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Executive Summary

The Adelaide Metropolitan Coast Park extends from Sellicks Beach in the south to North Haven in the north – some 70 km of coastline.

The Coast Park is one part of Adelaide’s open space network, linking to other public and privately owned land of an open nature to form the basis for the Metropolitan Open Space System (MOSS) for the city. In addition, the Coast Park provides access to the waters of Gulf St Vincent and the offshore marine reefs and shipwrecks included therein.

This report is a concept plan for the Coast Park. It sets out a number of possible strategies and recommended actions for the Coast Park over a ten-year time frame.

The results of previous studies undertaken by Government agencies and local authorities have been brought together and supplemented, where necessary, to support the information presented in this report.

The concept plan is intended to guide and assist future decision making and allocation of funds for future projects that will reinforce the open and accessible features of the Coast Park, the linkages along the coast, and the diversity of experiences.

The concept plan is not:

- a coastal management plan for the protection of the metropolitan coastline and the management of sand, nor
- an environmental management plan for the water quality issues of Gulf St Vincent.

The State Government has commissioned separate investigations into sand management practices along the metropolitan coastline and into the health of the waters of the Gulf. Whilst the outcomes of those investigations will have implications for issues canvassed in this report, they are outside the terms of reference of this study.

The proposals in the plan are concepts or ideas that are achievable over a ten year time frame.

The proposals are not designed, nor are they committed or funded, projects.

It is intended that these concepts will in each instance and as the opportunity arises, be subject to further consideration and design development by the relevant authorities, including further public consultation, before any decisions are made on the final form of each project and before any funds are committed.

1. The Vision

A number of key stakeholders and relevant interest groups were contacted during the course of the Coast Park study. Those groups were involved in developing a vision for the Coast Park. The vision is as follows:

“To revitalise and sustain a healthy, diverse and accessible Coast Park to be enjoyed and valued by present and future generations”:

The goals arising out of the consultation processes undertaken for this project are:

- Maintain and enhance open space linkages ensuring free, safe and convenient access and facilities are available for all ages and abilities.
- Recognise, value and reinforce the diversity of the coastline, ensuring that development takes place in appropriate locations and that social, economic and environmental values are achieved.
- Provide appropriately for traffic and parking, ensuring convenient access for people wishing to use the coast, taking into account the need for safety for pedestrians and cyclists.
- Recognise, value, protect and where possible, enhance sandy beaches, seagrass beds, remnant dunes, coastal reserves and buffers, and water quality along the coast.
- Pursue every opportunity to educate the community and decision makers on the vision for, and the special value of, the coast, and the lessons learnt about the management of our coastline.

2. Demographic Changes and Implications

One million people reside within a one-hour drive of Adelaide’s coast. It is probable that more than 550,000 Adelaide residents over 15 years of age visit the coast at least once each year, and more than 60,000 persons visit from intraestate, interstate and overseas each year. Overall, this amounts to somewhere between 4,000,000 and 6,000,000 visits to Adelaide’s metropolitan beaches each year.

Whilst Adelaide’s population growth will be relatively slow over the next 20 years, there will be significant demographic changes in the composition of the population. The changing rate of family formation and the aging of the population will lead to an increase in the number of households within metropolitan Adelaide.

The implications of these changes will be:

- increased demand for higher density housing adjacent to the coast,
- increased demand to use the Coast Park with an increasing number of people using the park as local, as well as regional, open space,
- increased demand for improved accessibility to the Coast Park to cater for the needs of a generally older population, and
- increased demand for a safe, pleasant and convenient Coast Park environment, with increased emphasis on passive forms of physical activity such as walking and cycling.

These issues will continue to be addressed as part of the Government’s urban regeneration program within the Department for Transport and Urban Planning.

3. Additional Open Space Opportunities

Additional requirements for open space relate to the need to ensure that safe, open and free access is available for all people over the length of the Park, both now and into the future.

These requirements can generally be addressed through the linkages that exist or that are able to be reinforced for the purposes of the Coast Park. These linkages include along the foreshore reserve to watercourses, conservation parks, local government reserves, the Adelaide Shores recreational open space land and road/transport corridors. These public land resources also link to other open space areas in various ownerships, such as the Hills Face Zone, constituting the MOSS for Adelaide.

