

Coastal Management Plan Part 1





DRAFT Coastal Management Plan (Part 1)

This document has been published by the City of Wanneroo. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith and on the basis that the Council, its employees and agents are not liable for any damage or loss whatsoever which may occur as a result of action taken or not taken, as the case may be, in respect of any representation, statement, opinion and advice referred to herein. Professional advice should be obtained before applying the information contained in this document to particular circumstances



TABLE OF CONTENTS

PAGE

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 5 |
| 1.0 INTRODUCTION | 8 |
| 1.1 Purpose and Scope | 8 |
| 1.2 Objectives | 8 |
| 1.3 Study Area | 9 |
| 1.3.1 Statutory Framework | 9 |
| 1.3.2 State Planning Policy 2.6 | 9 |
| 1.3.3 Draft Perth Coastal Planning Strategy | 9 |
| 1.4 Overall Coastal Characteristics | 10 |
| 1.4.1 Wind | 10 |
| 1.4.2 Waves | 10 |
| 1.4.3 Currents/Tides | 10 |
| 1.4.4 Sediment | 10 |
| 1.4.5 Sand Types | 10 |
| 2.0 CONSULTATION | 11 |
| 3.0 ISSUES | 15 |
| 3.1 Dog Beaches | 15 |
| 3.1.1 Background | 15 |
| 3.1.2 Advertised Options for Dog Beaches | 16 |
| 3.1.3 Key Findings | 17 |
| 3.2 Horse Beaches | 19 |
| 3.2.1 Background | 19 |
| 3.2.2 Advertised Options for Horse Beaches | 20 |
| 3.2.3 Key Findings | 21 |
| 3.3 Tourism | 22 |
| 3.3.1 Background | 22 |
| 3.3.2 Advertised Options for Tourism | 22 |



DRAFT Coastal Management Plan (Part 1)

| | | |
|-------|---|----|
| 3.3.3 | Key Findings | 22 |
| 3.4 | Segregation of Recreational Beach Activities | 26 |
| 3.4.1 | Background | 26 |
| 3.4.2 | Advertised Options for Segregation of Recreational Beach Activities | 26 |
| 3.4.3 | Key Findings | 26 |
| 3.5 | Beach Names | 27 |
| 3.5.1 | Background | 27 |
| 3.5.2 | Key Findings | 27 |
| 3.6 | Surf Life Saving Clubs | 28 |
| 3.6.1 | Background | 28 |
| 3.6.2 | Key Findings | 28 |
| 4.0 | EXISTING AND FUTURE USES OF THE COASTLINE | 30 |
| 5.0 | REFERENCES | 62 |
| 6.0 | APPENDICES | 63 |



Executive Summary

As a result of several enquiries and petitions received by the City of Wanneroo (CoW) regarding dog beaches and the implementation of a horse beach, Council resolved (6 April 2010, 1 June 2010) that a Coastal Management Plan was required to address these issues and consolidate management practices along the City's coastline.

The City of Wanneroo's Coastal Management Plan (CMP) is being developed in two parts. Part 1 of the CMP comprises a 'data capture' of the City's coastline, describes a number of issues related to use of the coastline, documents existing and proposed facilities along the coast and discusses the potential ways in which known issues can be resolved. Part 2 of the CMP will follow the adoption of Part 1 and is intended to address previous commitments made in existing foreshore management plans, as well as the potential impacts of climate change, and future community needs, including recommendations for future coastal uses.

Part 1 of the CMP is split into the following four sections:

1. Introduction;
2. Consultation;
3. Issues (known issues and conflicts associated with coastal use in the City of Wanneroo), including:
 - Dog Beaches;
 - Horse Beaches;
 - Tourism;
 - Segregation of Recreational Activities;
 - Beach Names;
 - Surf Life Saving Clubs; and
4. Existing uses and Future Uses of the coastline (16 maps outlining coastal characteristics and current land uses as well as current assets and facilities. Accompanying each map is a table detailing prohibited and allowed activities, proposed developments, specific issues and any associated foreshore management plans).

The community consultation for the CMP Part 1 commenced Monday 24 October 2011 and concluded Friday 27 January 2012 and consisted of the following:

- Public notices in the Community Newspaper;
- Displays in the City's libraries;
- Information on the City's website;
- Erection of beach signs along the City's coastline displaying all relevant information. A 'QR' code was included on the signs, which when photographed with a smart phone automatically linked the community to the CMP web page;
- A questionnaire was prepared and was available online or in hard copy from the Civic Centre or any of the City's libraries and this was the official submission accepted;
- Sausage sizzles at the City's dog beaches as well as The Spot in Two Rocks;
- A staffed display at the Wanneroo Show;
- Regular updates on the City's Facebook and Twitter page notifying the public of the Plan and informing them of upcoming events; and
- The City's online forum "Engage" could be accessed from the CMP link on the City's webpage; enabling the community to comment and discuss the Draft CMP Part 1 with other community members.

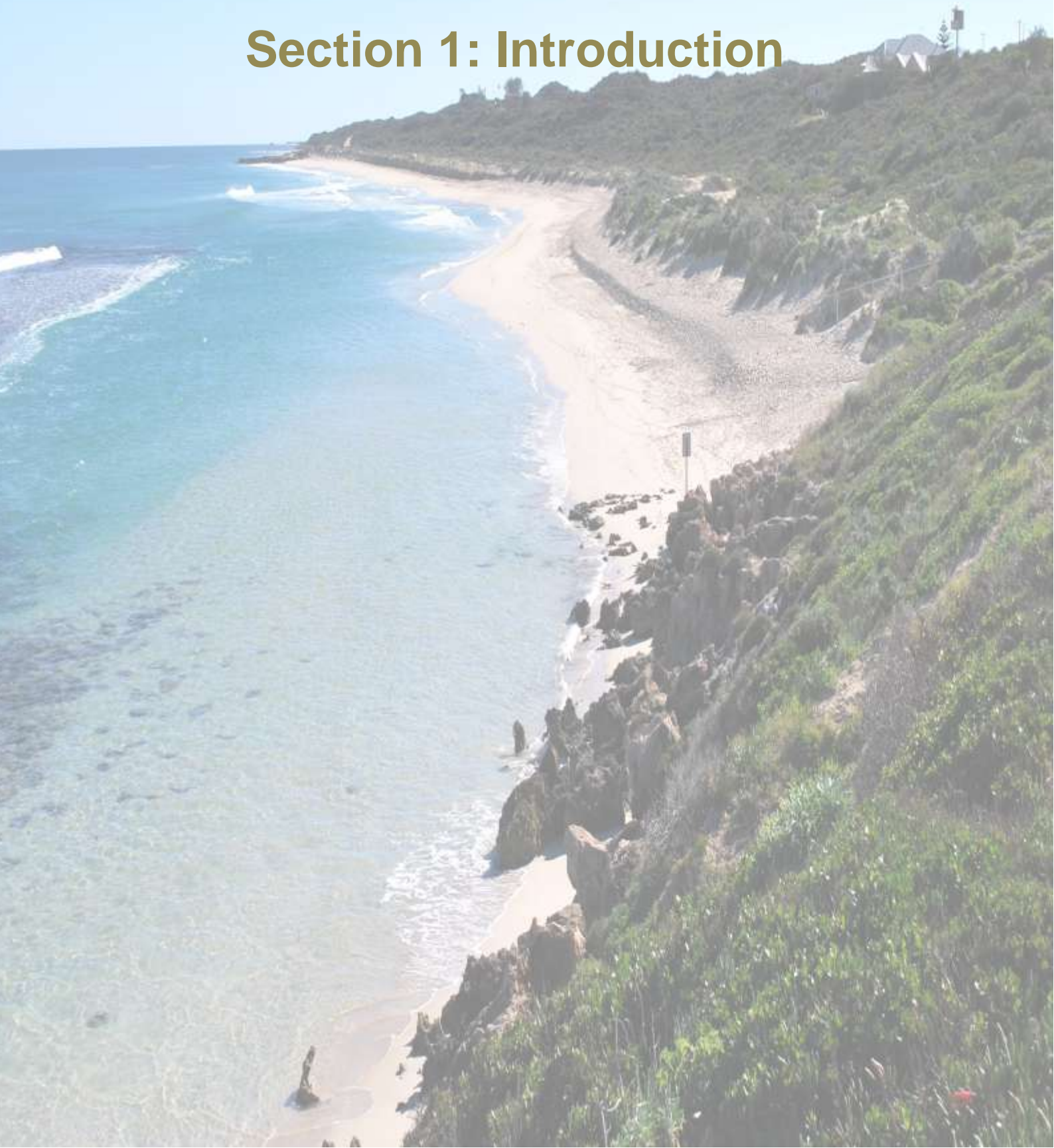


The following eight key recommendations were formed following the collation and review of submissions received during the community consultation.

Further information regarding the below recommendations is included in Section 3 of this document.

- RECOMMENDATION 1:** Extend Quinns dog beach south 700 metres to the northern most access of the existing car park at Fred Stubs Memorial Grove within the next 5 years.
- RECOMMENDATION 2:** Investigate the option of a split use dog and horse beach with separate times for dogs and horses in Tamala Park.
- RECOMMENDATION 3:** The City liaises with PEET to finalise location and timing of a dog beach in North Alkimos.
- RECOMMENDATION 4:** Undertake a feasibility study to establish the environmental impacts, as well as the suitability of a horse beach at Tamala Park.
- RECOMMENDATION 5:** Undertake a feasibility study to determine whether artificial reefs would be suitable along the City's coastline.
- RECOMMENDATION 6:** Investigate the feasibility and suitability of a tidal pool along the City's coastline.
- RECOMMENDATION 7:** In the CMP Part 2, investigate appropriate locations and opportunities for designated beach volley ball and/or beach soccer areas, open air amphitheatres, bars and cafes and open air markets.
- RECOMMENDATION 8:** Investigate the option of segregating jet skiing and kite surfing from other beach activities.

Section 1: Introduction





1.0 Introduction

The City of Wanneroo's (CoW) coastline extends 39 kilometres from Tamala Park to Two Rocks and provides an excellent environment for residents to enjoy recreational activities and natural areas. It is characterised by coastal limestone cliffs and coastal heathland vegetation and also represents relic sand dune formations (the Quindalup dune system) occurring as beach ridges.

As the City's population continues to grow and more of the City's residents utilise the coast, so too will the need for a consolidated Coastal Management Plan. The coast is one of the City's greatest assets and provides many opportunities for recreation, tourism and protection of the environment. By creating a consolidated management plan, the City is able to inventory existing assets and facilities as well as identify gaps where the community's needs are not being met, to allow for effective planning in the future. This information can also be used to ensure the most important coastal natural assets are retained and protected.

The City of Wanneroo's draft Coastal Management Plan (CMP) is being developed in two parts. This document is the first part of the two part plan and identifies major issues that directly impact upon the community and require further investigation. The issues that are discussed in this document include:

- The possibility of designating additional dog beaches;
- The possibility of designating a horse beach within the City of Wanneroo;
- Tourism ventures within the City of Wanneroo;
- The possibility of segregating recreational beach activities;
- The possibility of additional Surf Life Saving Clubs; and
- Naming beaches along the entire City of Wanneroo coastline.

Further to the above, included in Section 4 of this document, are 16 maps outlining coastal characteristics, current land uses as well as current assets and facilities. Accompanying each map is a table detailing already prohibited and allowed activities, possible future uses, specific issues and any associated foreshore management plans.

Part 2 of the CMP will follow the adoption of Part 1 and is intended to address previous commitments made in existing foreshore management plans, as well as the potential impacts of climate change, and future community needs, including recommendations for future coastal uses.

1.1 Purpose and Scope

The City of Wanneroo's Coastal Management Plan (Part 1) provides an overview of current and future coastal land use from Tamala Park to Two Rocks. It will enable the City to focus further research and ultimately allow for effective planning, implementation and management of recreation and conservation coastal areas, together with coastal facilities and assets both now and into the future.

1.2 Objectives

The objectives of this document are to:

1. Document existing uses of and facilities included on CoW coastal reserves;
2. Investigate key community issues and concerns regarding coastal access and use; and
3. Obtain community feedback on the issues surrounding coastal access and use.



1.3 Study Area

The CMP encompasses the foreshore area along the Wanneroo coastline. The cadastral boundary has been used to include the land parcels closest to the coast. The CMP area extends 39 kilometres from Two Rocks to Tamala Park and is depicted on Map 1 in Section 3 of this plan.

1.3.1 Statutory Framework

The majority of the CMP area is reserved 'Parks and Recreation' under the Metropolitan Region Scheme. Development in the reserve requires the approval of the Western Australian Planning Commission (WAPC).

Most of the coastline in the City has undergone, or is currently undergoing urbanisation. New urban areas are covered by either the District Structure Plan (DSP) for Alkimos-Eglinton or the DSP for Yanchep-Two Rocks. These two DSPs require the ecological integrity of the coastal foreshore to be maintained and managed in balance with recreation. The strategy to achieve this is the requirement for local Foreshore Management Plans to be produced.

In existing residential areas, Foreshore Management Plans are generally already in place having been previously approved by the City and WAPC. Implementation of the approved plans occurs at the time of subdivision or development of the adjacent land, or through individual infrastructure projects undertaken by the City.

1.3.2 State Planning Policy 2.6

State Planning Policy No 2.6 – State Coastal Planning (WAPC 2003) (SPP 2.6), identifies the requirement for establishing coastal reserves in Western Australia. The policy requires the area of foreshore reserve to provide sufficient setback to coastal processes, protect ecological values, landscape, amenity, indigenous and cultural heritage, public access, recreation and safety.

The WAPC has recently issued the updated draft SPP 2.6 for public comment, which includes an amended adopted sea level rise value of 0.9m, to accommodate the most recent sea level rise scientific information.

1.3.3 Draft Perth Coastal Planning Strategy

The draft Perth Coastal Planning Strategy (WAPC 2008) has been produced to provide a framework for sustainable planning of the metropolitan coastline and ensure provision of conservation and recreation areas and adequate infrastructure and development.

