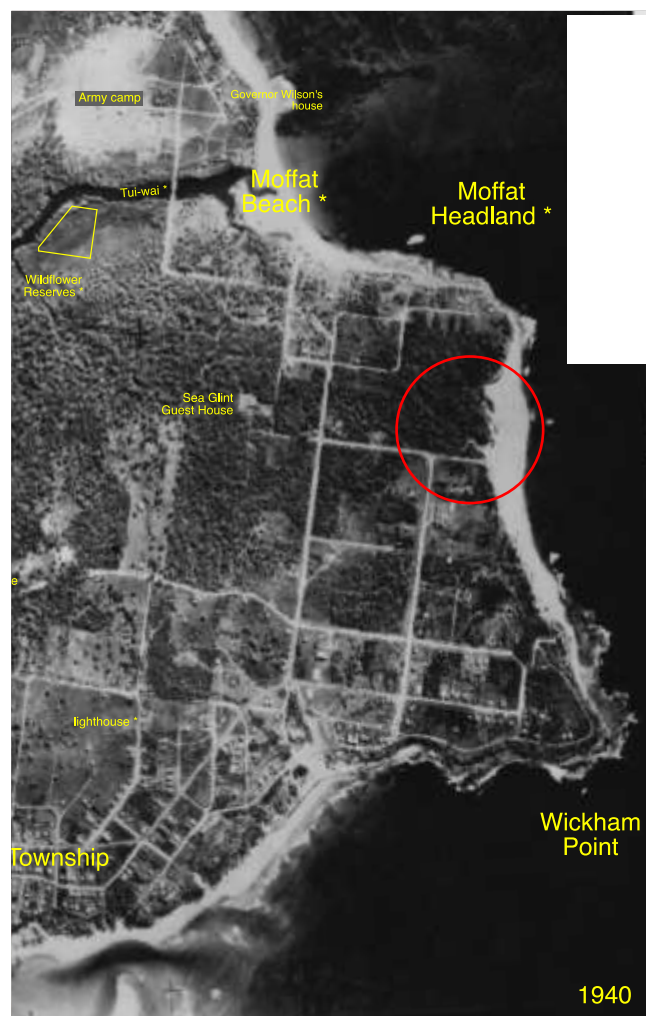
Long standing tension and differences regarding the conditions required to support nesting turtle populations:

- Space for nests
- Light impacts
- Vegetation limitations

The recognised authorities on this issue are Federal and State Government:

- Migratory Species Section, Biodiversity Conservation Division, Department of Agriculture, Water and the Environment
- Chief Scientific Officer, Department of Environment and Science

2. Dune conditions and vegetation considerations – Dunes



1940, Aerial – Caloundra to Moffat



2021 Cadastre – Shelly Beach

Note: All images supplied by Department of Environment and Science, Queensland Government (except 1940 image of Caloundra to Moffat).

2. Dune conditions and vegetation considerations – Dunes



1961 25 September, Aerial – North Shelly Beach

Sparse tree cover on the dunes and a well-developed ground cover behind the foredune but a sparsely vegetated foredune.



30 October 1962.

Sand/ Shell grit quarrying operation in progress on the foredune and vegetation cover increased, probably due to favourable seasonal conditions, and at the same time a new dune has built up seaward.

2. Dune conditions and vegetation considerations – Dunes



1974 January, Aerial – North Shelly Beach

A dune has been artificially reconstructed.



Imagery from the then Beach Protection Authority indicated dune severe sea erosion between 1972 to 1974 and damage to the January 1974 dune above. reconstructed

2. Dune conditions and vegetation considerations – Dunes



10A CYCLONE DAVID 22/1/76

1976 22 January, Aerial – North Shelly Beach

Beach Protection Authority imagery suggests the foredune was reconstructed again prior to January 1976 and revegetated.



18 September 1979.

Foredune at Shelly Beach looks devoid of tree cover except for a few horsetail she-oak at the southern end which predated the works.