The CMP will be in accordance with and compliment the State coastal planning that has already occurred.

Section 2: Consultation





2.0 Consultation

The community consultation for the CMP Part 1 commenced Monday 24 October 2011 and concluded Friday 27 January 2012. The following table outlines that methods and outcomes of the different aspects of the consultation.

Consultation Summary

What was involved

Outcomes



Nine (9) signs were placed at different access ways along the City's coastline. The signs featured relevant maps as well as a 'QR' code which when photographed with a smart phone automatically linked the community to the CMP web page.

Many enquires received throughout the duration of the consultation were due to the public seeing the beach signs and seeking more information.



Sausage sizzles were held at each of the City's dog beaches as well as The Spot in Two Rocks.

The principle of the sausage sizzles was to actively go out into the community and seek their opinion where they use the beach.

Sausage sizzles were a very effective way to engage with the community.

The largest in attendance was Quinns dog beach with over 100 people.

Approximately 70 people attended Two Rocks sausage sizzle.

Approximately 30 people attended Yanchep and The Spot sausage sizzles.

The overall feeling from the community was very positive, with the main message being that the community was very grateful for the opportunity to have their say and felt the City should do more of the same to actively engage with the community.



Consultation Summary

What was involved

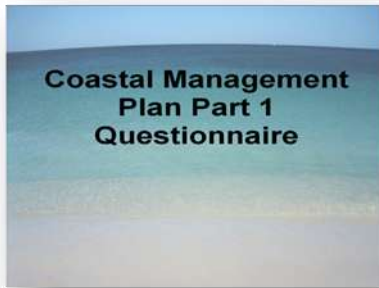
Outcomes



A CMP display was included in the City's marquee at the **Wanneroo Show** over two days.

The Wanneroo Show was a great success, with staff talking to over 100 show goers and assisting them in filling out the questionnaire.

The public showed a genuine interest in the future of the coast, with the overall view being positive towards the CMP and the consultation approach.



Formal submissions were accepted in the form of a **questionnaire** which was available online or in hard copy from the Civic Centre or any of the City's libraries.

A total of **211** submissions were received.

(20 of the 211 were written submissions (not a questionnaire)).



A copy of the plan as well as an information sheet and an FAQ sheet were available to download from the **City's website**.

The webpage was a very successful component of the consultation, as the public appreciated having all the information in one place and being able to read it at their leisure.

Engage

An online forum '**Engage**' was available from the CMP webpage, enabling comments and discussion of the Plan between the community.

7 comments were received on Engage.



Regular updates were posted on the City's **Facebook** and **Twitter** pages, notifying the public of the Plan and informing them of upcoming events.

A small number of 'likes' were received on each of the posts that were put on the Facebook Page.

Facebook and twitter were good tools to connect with the younger generations as well as delivering information to the public instantly.



Consultation Summary

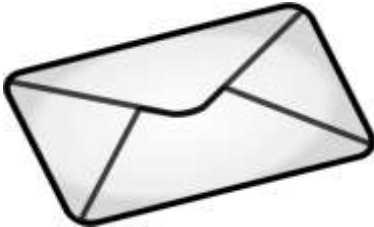
What was involved

Outcomes



A CMP display was set up at each of the **City's Libraries** with a copy of the Plan, as well as an information sheet, FAQ sheet and hard copies of the questionnaire.

The display in the City's libraries were helpful in providing the public with hard copy questionnaires or a computer if they wished to complete the questionnaire online.



A copy of the Draft CMP Part1, a questionnaire, information sheet and consultation schedule was distributed to key stakeholders, Residents Associations, community groups and special interest groups.

An invitation was also extended to Residents Associations and community groups to meet with the City to discuss the Plan, if they wish.

6 submissions were received from major land owners:

- Satterley;
- Lend Lease;
- Westminster Estates;
- Jindalee Beachside Estate Developers;
- PEET; and
- Capricorn Village Joint Venture.

5 submissions were also received from community groups:

- ONE Surf School;
- Hang Gliding Association of WA;
- Quinns Rocks Environmental Group;
- Mindarie Coast Care Association; and
- Two Rocks Residents Association.

Section 3: Issues





3.0 Issues

In recent times, it has become increasingly apparent that as the City grows and population expands, increasing pressure is being placed on the coastline as the beaches are more intensively used. The increase in beach use has also led to divided community opinion as to how the coastline should be used and managed, especially with regards to dog beaches.

This section therefore explores a number of key issues related to use of the City of Wanneroo coastline, highlights the options that were given to the public during community consultation for each identified issue, presents the key results of the community consultation and where appropriate makes recommendations for future use.

3.1 Dog Beaches

3.1.1 Background

In June 2009 a petition was presented to Council to extend the Quinns Rocks dog beach (comprising 829 signatures). This resulted in a three week period of community consultation in July/August 2009 to determine community opinion on an extension to the Quinns Rocks dog beach of 1 km.

Following the community consultation in August 2009 a report on the proposal to extend Quinns Rocks dog beach was presented to 22 September 2009 Council Meeting when it was resolved to refer the item back to Administration. Further consultation was carried out in early 2010 and the Council received a petition of 1,459 signatures supporting an extension to the Quinns Rocks dog beach on the 6th April 2010. The results of the survey indicated that public opinion is divided regarding the extension of the Quinns Rocks dog beach, or the implementation of a dog beach at Claytons beach. In appreciation of this, Council therefore determined at the meetings held on the 6 April 2010 and the 1 June 2010 that a more comprehensive investigation was required (in the form of a Coastal Management Plan), involving a thorough environmental assessment of the current dog beach exercise areas as well as the need for extra dog beaches now and as the City's population grows.

In an attempt to address this issue, data has been analysed to determine the number of registered dogs within the City per metre of existing allocated dog beach. This has then been compared to the provision of dog beaches in other local government districts. Information has also been collected regarding projected population growth and additional beach required to accommodate such growth (Refer Appendix A & B).

The City of Wanneroo has 9.75 registered dogs per metre of existing allocated dog beach. This is a much lower density of dogs per allocated metre of beach than either Joondalup (25.20 dogs/m of allocated beach) or Stirling (21.79 dogs/m of allocated beach), and is only marginally higher than the City of Cockburn (8.16 dogs/m of allocated beach).

As the population of Wanneroo increases, the number of dogs per allocated metre of dog beach will also increase unless more dog beaches are provided. This is likely to also increase the use of the dog beaches and increase the pressure they are under. Based on population growth projections, if the City's current number of dogs per allocated metre of beach is to be maintained, it is estimated that the City will need to provide an additional 1.5km of extra dog beach over the next 20 years.



3.1.2 Advertised Options for Dog Beaches

The below options were included in the questionnaire that was put forward to the community as part of the community consultation.

In response to community input prior to commencement of the community consultation, some of the 'Change to beach use' options were updated in the questionnaire and therefore differed slightly to the 'Change of beach options' below.

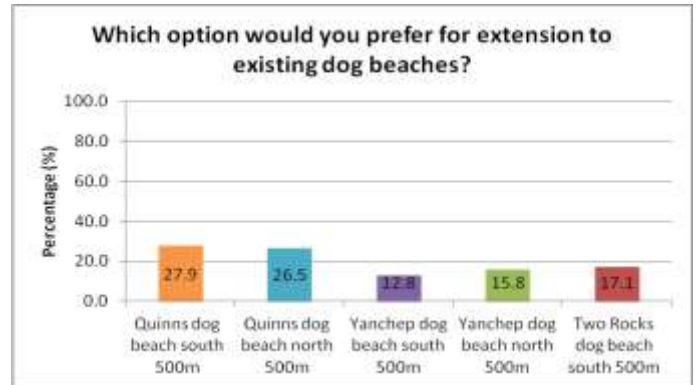
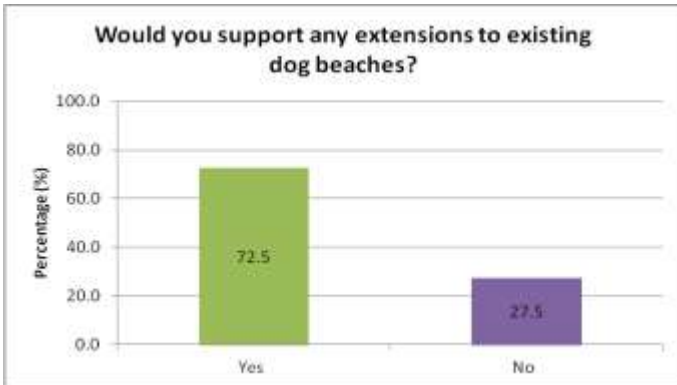
| Option | Change to beach use | Impact by 2031 | Comment |
|------------------------------------|---|--|---|
| 1. No additional beaches | Nil | Dogs per metre of allocated dog beach will increase to 16.35. | This option will place increasing pressure on existing dog beaches. |
| 2. Extend the existing dog beaches | <ul style="list-style-type: none"> • Yanchep Dog Beach extended North 250m; and • Quinns Dog Beach extended South 250m; and • Two Rocks Dog Beach extended South 1km. | Dogs per metre of beach will remain at 9.75. | This option may not be popular with some existing residents in the areas affected. |
| 3. Provide New dog beaches | <ul style="list-style-type: none"> • North Alkimos 100m from the northern boundary (see map 11) • Eglinton immediately north of the proposed Marina | New dog beaches will provide the 1.5km required to maintain the current number of dogs per metre of beach at 9.75 | This option may not be popular with some future residents in the areas affected. |
| 4. Change to beach usage | <p>Changes to beach usage would allow dogs access to the majority of beaches within the City during the winter season (April 1 – October 31)</p> <p>Summer Season: November 1 – March 31</p> <ul style="list-style-type: none"> - Dogs are only allowed on designated dog beaches - Dogs are allowed on certain beaches from 5.30 – 9.30 <p>Winter Season: April 1 – October 31</p> <ul style="list-style-type: none"> - During the off season dogs are allowed on all beaches excluding popular tourist beaches | Extra dog beaches would be provided but use limited. In this way 9.75 dogs per metre of beach would be maintained. | This option may be difficult to monitor and enforce. More than 1.5km may be required given the restrictions on use. |



3.1.3 Key Findings

Below are the key findings of the community consultation and the City's recommendations in response to these.

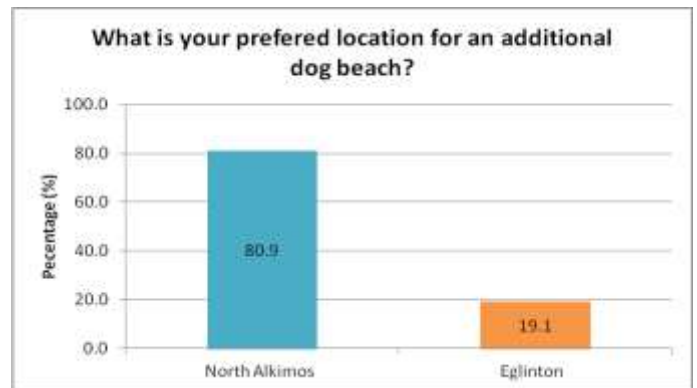
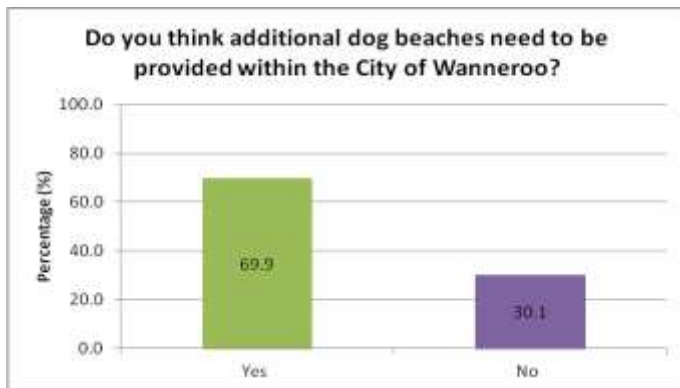
Extension to existing dog beaches



72.5% of submitters supported an extension to an existing dog beach indicating the need for additional provisions within existing communities.

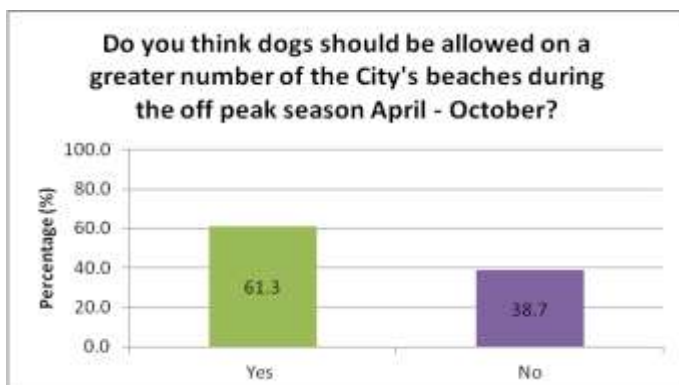
54.4% of submitters supported an extension to the Quinns dog beach, indicating that there is a need for additional provisions within the existing Quinns community.

Additional dog beaches



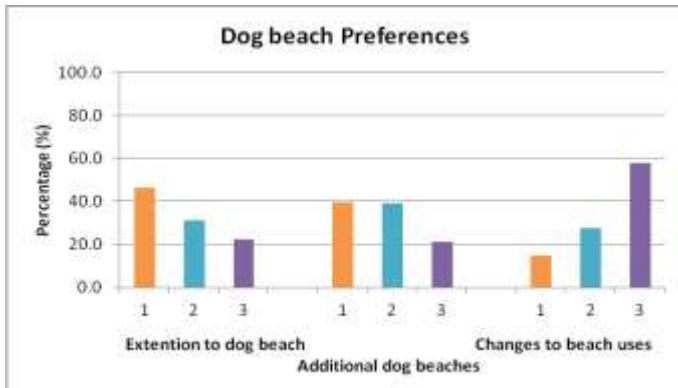
69% of submitters supported an additional dog beach, indicating the need to provide additional dog beaches for future communities.