2. Dune conditions and vegetation considerations – Dunes



1981 7 November

Aerial imagery confirms the dune is dominated by ground cover plant species with a single line of trees, most likely planted, at the rear of the dune becoming obvious.



2004 11 June

The new line of trees appear to be expanding, but mainly westward (probably due to exposure). It is therefore assumed that these are the current cotton trees. Ground truthing needed.



1994 25 May

Trees have appeared seaward of the original line of trees at the rear. The uniform size, spacing and arrangement in lines suggests artificial planting. These may be the Cotton Trees. Clearing of trees in the northern part appears to have occurred. Additional trees appear to have been planted on the western edge



Circa 2011

Land elevations.

Suggest the 1976 artificially created dune is still intact.

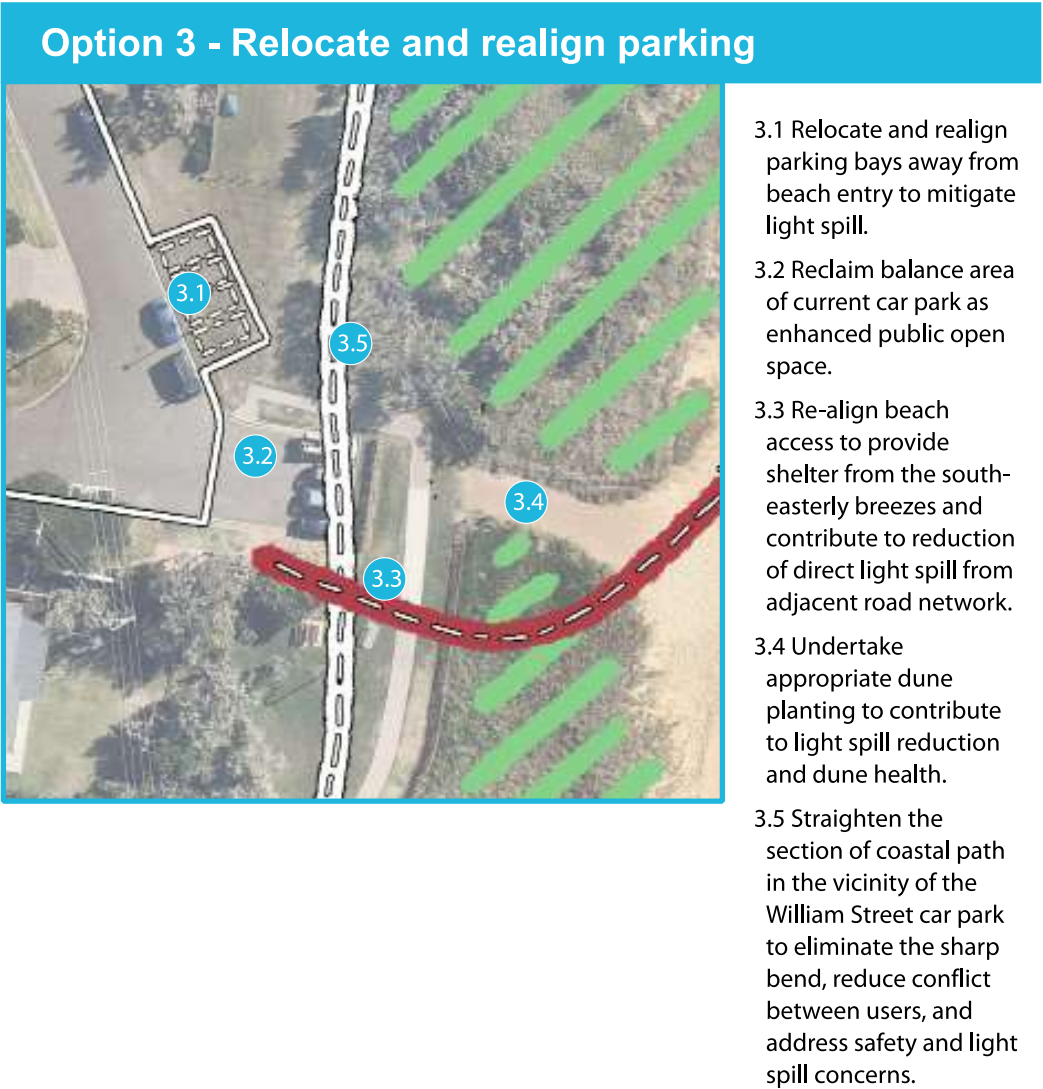
Key strategies & community sentiment

Zones 3A North Shelly Beach (William Street car park)



Option 3 preferred direction from community engagement. This feedback will be used to establish a brief for further development and the testing of options and ideas. Options will be developed and tested with technical and community inputs.

Note - This diagram does not illustrate a design.



Summary of project implications

Key issue	Project implications
Land designation	<ul style="list-style-type: none"> • Council is using the land for purposes consistent with land designation and relevant Council and State approvals. • Council is required to maintain and enhance the area. • There is room for improvement on the clarity, coordination and approach to landscape enhancement and management.
Dune conditions and vegetation considerations – Dunes	<ul style="list-style-type: none"> • Sensitive landscape subject to dynamic influences (coastal erosion) • Has important coastal protection role and habitat role, supporting marine turtle nesting • Valued community amenity • Supports valued vegetation communities
Dune conditions and vegetation considerations – Vegetation	<ul style="list-style-type: none"> • Appropriate vegetation RE advised as RE12.2.14 • Cottonwood Tree appropriate in the mix but not in its current behaviour. • Management supported to improve the overall biodiversity of the dune, in line with what would be expected of this type of Regional Ecosystem
Turtles (at Shelly Beach)	<ul style="list-style-type: none"> • On the Sunshine Coast Buddina and Shelly beaches typically record more nests than any other beaches. • Shelly beach is identified by State Government as the index beach for the entire Sunshine Coast rookery (first studied in the 1970's). • An elevated frontal dune and dark horizon are important nesting habitat requirements for turtles. • Activity conducted outside of critical nesting period and not piloted on core habitat areas. • Referral under the EPBC Act advised where disturbance to vulnerable species habitat expected (MNES)
Overall	<ul style="list-style-type: none"> • The adoption of an integrated collaborative process that draws together the appropriate technical expertise – turtles, dunes and vegetation – is essential to informing any proposed physical change at Shelly Beach.

8.0 Advancing the pilot project



Background

Shelly Beach is a highly modified landscape. In its current condition the vegetation, the species mix and the profile and extent of the landscape are not characteristic of an established coastal dune.

The issues

The prevalence and growth form of Cottonwoods in the area is dominating the foredune vegetation community and limiting available space for turtle nesting habitat above the high-tide mark.

The opportunity

Proposed opportunity to trial and monitor effectiveness of Cottonwood management techniques for application in the broader North Shelly Beach area to support dune health and turtles.

Pilot site selection process

The pilot site selection process was informed by the following key considerations:

- Identification of the dune area most heavily dominated by Cottonwood trees and limiting available space for natural turtle nesting.
- Avoiding most consistently successful natural turtle nesting areas on North Shelly Beach.
- Avoiding current preferred / successful turtle nest relocation areas.
- Recognition that successful turtle nesting habitat requires approximately 18 months to settle post significant disturbance of sand dune to minimise poor nest outcomes.
- Risk of wide-spread coastal / dunal erosion if entire area was managed at the same time.
- Risk of significant impact on successful turtle nesting from poor outcomes if Cottonwood management is not delivered in a staged and sequenced manner integrated with dune management etc.

Staged habitat restoration program with pilot initiative



Future action for consideration - Low amenity planting to integrate and screen Coastal Path

In the 5 year time frame undertake a design process to consider in detail the option of establishing low (up to 2m) plantings on the western side of the coastal path between William and Russell Streets, to provide a level of privacy to adjoining residents, in anticipation of the coastal path becoming busier.

Design process to include species selection and placement in conjunction with CPTED principles and adjacent residents inputs.