Changes to beach usage





Overall dog beach preference



1=First preference
2=Second preference
3=Third preference

The issue of additional dog beaches was one of the main issues raised within the CMP Part 1 and as such, there were many comments submitted in relation to this matter.

One of the principal concerns highlighted in the consultation responses was the need for an additional dog beach between Whitforde dog beach, located in the City of Joondalup and Quinns dog beach. The City acknowledges these concerns and the increased pressure placed on the two beaches, given that they are approximately 20km apart. In order to alleviate the pressure, The City recommends extending Quinns dog beach south 700 metres to the northern most access of the existing Fred Stubs Memorial Grove car park within the next 5 years.

To further address this issue in the longer term (10 to 15 years), the City recommends investigation into the option of a split use dog and horse beach with separate times for dogs and horses in Tamala Park. The use of the beach by horses is discussed below, under the heading 'Horse Beaches'.

The consultation responses also highlighted the need for an additional dog beach within the new coastal development of North Alkimos. The land developer PEET have included the provision for a dog beach in their Foreshore Management Plan (FMP), therefore, it is the intention that the City will liaise with PEET, to finalise the location and timing of a dog beach in North Alkimos.

As the population increases due to new development in existing communities, such as Yanchep and Two Rocks, there will be the need for additional dog beaches within these locations. It is intended that the City will reassess these communities within 5 to 10 years as part of the major review of the CMP Part 2; to ensure that adequate dog beaches are being provided in line with population growth.

- RECOMMENDATION 1:** Extend Quinns dog beach south 700 metres to the northern most access of the existing car park at Fred Stubs Memorial Grove within the next 5 years.
- RECOMMENDATION 2:** Investigate the option of a split use dog and horse beach with separate times for dogs and horses in Tamala Park.
- RECOMMENDATION 3:** The City liaises with PEET to finalise location and timing of a dog beach in North Alkimos.



3.2 Horse Beaches

3.2.1 Background

As the horse beach in the City of Joondalup (Hillarys) is due to close, the City of Wanneroo is investigating as part of the draft CMP Part 1, the possibility of designating a horse exercise beach within its boundaries. To date, appropriate locations for a horse beach have been identified and pony and racing clubs have been contacted seeking further information regarding horse requirements and also the distribution of horses throughout the City of Wanneroo (Refer Appendix C).

The City of Wanneroo's coastline is predominantly dominated by rocky outcrops and reef in the intertidal region, and therefore has very little shore that is appropriate for a horse beach. However, four locations have been identified based on the following site characteristics:

| Site Characteristic | Explanation |
|--|---|
| No Rocks present offshore. | As the horses are waded out into the water for low impact resistance training, rocks present offshore pose a significant safety risk. |
| A stable beach (not heavily prone to erosion). | Animal beaches are usually utilised year round. Activity taking place on the beach during winter when the beach naturally erodes may accelerate the rate of erosion and increase the damage caused to the beach during the winter months. |
| An even and wide beach. | If the beach is too narrow there may not be enough room for animals to pass each other without confrontation during peak usage times. An even beach will minimise tripping. |
| Ample Space for a car park. | Adequate space will be needed to accommodate car parks that are able to accommodate horse floats, as well as allowing easy entrance and exit from the car park. |

A horse beach was previously proposed in the 1997 Two Rocks Yanchep Foreshore Management Plan, 3km south of the Yanchep Lagoon in North Eglinton. However, due to the number of rocks in the intertidal region within this area, the City no longer considers this area to be suitable for a horse beach, as it could pose a safety risk to horses.



3.2.2 Advertised Options for Horse Beaches

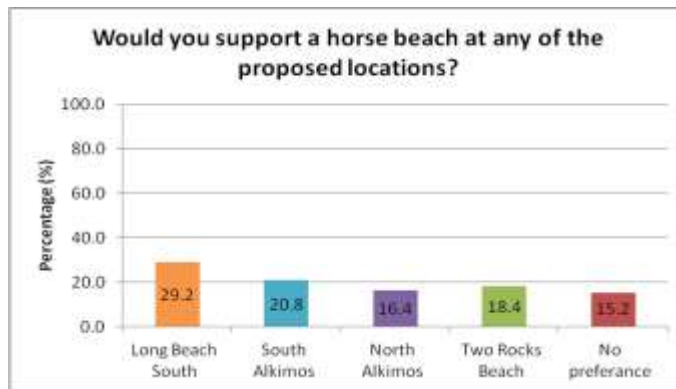
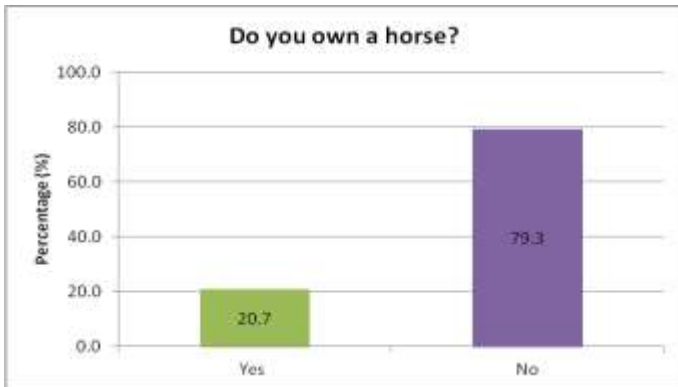
The below four options for a horse beach were include in the questionnaire that was put forward to the community as part of the community consultation.

| Beach Locations | Reasons for Suitability | Issues with the Location | Closest beach access road |
|---|--|---|--|
| 1. Long Beach south through to Tamala Park foreshore | <ul style="list-style-type: none"> - The beach is wide and even; - There are no rocks present on shore; - There are no rocks present immediately offshore; - There will be no residential development opposite the site for some time; and - There is ample space for a car park. | <ul style="list-style-type: none"> - Access is an issue as there are currently no roads providing access to the beach; and - There is a reef between 50 and 80 metres offshore. | Long Beach Promenade. |
| 2. South Alkimos (Just north of the Jindalee Alkimos border) | <ul style="list-style-type: none"> - The beach is quite wide and reasonably even; - There are no rocks present on shore; - There are no reefs or rocks present offshore; and - There is ample space for a car park. | <ul style="list-style-type: none"> - Access is an issue as there are currently no roads providing access to the beach; and - Adjoining private land owners may not support the implementation of a horse beach. | Jindalee Boulevard. |
| 3. North Alkimos (Just south of the Alkimos Eglinton border) | <ul style="list-style-type: none"> - The beach is wide and even; - There are no rocks present on shore; - There are no reefs or rocks present offshore; - There appears to be no major foreshore development proposed opposite the site; and - There is ample space for a car park. | <ul style="list-style-type: none"> - Access is an issue as there are currently no roads providing access to the beach; and - Adjoining private land owners may not support the implementation of a horse beach. | <p>Pipidinny Road (To the north - does not extend through to the beach).</p> <p>Trumpeter Parade, Yanchep (To the far north)</p> <p>Jindalee Boulevard (To the south).</p> |
| 4. Two Rocks Beach (South of Leemans Landing and north of The Spot) | <ul style="list-style-type: none"> - The beach is wide and even; - There are no rocks present on shore; - There are no reefs or rocks present offshore; - There is no residential development west of Two Rocks Road; and - There is ample space for a car park. | <ul style="list-style-type: none"> - Access is an issue as there are currently no roads providing access to the beach. | Marcon Street. |



3.2.3 Key Findings

Below are the key findings of the community consultation and the City's recommendation in response to these.



Currently there are no horse beaches within the City of Wanneroo; however, due to the fact that the City of Joondalup is closing its horse beach at Whitfords, the City of Wanneroo has chosen to investigate the possibility of providing that amenity within the City of Wanneroo.

The community consultation identified that 71% of submitters support a horse beach within the City and of the four identified locations, Tamala Park received the most support with 29%.

While a large percentage of submitters support a horse beach within the City, a number of Mindarie residents do not support a horse beach at Mindarie as they fear that it will create congestion and increase traffic within Mindarie and would interrupt their beach use. A horse beach could be located at Tamala Park, approximately 900 metres south of the Mindarie Marina, to minimise any potential impacts on the nearby residents. Car parking and beach access could possibly be located in the Tamala Park development, avoiding the use of Longbeach Promenade. A horse beach would not be for the exclusive use of horses and therefore, would not restrict community access of the beach for walking or swimming. Therefore, the City recommends that a feasibility study be conducted to determine the suitability and the potential environmental impacts of a horse beach at Tamala Park.

The proposed location is contained within the Tamala Park Conservation Park, therefore the environmental impacts of horses will need to be thoroughly investigated and managed, and any clearing of natural vegetation will need to be offset.

The Department of Environment and Conservation (DEC) indicated that the Tamala Park Community Advisory Committee (TPCAC) is currently overseeing the preparation of an establishment plan for the entire coastal reserve to help guide future land managers (DEC and CoW) in the preparation of management plans and in seeking appropriate government funding.



The DEC recommends that any horse exercise area should not be approved until management of the coastal reserve has been clearly defined.

RECOMMENDATION 4: Undertake a feasibility study to determine the suitability and the potential environmental impacts of a horse beach at Tamala Park.

3.3 Tourism

3.3.1 Background

The coastline within the City of Wanneroo currently supports a number of tourism ventures and there is the potential to further expand and support these opportunities as the City grows and develops. This would provide greater amenities to current residents as well as providing activities and experiences to draw people into the City. Below are the current tourism related uses of the City's coastline.

- Fishing Charters;
- Boat Charters;
- Dive Charters;
- Sailing Schools;
- Mindarie Marina; and
- Two Rocks Marina.

3.3.2 Advertised Options for Tourism

Below are tourism suggestions that were included in the questionnaire put forward to the community, as part of the community consultation.

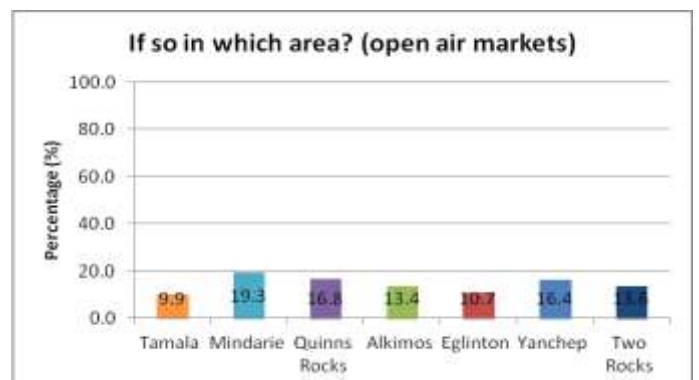
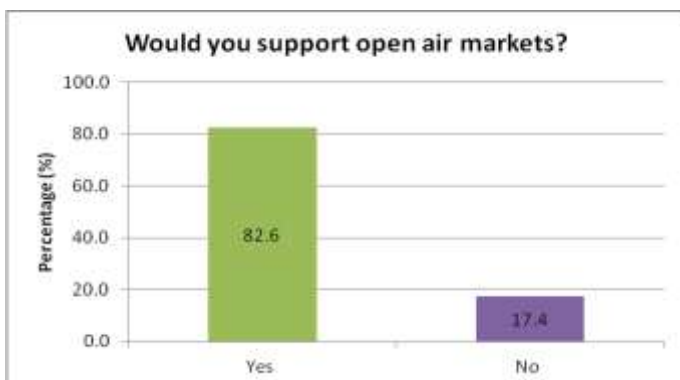
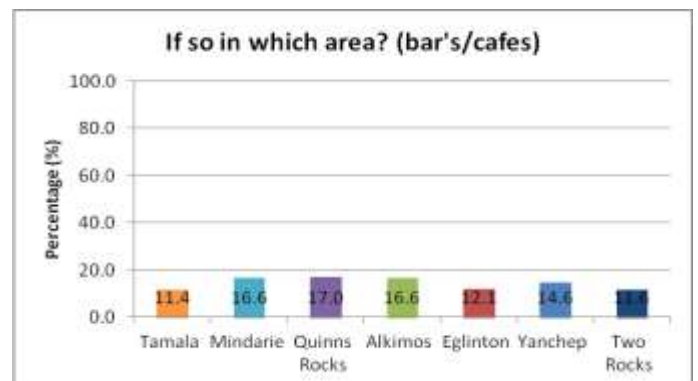
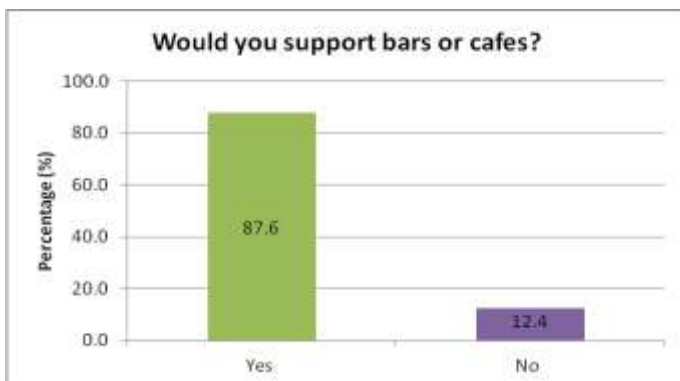
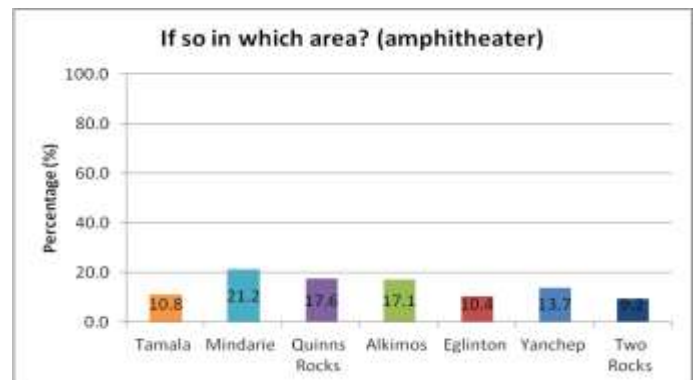
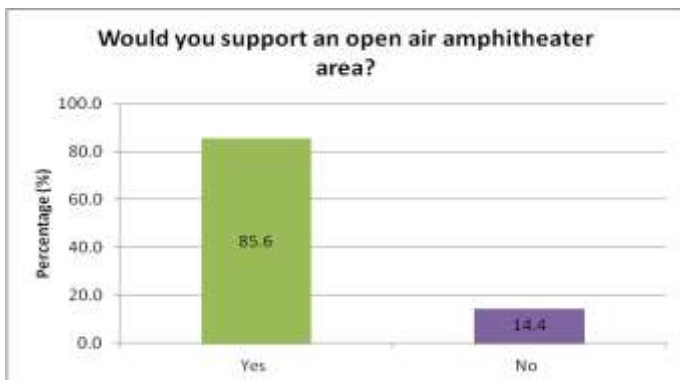
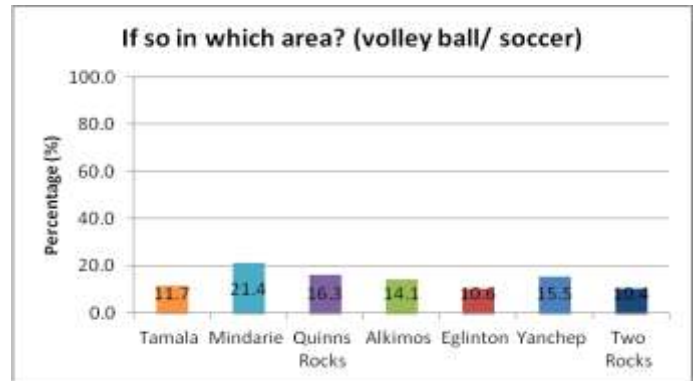
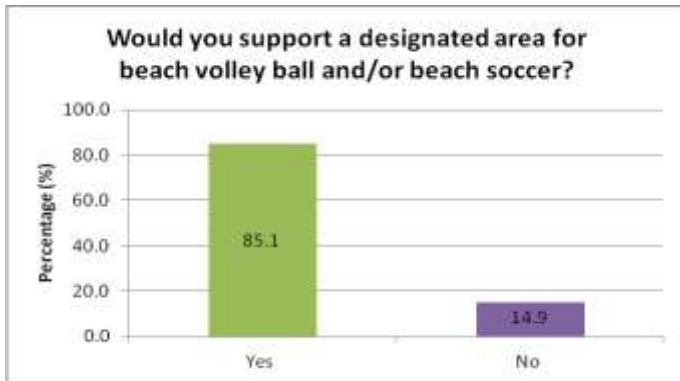
- Beach/ball areas e.g. beach volleyball;
- Open air amphitheatre
- Bars and Cafes;
- Open air markets;
- Parkland adjacent to the beach;
- Designated sand boarding area;
- Designated 4WD areas; and
- Short stay accommodation.