Establish and enhanced dunal ecology and vegetation diversity achieved through:

- The assisted staged reduction in the current extent of Cottonwoods on the foredune at North Shelly Beach.
- Dune vegetation rehabilitation activities to establish a functional foredune vegetation community informed by Regional Ecosystem 12.2.14, including spinifex on the frontal dune grading to Foredune Herbland and then into *Casuarina equisetifolia*, *Banksia integrifolia*, and *Pandanus tectorius*.
- Dune vegetation rehabilitation activities to establish a pseudo hind-dune vegetation community within available space incorporating *Acrotylia imperforata* (Fraser Island apple), the ubiquitous *Cupaniopsis anacardioides* (tuckeroo) and *Hibiscus tiliaceus* (cottonwood).
- Dune vegetation species composition, density and height to provide equivalent to or enhanced dark sky and light glow management outcomes (elevated dark horizon supporting ocean-finding behaviour).
- Outcomes to balance enhanced ecological diversity, dune stabilisation against coastal erosion processes, and turtle conservation.

Establish an expanded area of turtle nesting habitat located above high tide to optimise available nesting habitat and hatchling success - achieved through the removal of woody vegetation for a distance of 10m landward of high-tide mark, and rehabilitated with appropriate coastal grasses and herbs dominated by coastal spinifex.

The same 10m strip of enhanced turtle nesting habitat will provide valuable turtle nest relocation receiving sites located above high tide to provide alternative receiving sites and optimise hatchling success.

Ensure *Pandanus tectorius* plantings are maintained approx. 10m landward of the turtle nesting habitat area to minimise risk of *Pandanus* root impacts on turtle nests, particularly during dry seasons / drought years.

Manually remove any marine couch grass growing at high tide mark to remove physical restrictions to turtle nesting, and replace with coastal spinifex plantings.

Close the informal beach access point located between Russell Street and William Street, fence completed and dune rehabilitated.

Undertake infill planting on bare and degraded areas of the dune consistent with the recommended establishment of a functional foredune and pseudo hind dune as above.

Dune areas subject to disturbance through removal of woody vegetation become unsuitable as nesting habitat for a period of 18 months.

Any turtle nests laid within this pilot zone within the 18 month dune settlement period to be relocated to minimise the risk of poor nest outcomes.

Lift Cottonwoods off fence line separating the dunes and grassed recreation open space area to a distance of 1m - achieving a reduction in fence maintenance, and reducing competition for the recommended Parks and Gardens amenity plantings between the fence line and coastal path.

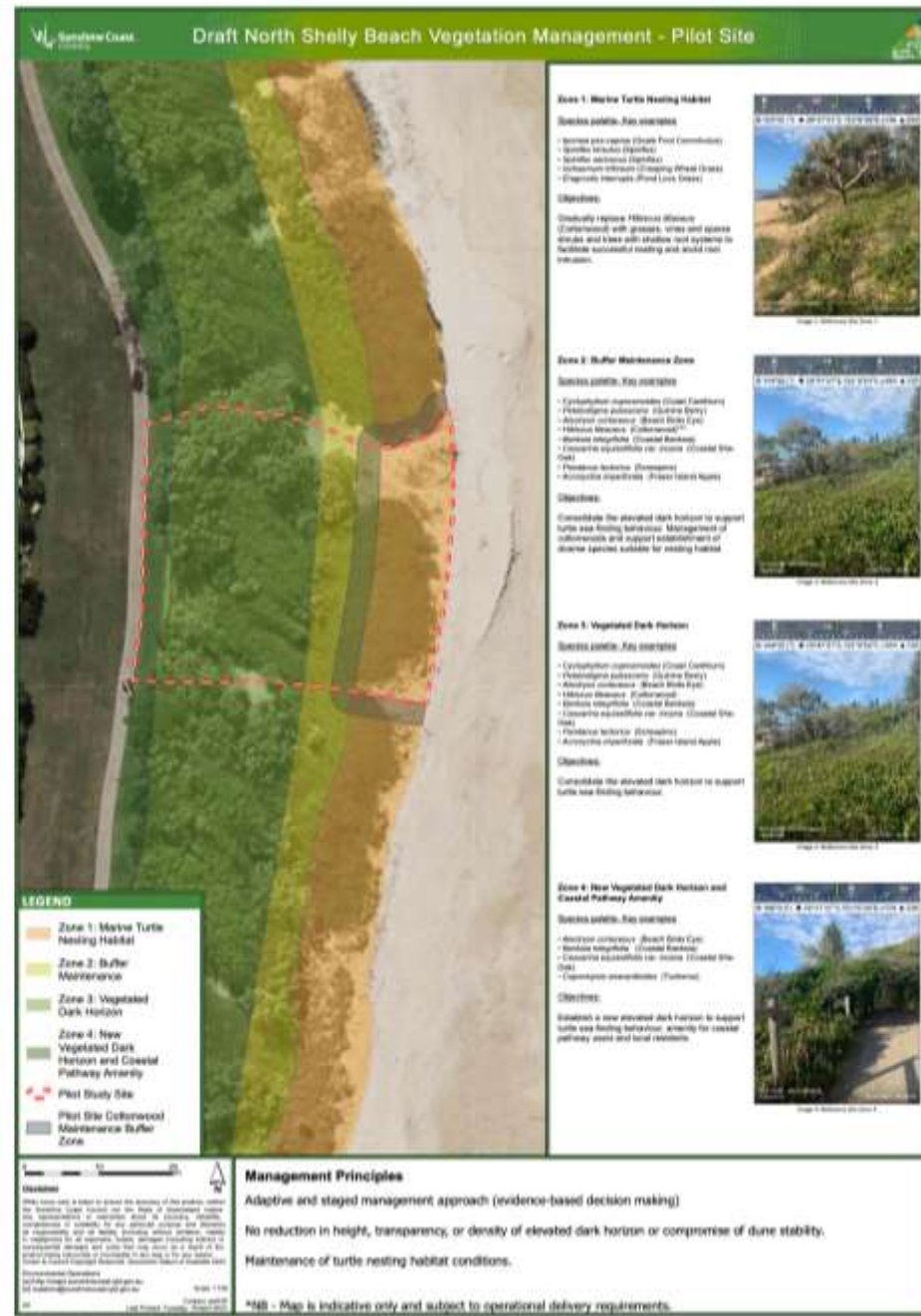
Establish Parks and Gardens amenity plantings utilising small native trees to maximum height of 5m - achieving improved amenity, shading for park users, and contribute to enhanced light glow management.

Enhanced management of dune areas to disrupt occasional anti-social behaviour, and to minimise associated fire risk and dune erosion.

Consistent approach to Council's messaging, response and regulation of unauthorised vegetation management (clearance and/or planting) on public land under Council's care and control.

Enhanced coordination and collaboration between Council, contractors and volunteer groups operating in accordance with endorsed guidelines and operating procedures - achieving improved awareness of activities and collective outcomes.

Reinstate appropriate mowing regime for the grass open space recreation areas in accordance with Council's levels of service.





LEGEND

- Zone 1: Marine Turtle Nesting Habitat
- Zone 2: Buffer Maintenance
- Zone 3: Vegetated Dark Horizon
- Zone 4: New Vegetated Dark Horizon and Coastal Pathway Amenity
- Pilot Study Site



Zone 1: Marine Turtle Nesting Habitat

Species palette- Key examples

- *Ipomea pes-caprae* (Goats Foot Convolvulus)
- *Spinifex hirsutus* (Spinifex)
- *Spinifex sericeous* (Spinifex)
- *Ischaemum triticeum* (Creeping Wheat Grass)
- *Eragrostis interrupta* (Pond Love Grass)

Objectives:

Gradually replace *Hibiscus tiliaceus* (Cottonwood) with grasses, vines and sparse shrubs and trees with shallow root systems to facilitate successful nesting and avoid root intrusion.