3.3.3 Key Findings

Below are the key findings of the community consultation, along with the City's recommendation in response to these.



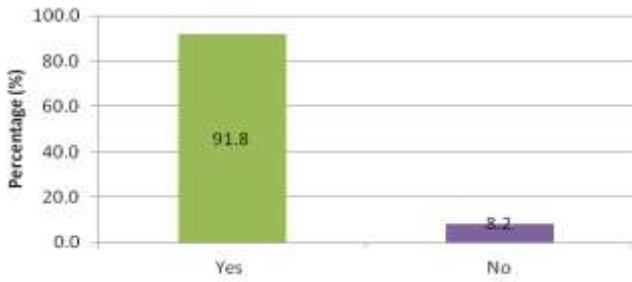
DRAFT Coastal Management Plan (Part 1)



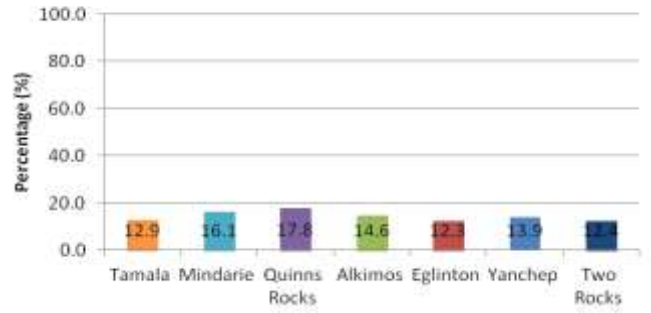


DRAFT Coastal Management Plan (Part 1)

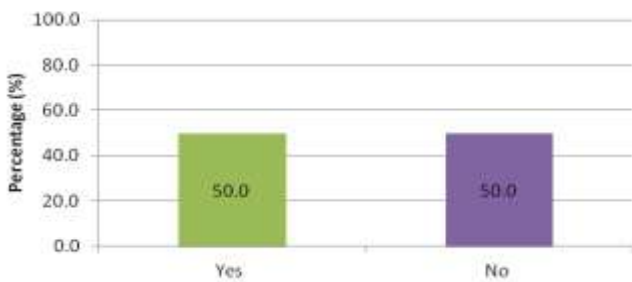
Would you support park land adjacent to the beach?



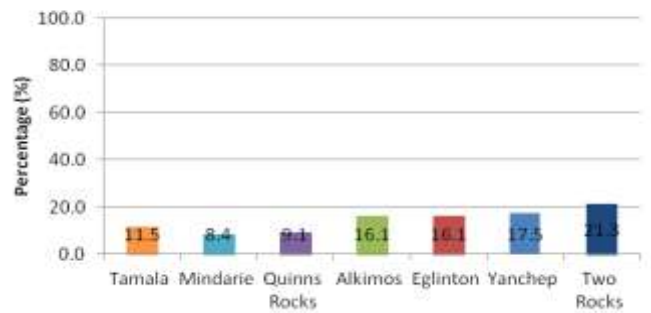
If so in which area? (parkland)



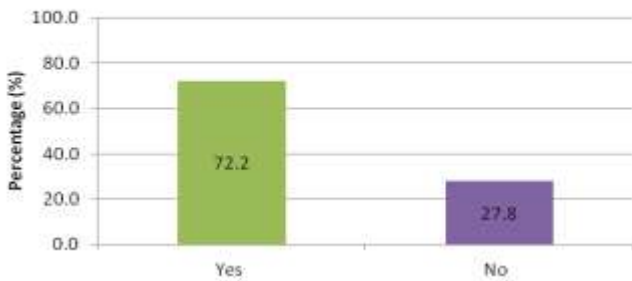
Would you support designated 4WD beach areas?



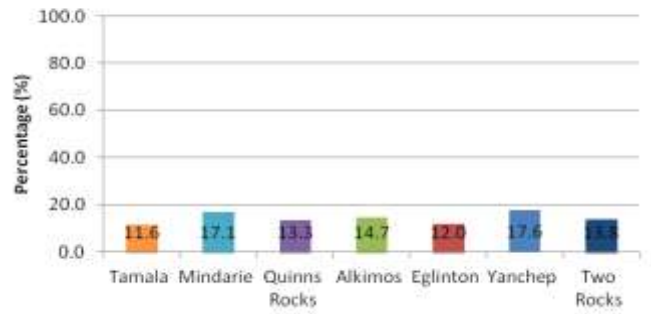
If so in which area? (4WD)



Would you support short stay accomodation?



If so in which area? (accomodation)





DRAFT Coastal Management Plan (Part 1)

Overall, tourism ventures were widely supported by the community, in particular, the construction of tidal pool for swimming and an artificial reef for surfing. Two petitions totalling 1,604 signatures were sent to the City in March 2012 requesting the construction of a tidal pool at the southern end of Quinns Beach. Sixteen separate requests for the construction of artificial surf reefs to enhance surf conditions were received during the community consultation.

In response to this, the City recommends that the feasibility and suitability of a tidal pool be investigated in Part 2 of the CMP, and a feasibility study be conducted to determine whether artificial reefs would be suitable along the City's coastline, along with potential locations. This could support further tourism and economic development opportunities in planned coastal activities centres.

Due to the wide support for tourism within the City, it is intended that other tourism ventures including but not exclusive to, designated beach volley ball and/or beach soccer areas, open air amphitheatre, bars and cafes and open air markets areas be investigated in the CMP Part 2.

However, whilst it is recognised that the community shows support for Tourism ventures and provisions, any implementation of such ventures where possible should be located near activity centres and in areas that promote the protection and conservation of the surrounding environment.

- RECOMMENDATION 5:** Undertake a feasibility study to determine whether an artificial reef would be suitable along the City's coastline.
- RECOMMENDATION 6:** Investigate the feasibility and suitability of a tidal pool along the City's coastline.
- RECOMMENDATION 7:** In the CMP Part 2, investigate appropriate locations and opportunities for designated beach volley ball and/or beach soccer areas, open air amphitheatre, bars and cafes and open air markets areas.



3.4 Segregation of Recreational Beach Activities

3.4.1 Background

A Coastal Risk Assessment and Treatment Plan of Yanchep was prepared for the City of Wanneroo and Surf Life Saving Western Australia in May 2010. This document notes that the separation of swimming and other aquatic recreational activities would increase safety on the City's beaches.

The above risk assessment recommended that the use of strategically placed buoys would provide clear identification of zoned areas, or alternatively, coloured flags could be used on the beach to mark the areas allocated to such activities as swimming, boarding, and fishing.

Segregation of beach uses, whilst common in other local government districts will change the way the City of Wanneroo's coastline is used. Community feedback has therefore been sought on this issue..

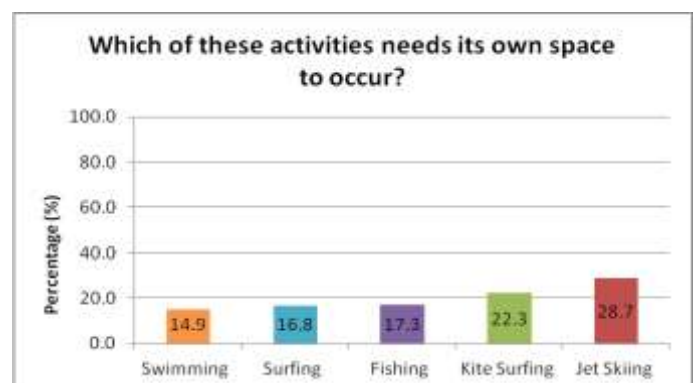
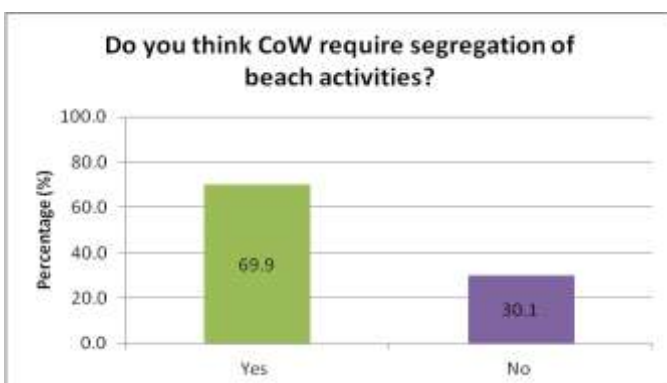
3.4.2 Advertised Options for Segregation of Recreational Beach Activities

Below are the options for segregation that were included in the questionnaire put forward to the community, as part of the community consultation:

- Swimming;
- Surfing;
- Fishing;
- Kite surfing; and
- Jet skiing.

3.4.3 Key Findings

Below are the key findings of the community consultation, along with the City's recommendations in response to these.



The City of Joondalup currently segregates kite surfing and jet skiing from other beach activities; however, with the exception of animal exercise, the City does not currently segregate any beach activities. Segregation of beach activities can increase the safety of all beach goers and this is particularly important given the City's future population growth, as there will an increase in people utilising the beach. Segregating beach activities would not imply exclusive use of the area. All beach users would be able to access these areas; however appropriately located signage would indicate they enter these areas at their own risk.



70% of submitters support the segregation of beach activities, in particular jet skiing and kite surfing. Based on these results and the increased safety it would provide to the community Administration supports segregation of these types of activities and recommends that the segregation of kite surfing and jet skiing from other beach activities be investigated in the CMP Part 2.

RECOMMENDATION 8: Investigate the option of segregating jet skiing and kite surfing from other beach activities.

3.5 Beach Names

3.5.1 Background

The City will be seeking to formally name all of the beaches along the full length of its coastline. To date, there are seven gazetted beach names in total along the City’s coastline (refer to below table). Public comment was sought on possible names for the existing un-named beaches. The suggested names will be considered for suitability and geographical or local relevance and then state referred to Landgate; the agency responsible for nomenclature.

| Current Formalised Beach Names | Location | Map |
|--------------------------------|--|-----|
| Mindarie Beach | Southern Boundary of Mindarie to Alexandria View | 16 |
| Claytons Beach | North end of Mindarie Beach | 16 |
| Quinns Beach | Quinns Rocks | 15 |
| Yanchep Beach | Yanchep – North of the Lagoon | 7 |
| The Spot | South Two Rocks | 5 |
| Unwin Shoals | Just North of the Spot | 5 |
| Wreck Point/Two Rocks Beach | Just south of Two Rocks Marina | 4/5 |

3.5.2 Key Findings

The following names were suggested by the public during community consultation:

- Fishermans Hollow – Yanchep south of the lagoon;
- Capricorn beach – opposite Club Capricorn;
- The Lagoon – *assumed* the lagoon area in Yanchep;**
- Alkimos Beach- South Alkimos;
- Sandy Bay (Unknown location);*
- Sunset beach (Unknown location);*
- Re name the horse beach after Cr Grierson;
- Granny’s Pool - Southern Portion of Yanchep Lagoon;
- Morgan’s Bay – Morgan means comes from the sea (Unknown location);*
- Jindalee Beach – Jindalee;
- Durrs – Surf break in north Two Rocks;



- The Rock – Quinns Rocks; and
- Lindsay Beach – Opposite the Mary Lindsay Homestead.

*Names put forward by the community that were not accompanied by location descriptions.

** Names put forward by the community that were not accompanied by location descriptions, however, the City has assumed the location based on the suggested name.

The procedure for naming parks and reserves is set out in the Geographic Names Committee Western Australia's Principles, Guidelines and Procedures.

The procedure outlines that; *any naming proposals should conform to the naming policy and include clear identification of the property to be named. All proposals must be submitted by Local Government.*

Final consideration of beach names, including specific locations and total length of proposed areas will be addressed through a separate cover to the CMP Part 2.

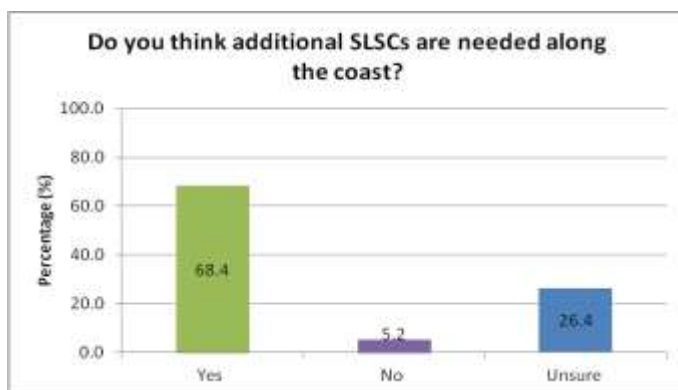
3.6 Surf Life Saving Clubs

3.6.1 Background

Surf Life Saving Clubs (SLSCs) are currently present in Yanchep and Mindarie/Quinns Rocks (refer Maps 8 and 15). The provision of a future SLSC has been included in the design for South Alkimos, with the proposed location being in the northern section of South Alkimos (refer Table 10). This facility has been supported in the City of Wanneroo Draft Community Facilities Plan and Draft Developers Contribution Plan.

3.6.2 Key Findings

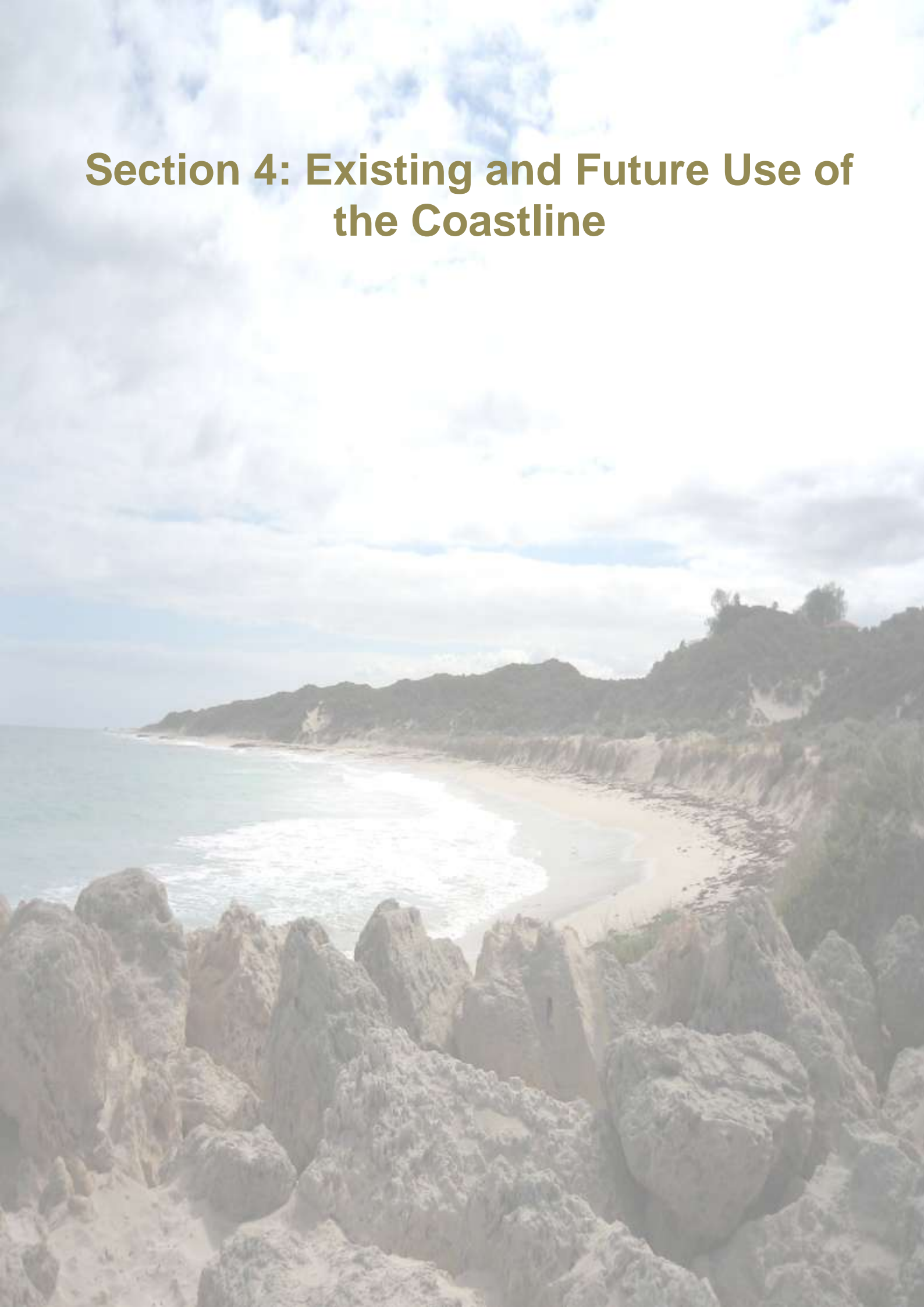
The questionnaire that was put forward to the public during the community consultation, sought public opinion on whether the City required additional SLSCs along the coast and if so where should they be situated and what sort of facilities and amenities should be included. Below are the key findings of the community consultation.



Comments received from the community regarding SLSCs indicated that there is a need for additional surf life saving provisions in areas of new development.

Although the City does not have control in regards to the location and implementation of SLSCs. It is intended that the City will liaise with Surf Life Saving Australia and the presidents of Yanchep and Quinns SLSCs to workshop the responses received throughout the consultation and identify the most appropriate locations for future SLSCs.

Section 4: Existing and Future Use of the Coastline





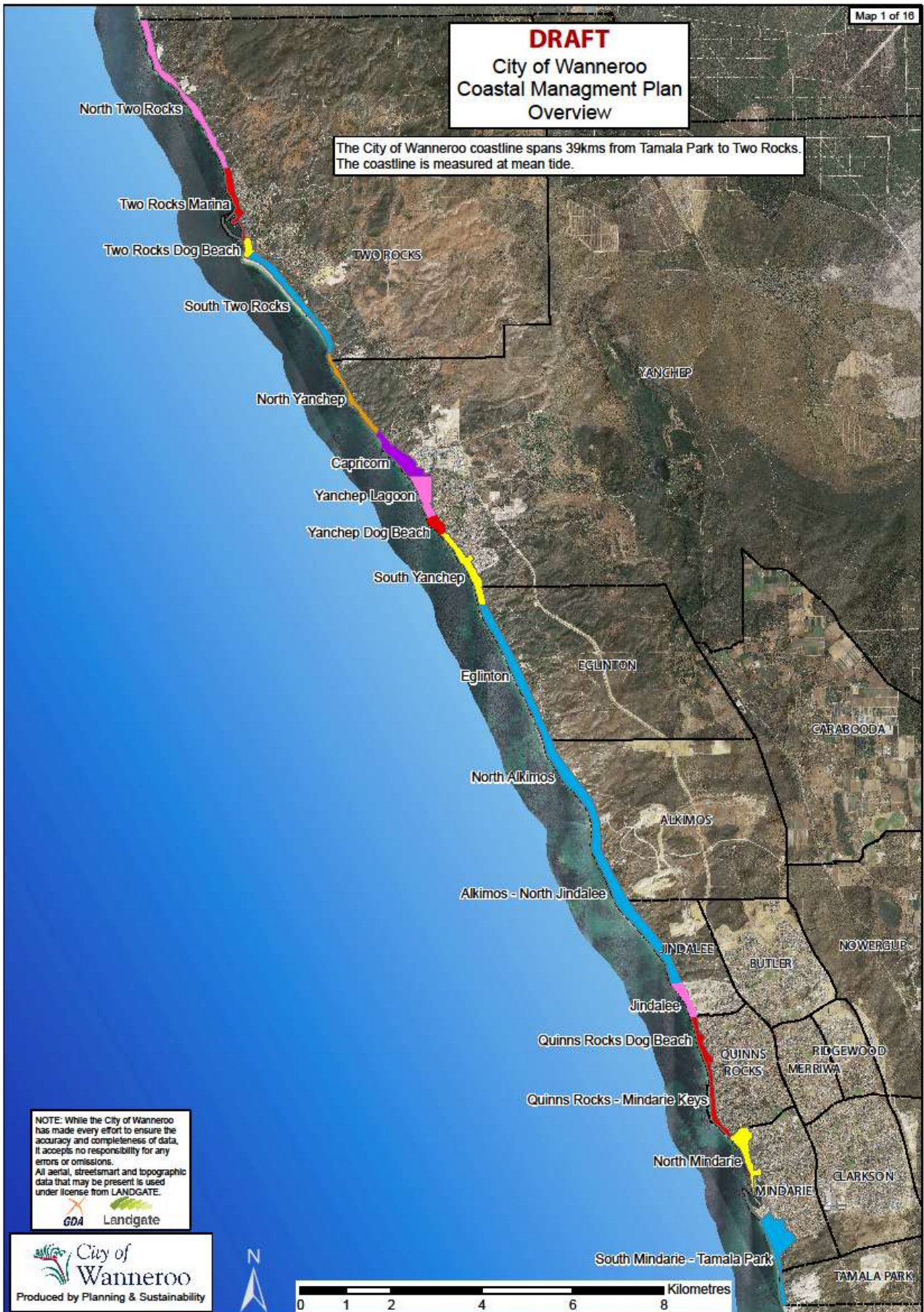
4.0 Existing and Future Uses of the Coastline

A series of 16 maps have been produced to document existing uses along the City of Wanneroo coastline. The coastline has been split into 14 precincts which are generally based on existing planning documents, such as foreshore management plans associated with local structure plans and implemented through conditions of subdivision.

Map 1 depicts these precincts, with the subsequent maps providing a close up aerial view of each precinct, with existing features highlighted. A table accompanies each map to describe allowed or prohibited activities, issues, possible future uses and opportunities that could be implemented to resolve some of the issues identified in Section 3 of this document.



DRAFT Coastal Management Plan (Part 1)





DRAFT Coastal Management Plan (Part 1)

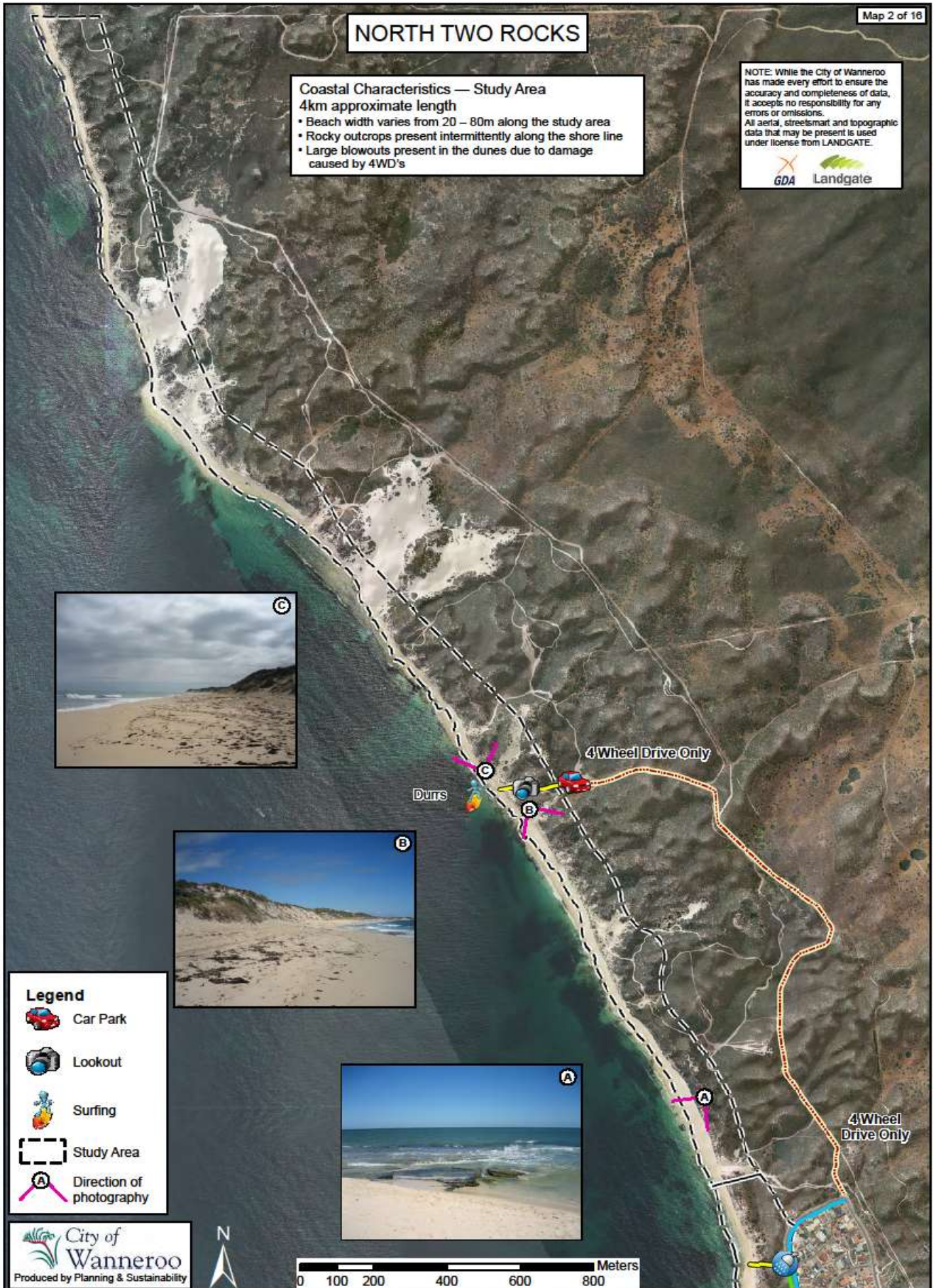




Table 1: North Two Rocks

| | |
|--|--|
| <p>Prohibited/Allowed Uses</p> | <p>The following activities are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amended); • 4WD – excluding the designated 4WD track (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). <p>The following activities are currently allowed in this area:</p> <ul style="list-style-type: none"> • 4WD – on designated 4WD track. |
| <p>Potential Future Uses</p> | <ul style="list-style-type: none"> • Beach Access Paths (As per CFMP 2004); • Dual Use Path (As per CFMP 2004); • Car Parking (As per CFMP 2004); • Signage (As per CFMP 2004); and • Fencing (As per CFMP 2004). |
| <p>Issues</p> | <ul style="list-style-type: none"> • Access tracks require ongoing maintenance. |
| <p>Associated Foreshore Management Plans</p> | <ul style="list-style-type: none"> • Two Rocks Superlot subdivision – Coastal Foreshore Management Plan 2004 (CFMP 2004). |