Image 1: Reference Site Zone 1

Zone 2: Buffer Maintenance Zone

Species palette- Key examples

- *Cyclophyllum coprosmoides* (Coast Canthium)
- *Petalostigma pubescens* (Quinine Berry)
- *Alectryon coriaceus* (Beach Birds Eye)
- *Hibiscus tiliaceus* (Cottonwood)***
- *Banksia integrifolia* (Coastal Banksia)
- *Casuarina equisetifolia* var. *incana* (Coastal She-Oak)
- *Pandanus tectorius* (Screwpine)
- *Acronychia imperforata* (Fraser Island Apple)

Objectives:

Consolidate the elevated dark horizon to support turtle sea-finding behaviour. Management of cottonwoods and support establishment of diverse species suitable for nesting habitat.



Image 2: Reference Site Zone 2

Species palette provides examples of species to be planted and those likely to naturally occur in the seedbank. Indicative draft only and subject to change in consultation with relevant experts and development of EPBC referral.

***No additional Cottonwood trees will be planted in this zone

Zone 3: Vegetated Dark Horizon

Species palette- Key examples

- *Cyclophyllum coprosmoides* (Coast Canthium)
- *Petalostigma pubescens* (Quinine Berry)
- *Alectryon coriaceus* (Beach Birds Eye)
- *Hibiscus tileaceus* (Cottonwood)***
- *Banksia integrifolia* (Coastal Banksia)
- *Casuarina equisetifolia* var. *incana* (Coastal She-Oak)
- *Pandanus tectorius* (Screwpine)
- *Acronychia imperforata* (Fraser Island Apple)

Objectives:

Consolidate the elevated dark horizon to support turtle sea-finding behaviour.



Image 3: Reference Site Zone 3

Species palette provides examples of species to be planted and those likely to naturally occur in the seedbank. Indicative draft only and subject to change in consultation with relevant experts and development of EPBC referral.

***No additional Cottonwood trees will be planted in this zone

Zone 4: New Vegetated Dark Horizon and Coastal Pathway Amenity

Species palette- Key examples

- *Alectryon coriaceus* (Beach Birds Eye)
- *Banksia integrifolia* (Coastal Banksia)
- *Casuarina equisetifolia* var. *incana* (Coastal She-Oak)
- *Cuponiopsis anacardioides* (Tuckeroo)

Objectives:

Establish a new elevated dark horizon to support turtle sea-finding behaviour, amenity for coastal pathway users and local residents.



Image 4: Reference Site Zone 4

EPBC Process

Environmental Protection and Biodiversity Conservation Act - Referral process

- Prepare EPBC Assessment Report
- Pre-referral meeting with Department of Climate Change, Energy, and the Environment and Water (DCCEEW)
- Finalise the EPBC Assessment Report
- Lodge referral end of May
- All referrals are subject to a mandatory public comment period of 10 business days
- Anticipate receiving a response from DCCEEW by early July

9.0 Next Steps

1. Pilot Project at Shelly Beach

- Undertake community stakeholder project update exercise
- Advance development of pilot project scope
- Lodge EPBC referral end of May, anticipate receiving a response by early July
- Finalise preparation for pilot project implementation, pending receipt of EPBC outcome

2. Utilise plan to drive action and planning

- Environmental Operations and Parks & Gardens develop action plan – projects, priorities, resourcing, funding

Ongoing

Provision of updates at key points eg. Lodgement of EPBC referral, receipt of response, proposed commencement of works

9.0 Next Steps

Delivered through spatial strategies

Landscape and place management plan

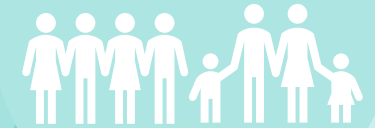
Guide & align action

A framework for decisions and action

Priority Place Values

Protect and Enhance

- I. The turtles
- II. The dune and beach habitat
- III. The public amenity of the area and the coastal path.



Thank you.



See council's website for further details
www.sunshinecoast.qld.gov.au