DRAFT Coastal Management Plan (Part 1)

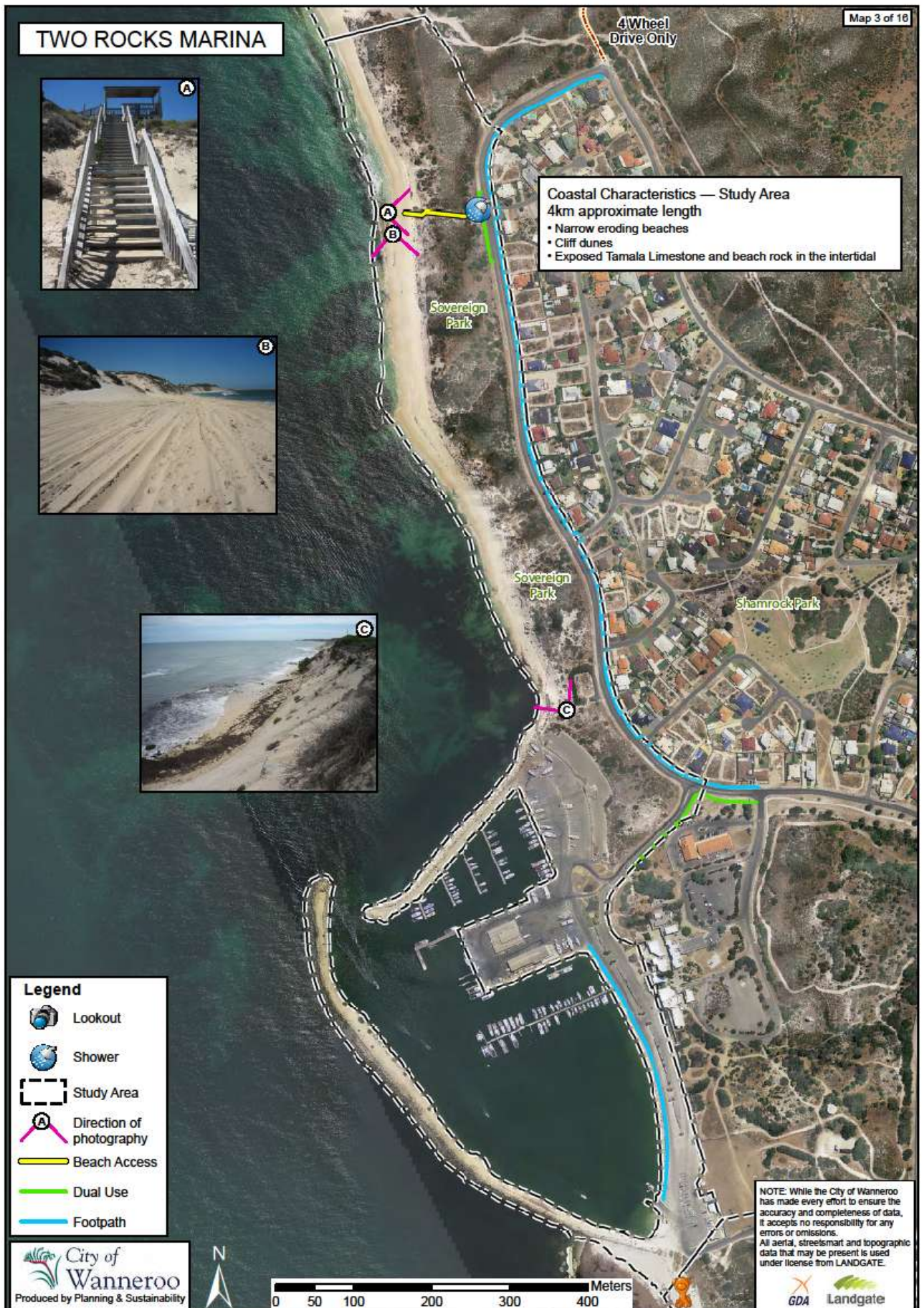




Table 2: Two Rocks Marina

| | |
|---------------------------------------|--|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amended); • 4WD – excluding the designated 4WD track (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Extension to dual use path along Sovereign Drive (FMP 2007). |
| Issues | <ul style="list-style-type: none"> • There is limited beach access north of the Marina; • People park at the beach access and walk to Dewars, which creates parking issues; and • Fence hopping. |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • Two Rocks Yanchep Foreshore Management Plan 1997 (FMP1997); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |



DRAFT Coastal Management Plan (Part 1)



Wreck Point/ Two Rocks Beach



Table 3: Two Rocks Dog Beach

| | |
|---|--|
| <p>Prohibited/Allowed Uses</p> | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Horse Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). <p>The following uses are currently allowed in this area:</p> <ul style="list-style-type: none"> • Dog exercise (Animal’s Local Law 1999 as amendment). |
| <p>Potential Future Uses</p> | <ul style="list-style-type: none"> • There is no proposed development for this area at this point in time. |
| <p>Issues</p> | <ul style="list-style-type: none"> • Access is an issue to the beach with only one access point, another access point in the north end of the beach would be appropriate however the land is not owned by the City of Wanneroo; and • Unauthorised access to the north. |
| <p>Associated Foreshore Management Plan</p> | <ul style="list-style-type: none"> • Two Rocks Yanchep Foreshore Management Plan 1997 (FMP 1997); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |

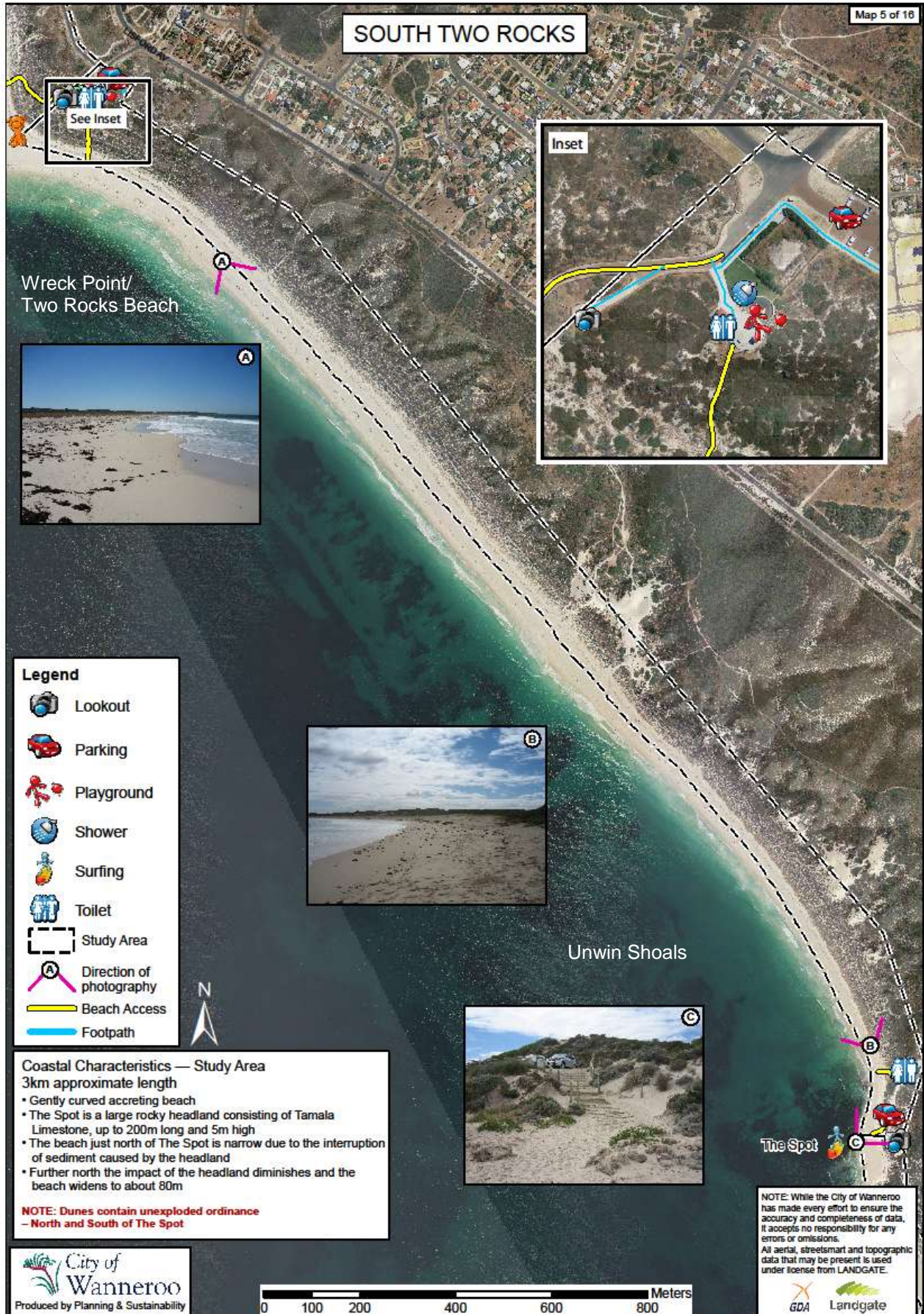




Table 4: South Two Rocks

| | |
|--------------------------------------|---|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Horse Exercise (Animal's Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Two beach access ways, including associated car parking, lookouts, signage, bins and bike racks south of Leemans Landing picnic area along Two Rocks Road (FMP 2007); • Extend and expand car park at Leemans Landing (FMP 2007); • Convert Sump into landscaped swale (FMP 2007); • Regeneration and work to manage access has been undertaken; and • Potential horse beach. |
| Issues | <ul style="list-style-type: none"> • Car parking facilities don't cater for users; • Request for an artificial reef; • The Spot is at capacity; • Intensity of use increased with population (surfers and fisherman); and • Anti Social behaviour. |
| Associated Foreshore Management Plan | <ul style="list-style-type: none"> • Two Rocks Yanchep Foreshore Management Plan 1997 (FMP 1997); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |



DRAFT Coastal Management Plan (Part 1)





Table 5: North Yanchep

| | |
|--------------------------------------|--|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Horse Exercise (Animal's Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Potential regional beach (DSP 2010); and • Potential Marina (DSP 2010). |
| Issues | |
| Associated Foreshore Management Plan | <ul style="list-style-type: none"> • Yanchep Two Rocks District Structure Plan 2010 (DSP 2010). |

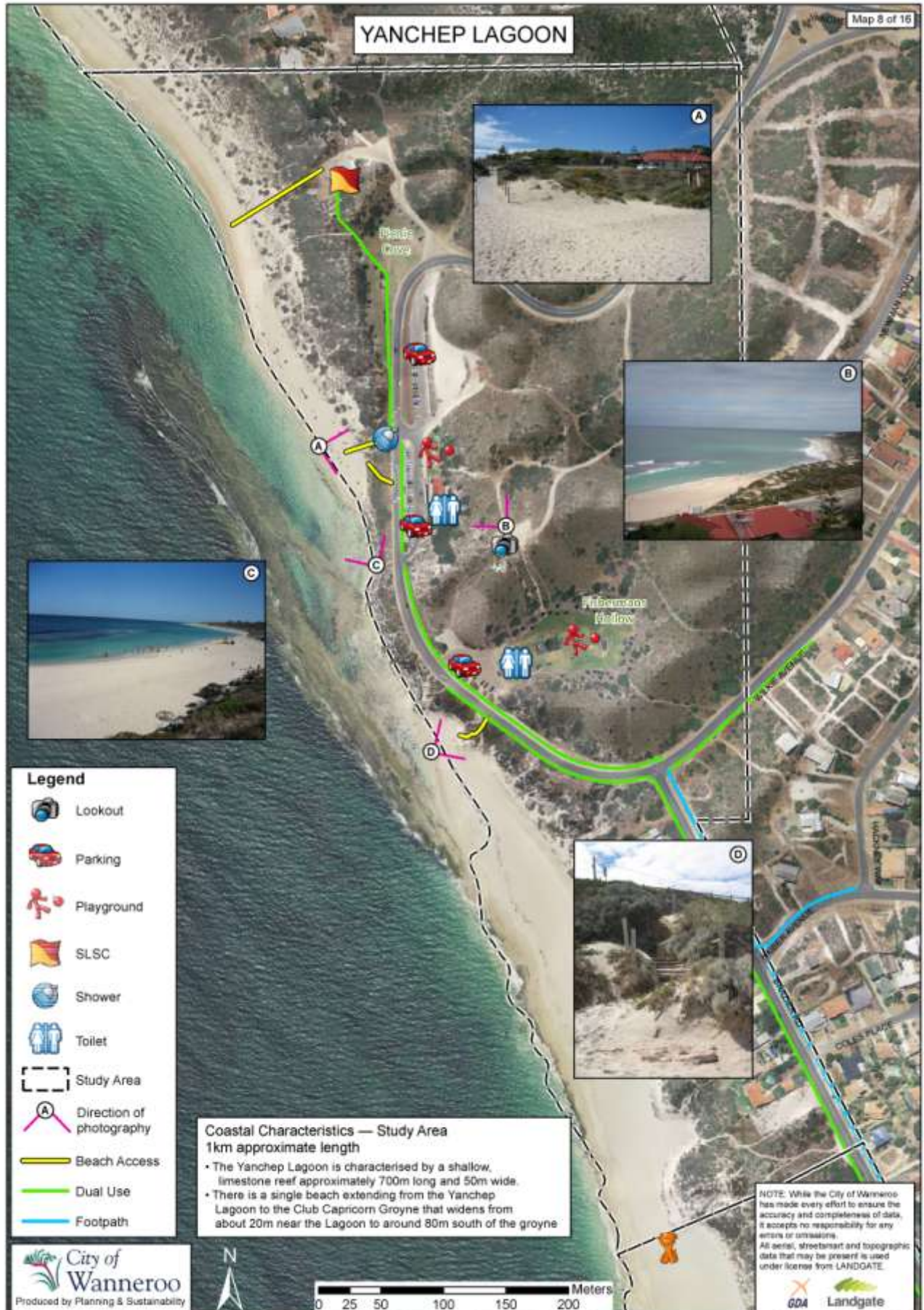


Table 6: Capricorn

| | |
|---------------------------------------|--|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Horse Exercise (Animal's Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Two picnic/recreation areas (CCVSP 2003 – 04); • Dual use path parallel to the foreshore/ Board walk and beach access (CCVSP 2003 – 04); • Beach access ways including associated car parking, lookouts, signage, bins and bike racks (CCVSP 2003 – 04); • Investigation into proposed uses for the Lindsay Homestead (FMP 2007); • Capricorn Boulevard Extension (CCVSP 2003 – 04); • Proposed boardwalk and beach access (CCVSP 2003 – 04); and • Extra access from Lindsay Homestead (CCVSP 2003 – 04). |
| Issues | |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • Two Rocks Yanchep Foreshore Management Plan 1997 (FMP 1997); • Capricorn Coastal Village Structure Plan 2003-04 (CCVSP 2003 – 04); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |



DRAFT Coastal Management Plan (Part 1)





| Table 7: Yanchep Lagoon | |
|--------------------------------------|---|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal's Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Redevelopment of Yanchep Lagoon; • Redevelopment and expansion of picnic cove; • Construction of beach access way meeting disabled access standards; and • Proposed roundabouts and potential beach access. |
| Issues | |
| Associated Foreshore Management Plan | <ul style="list-style-type: none"> • Two Rocks Yanchep Foreshore Management Plan 1997 (FMP 1997); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |



DRAFT Coastal Management Plan (Part 1)





Table 8: Yanchep Dog Beach

| | |
|---|--|
| <p>Prohibited/Allowed Uses</p> | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Horse Exercise (Animal's Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); • Quad Biking (Parking and Parking Facilities Local Law 2003); <p>The following uses are currently allowed in this area:</p> <ul style="list-style-type: none"> • Dog Exercise (Animal's Local Law 1999 as amendment). |
| <p>Potential Future Uses</p> | <ul style="list-style-type: none"> • Replace drainage sump at the entrance of the beach access way leading to the dog beach with a swale incorporating a recreational area (FMP 2007); • Replace the two dog exercise area signs with more visually sympathetic signage (FMP 2007); and • Pathway Upgrade to beach access 2011 – 2012. |
| <p>Issues</p> | <ul style="list-style-type: none"> • Adequate parking is an issue. |
| <p>Associated Foreshore Management Plan</p> | <ul style="list-style-type: none"> • Two Rocks Yanchep Foreshore Management Plan 1997 (FMP 1997); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |



DRAFT Coastal Management Plan (Part 1)

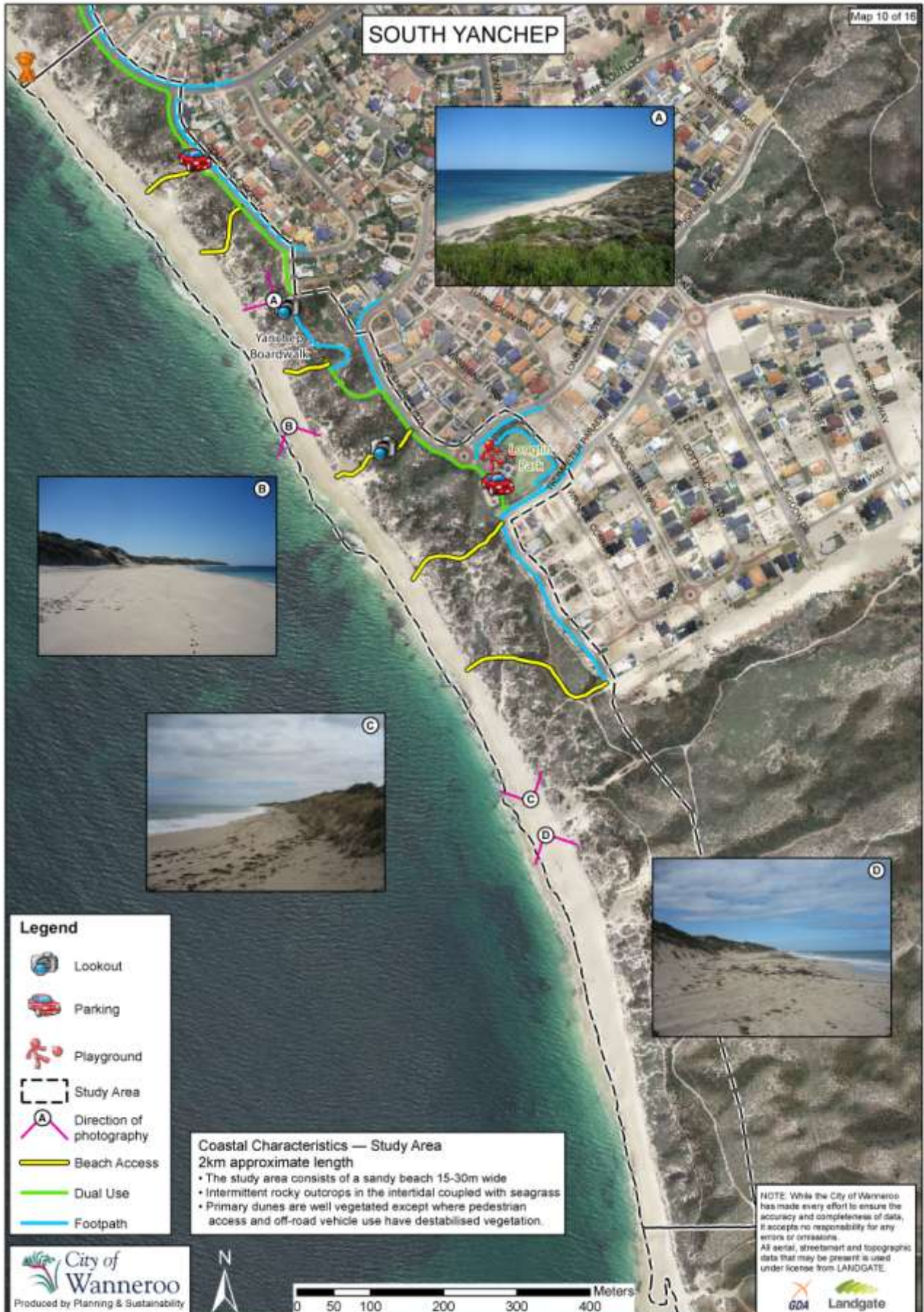




Table 9: South Yanchep

| | |
|--------------------------------------|--|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal's Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Provide a car park at the very south of Trumpeter Parade (FMP 2007); and • Potential car park north of the existing car park on Foreshore Vista (FMP 2007). |
| Issues | <ul style="list-style-type: none"> • Emergency access should be considered along the entire coast; • Potential wheelchair access; • Some access ways need to be removed; • Accessibility is an issue; and • Issues with illegal parking, car parking may be proposed as a solution. |
| Associated Foreshore Management Plan | <ul style="list-style-type: none"> • Foreshore Management Plan for Lot 614 Yanchep 1997 (FMP 1997); and • Council endorsed Two Rocks Yanchep Foreshore Management Plan 2007 (FMP 2007). |

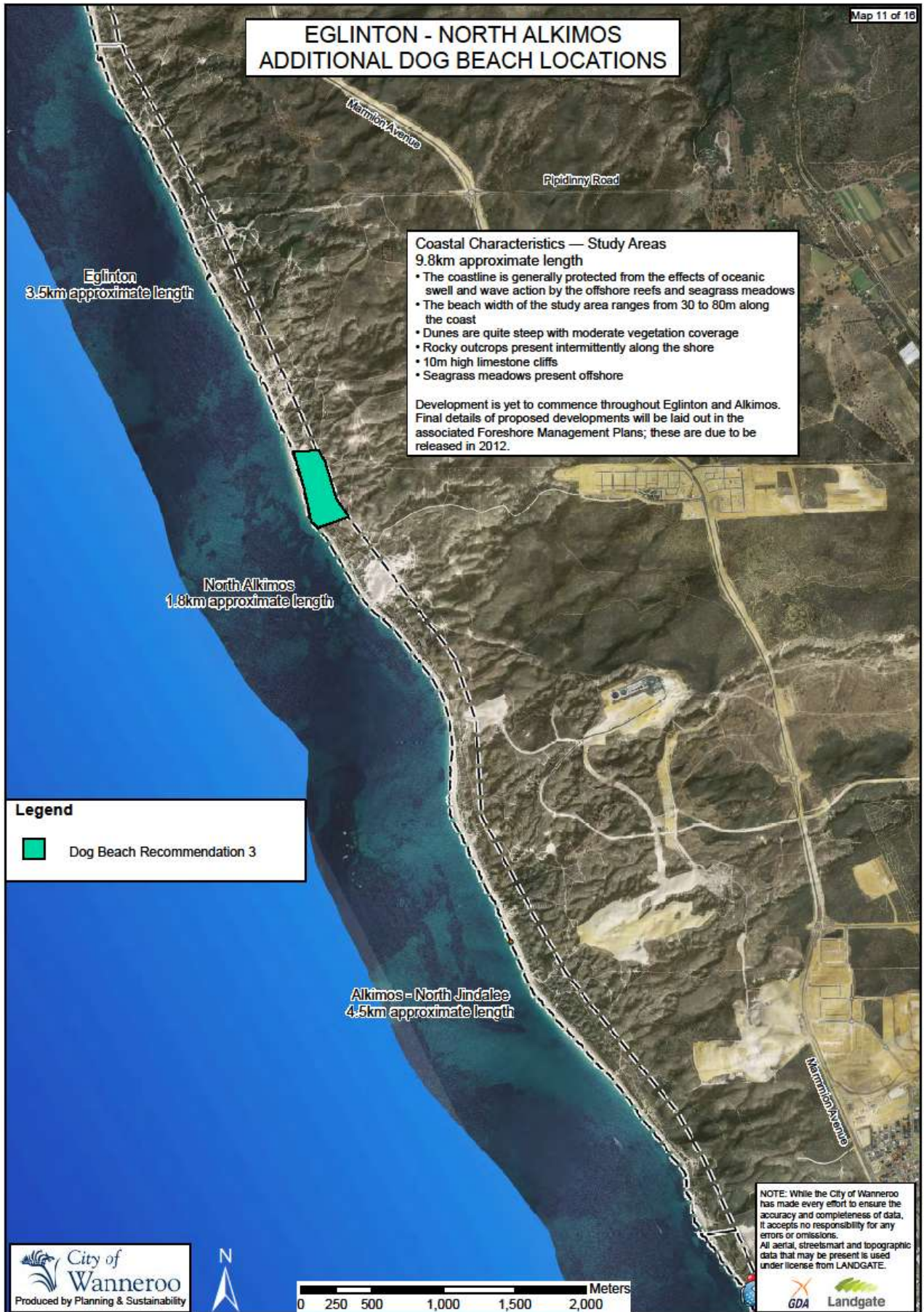




Table 10: Eglinton, North Alkimos, South Alkimos – North Jindalee

| | |
|---------------------------------------|--|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <p>Eglinton:</p> <ul style="list-style-type: none"> - Marina; and - Approximately 3 recreational nodes. <p>North Alkimos (FMP 2010):</p> <ul style="list-style-type: none"> - Esplanade; - Leading Lights; - Parkland; - Coastal Heath; - Potential Horse Beach Location; and - Potential dog beach location (recommendation 4). <p>South Alkimos – North Jindalee:</p> <ul style="list-style-type: none"> - Potential Marina; - Potential Horse Beach Location; and - Proposed Surf Life Saving Club. |
| Issues | <p>Eglinton:</p> <ul style="list-style-type: none"> • Traditionally the beach is used for fishing and 4 wheel driving. |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • North Alkimos Foreshore Management Plan 2010 (FMP 2010). |



DRAFT Coastal Management Plan (Part 1)

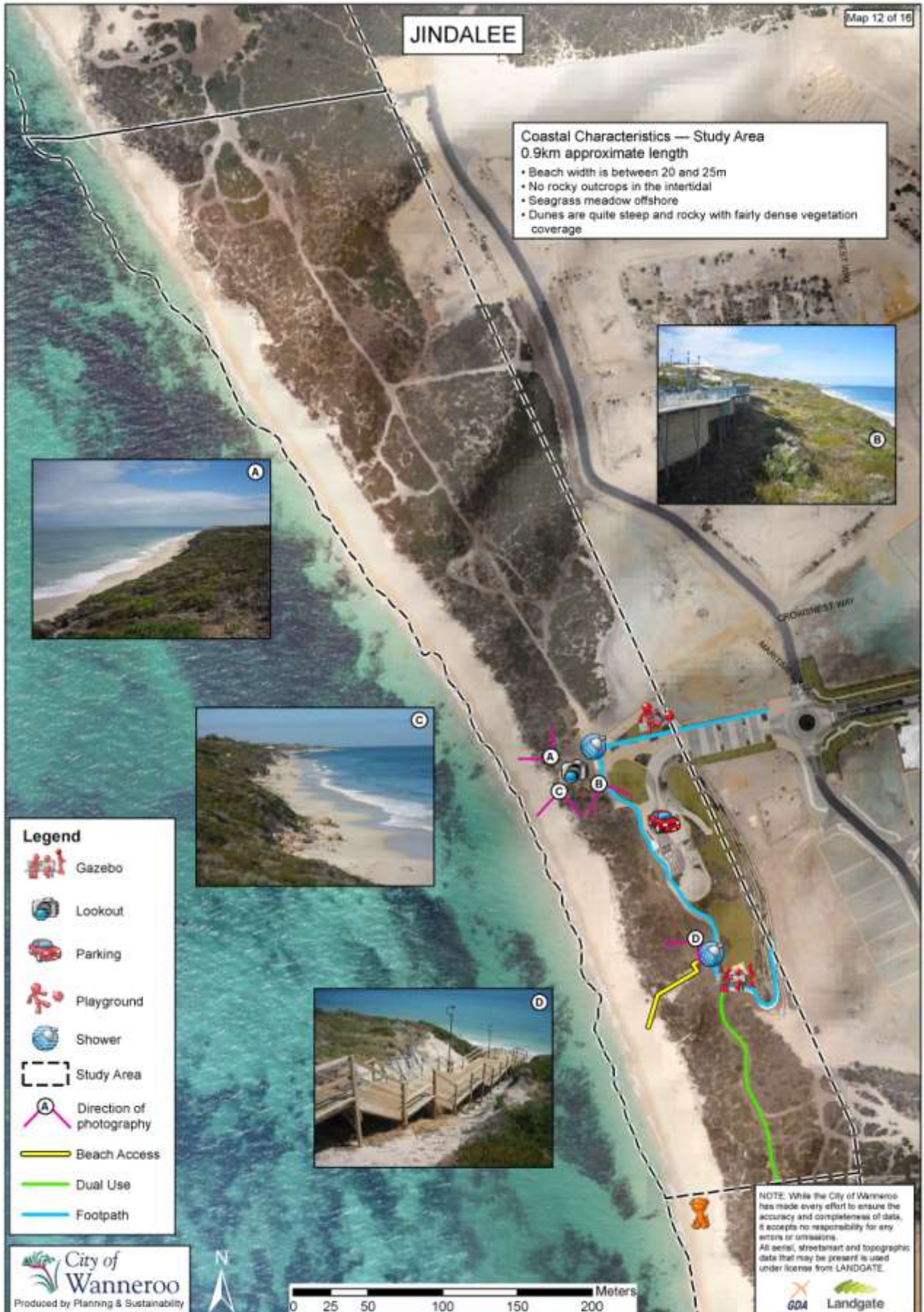




Table 11: Jindalee

| | |
|---------------------------------------|---|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Lookout at the Northern Section of the study area (FMP 2005); • Toilet Block and shower facility at lookout; and • Kiosk or cafe constructed at the northern end of the study area. |
| Issues | |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • Lot 12 Marmion Avenue Jindalee Foreshore Management Plan (FMP 2005). |



DRAFT Coastal Management Plan (Part 1)





Table 12: Quinns Rocks Dog Beach

| | |
|--|--|
| <p>Prohibited/Allowed Uses</p> | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Horse Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). <p>The following uses are currently allowed in this area:</p> <ul style="list-style-type: none"> • Dog Exercise (Animal’s Local Law 1999 as amendment). |
| <p>Potential Future Uses</p> | <ul style="list-style-type: none"> • Access upgrade to the south of the dog beach – will include emergency access that will tie into the groyne; • Proposed groyne to try and decrease erosion; • Upgrade to Queens Cliff Park access; and • Proposed car park extension at the southern end of the dog beach. |
| <p>Issues</p> | |
| <p>Associated Foreshore Management Plans</p> | <ul style="list-style-type: none"> • Mindarie – Quinns Rocks Foreshore Management Plan 2004 (FMP 2004). |



DRAFT Coastal Management Plan (Part 1)

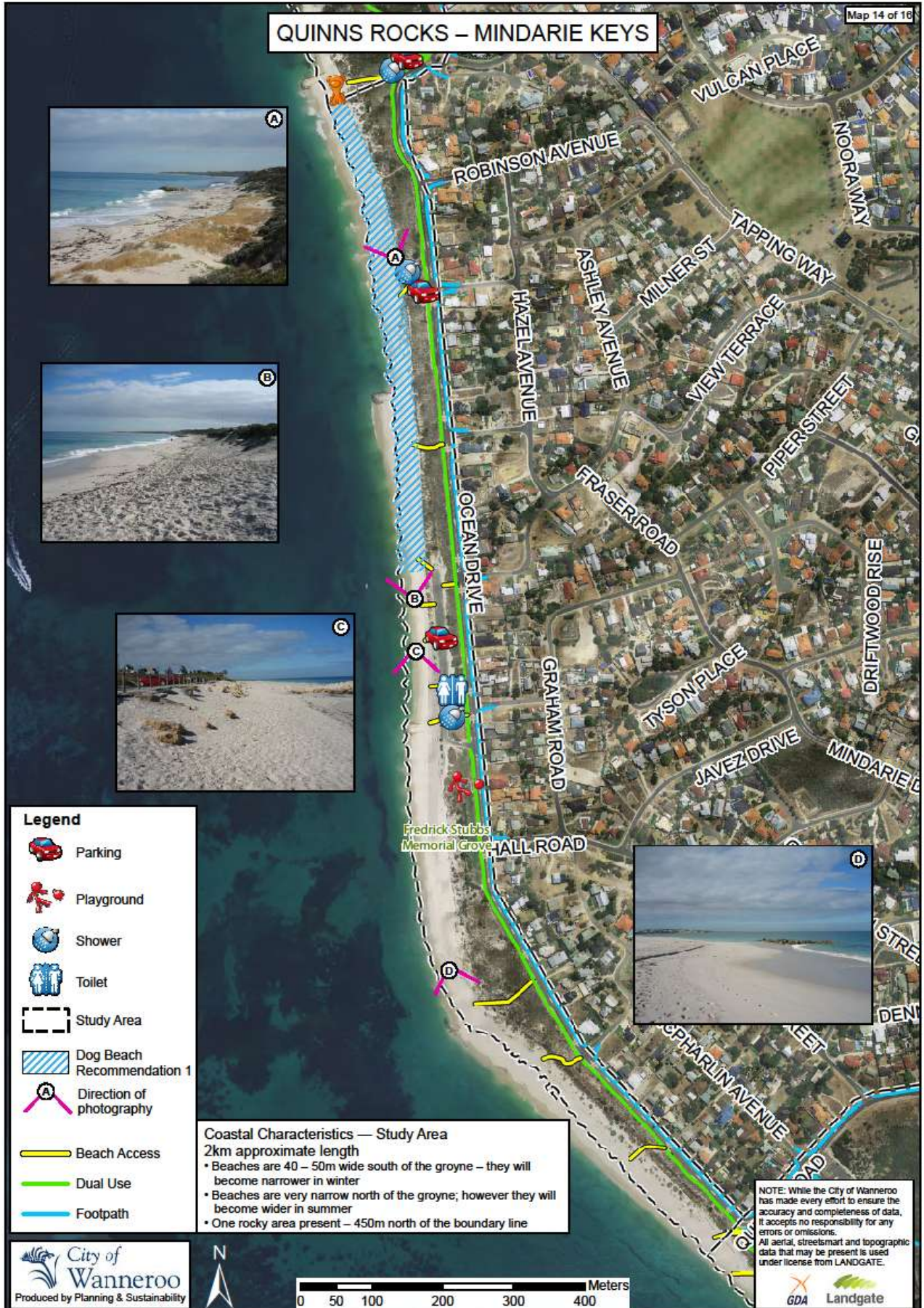




Table 13: Quinns Rocks – Mindarie Keys

| | |
|---------------------------------------|---|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Install interpretive signage and/or an information shelter at bush forever site adjacent to lot 211 development (FMP 2004); • Beach access south of the Mary Street car park is closed; and • Potential extension to dog beach south 700m (Recommendation 1). |
| Issues | <ul style="list-style-type: none"> • Storm water is causing erosion; • High maintenance due to wind blow sand; • Large numbers of pedestrian users; and • Traffic management. |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • Mindarie – Quinns Rocks Foreshore Management Plan 2004 (FMP 2004). |



DRAFT Coastal Management Plan (Part 1)





Table 14: North Mindarie

| | |
|---------------------------------------|---|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Ocean Drive – Removing overhead power lines and putting it underground – (joint venture with Western Power/CoW) residents contribute; • Potential redevelopment of Caravan Park; and • Potential upgrade to lookouts. |
| Issues | |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • Mindarie – Quinns Rocks Foreshore Management Plan 2004 (FMP 2004). |



DRAFT Coastal Management Plan (Part 1)





Table 15: South Mindarie – Tamala Park

| | |
|---------------------------------------|--|
| Prohibited/Allowed Uses | <p>The following uses are currently prohibited in this area:</p> <ul style="list-style-type: none"> • Animal Exercise (Animal’s Local Law 1999 as amendment); • 4WD (Parking and Parking Facilities Local Law 2003); and • Quad Biking (Parking and Parking Facilities Local Law 2003). |
| Potential Future Uses | <ul style="list-style-type: none"> • Possible horse exercise area in the southern end of the study area (Recommendation 3); • Proposed DUP to connect Burns Beach with Tamala Park; • Blow out is proposed for revegetation; and • Potential change room and toilet at the access way from long beach promenade. |
| Issues | <ul style="list-style-type: none"> • Unauthorised sand boarding in the southern end of the study area; and • 4WD issues in the southern section of the study area. |
| Associated Foreshore Management Plans | <ul style="list-style-type: none"> • Mindarie – Quinns Rocks Foreshore Management Plan 2004 (FMP 2004). |



5.0 References

Widermanski, A.M., McCleery, J., (2010) Coastal Risk Assessment and Treatment Plan. ABSAMP Beaches WA893 – WA897

Masselink, G., (1996). Sea breeze activity and its effect on coastal processes near Perth, Western Australia. *Journal of the Royal Society of Western Australia* **79**, 199–205.

Masselink G. and Pattiaratchi C.B. (2000). Seasonal changes in beach morphology along the sheltered coastline of Perth, Western Australia. *Marine Geology*

Sanderson, P.G., Eliot, I., and Maxwell, S., (1999) Regional variation of coastal morphology in southwest Australia: a synthesis. *Geomorphology* **34**, 73-88.

Tonk, A. M.,(2004) Longshore sediment transport driven by sea breezes on low energy sandy beaches, Southwestern Australia. *Longborough University*



6.0 Appendices

Appendix A: Statistics for City of Wanneroo

| Current Total Dog Beach (m) | Current Dog Population | Projected Dog Population Growth per year (%) | Projected Number of Additional Dogs per year (Number) | Current Population (People) | Number of dogs/ Metre of Beach | Number of registered dogs/Person | Total length of additional dog beach required to maintain current ratio (m) | Additional dog beach needed in 5 years (m) |
|-----------------------------|------------------------|--|---|-----------------------------|--------------------------------|----------------------------------|---|--|
| 1900 | 18500 | 3.4 | 629 | 156327 | 9.75 | 0.12 | 1500 | 500 |

Appendix B: Comparison of City of Wanneroo to Other Councils

| Council | Dog Beach Length | Number of dogs | Population Density | Number of Dogs/m of beach | Number of Dogs/person |
|---------------------|------------------|----------------|--------------------|---------------------------|-----------------------|
| City of Wanneroo | 1900 | 18500 | 156327 | 9.75 | 0.12 |
| City of Joondalup | 910 | 22931 | 162195 | 25.20 | 0.14 |
| City of Stirling | 900 | 19615 | 198803 | 21.79 | 0.10 |
| Town of Cambridge | 2000 | 2500 | 26622 | 1.25 | 0.09 |
| Town of Mosman Park | 400 | 1128 | 9392 | 2.82 | 0.12 |
| City of Fremantle | 1230 | 2985 | 28105 | 2.43 | 0.11 |
| Town of Cottesloe | 1910 | 800 | 8152 | 0.42 | 0.10 |
| City of Cockburn | 1716 | 14000 | 91400 | 8.16 | 0.15 |



Coastal Management Plan (Part 1)

Appendix C: Response from Pony Clubs

| Organisation Name | Number of horses within the organisation | Portion of Members that reside within the City of Wanneroo | Portion of members use the beach for exercise | Frequency of beach use | Main features required for a horse beach | Preferred time of use if the beach were a dual use beach. | Does the Club provide any aquatic facility for its members |
|--------------------------------------|--|---|---|---|---|---|--|
| <u>Racing W.A</u> | 500 – 600 | Unable to determine, Horses move around to follow the races | Hard to determine | Varies from every day to once or twice a week to infrequent | Watering Station Float access Flat beach No rocks | Mornings Both Weekdays and Weekends | Yes, Ascot has a pool facility available for racing horses |
| <u>Wanneroo Trotting Club</u> | Approx 1000 | Majority of horses reside in Wanneroo | Majority of horses utilise the beach | Usage varies anywhere from every day to infrequent | Watering Station Float access Hitching rail Flat beach No Rocks | Mornings Both Weekdays and Weekends | No |