An important consideration for the Coast Park will be the completion of a publicly accessible linkage and pathway along the entire length of the coast. Issues to be addressed in the creation of this link include:

1. Key sections of the coast where there is a perception of private ownership of foreshore land, including places where private development has encroached on the foreshore reserve. The principle of public access to publicly owned land should be reinforced and only compromised where environmental considerations are paramount.

2. Access to road reserve land. Along some sections of the coast, the entire available foreshore reserve comprises essentially an esplanade road. Opportunities exist in these areas to shift the balance between the space allocated to vehicles and that allocated to pedestrians and cyclists. This can be achieved by introducing one-way traffic movements and/or progressively restricting strip parking along the esplanade as alternative arrangements for parking and access are put in place.

3. Eroding cliff faces. The cliffs at Sellicks Beach and between Port Willunga and Moana are eroding. The coastal reserve through this area is too narrow in parts to support the construction of a safe shared pedestrian/cycle pathway. Action should be taken to secure additional land in these areas to ensure that sufficient public land is available into the future for this purpose.
4. Issues and Opportunities

A number of key issues have implications for the whole of the Coast Park:

i. Access Considerations

- Increased provision should be made for disabled access to the beach and water.
- The access needs of older persons need to be taken into account.
- Public transport access to the coast should be enhanced and expanded.
- Roadside car parking areas should be progressively removed away from the foreshore in favour of shared "out-of-hours" parking areas within walking distance of the beach (or supported by shuttle bus services), and specifically defined parking areas at key points along the coast.
- A calmed traffic environment should be established on all esplanades where pedestrian and cycle movement takes precedence over vehicles.

ii. Management of Conflicting Activities

- By-laws governing the activities of dogs and horses on beaches should be compatible and integrated along the Coast Park.
- Measures should be implemented to control activities, such as jet skis, that cause a nuisance to other beach users.
- Boating and sailing activities should be supported through the network of sailing and yacht clubs established along the coastline.

iii. Commercial Opportunities

- Numerous commercial opportunities for kiosks, cafes, mobile catering, greater use of the gulf waters and hire of equipment, are available along the Coast Park. Many of these opportunities are seasonal in nature and hence are unlikely to be viable throughout a full year. Support should be given for existing businesses along the coast to expand their operations to provide enhanced services during the summer peak season.

5. Concept Plan and Strategies

The Coast Park has been divided into eight precincts for a detailed “area-by-area” analysis of the state of the environment, and a response to the pressures being experienced in each area.

The precincts take account the landform, local character or identity, dominant land-use patterns and administrative boundaries. They are set out in the following Table E.1

| Table E.1.1 Coast Park Precincts |
|------------------|------------------|
| **Landform**     | **Precinct**     | **Location**                                      |
| Willunga Basin   | 1. Southern Sands| Cactus Canyon to Snapper Point                   |
|                  | 2. Willunga Cliffs| Snapper Point to Ochre Point                    |
| Noarlunga Basin  | 3. Mid-South Surf Coast| Ochre Point to O’Sullivan Beach                  |
|                  | 4. Cove Conservation| O’Sullivan Beach to Marino Rocks                  |
| Adelaide Plains  | 5. Holdfast Bay | Marino Rocks to West Beach                       |
|                  | 6. Adelaide Shores| West Beach Recreation Reserve                    |
|                  | 7. Torrens Beaches| West Beach to Point Malcolm                      |
|                  | 8. Northern Maritime| Point Malcolm to North Haven                   |

As a result of the extensive review of previous reports and the investigations undertaken for this project, strategic proposals, supported by ‘Pressure, State, Response’ tables and concept plans, have been prepared for each precinct.

6. Priority Actions

Approximately 60 projects are identified as potential Coast Park projects with a total value of $20m.

A priority strategy concerns the provision of thematic interpretative art works along the length of the Coast Park. Three coastal landmark artworks and twelve other items are proposed to be developed as part of a ‘Resting Places – Learning Places’ theme.

Other projects relate to the planning, development, redevelopment or interpretation of specific sites, and the further development of the Coast Park’s shared recreational pathway. Suggested budget amounts for these projects are included. These will be refined as the designs are progressed and modifications put in place over time following further consultation.

All projects are presented as initial concepts. It is intended that they be further investigated and implemented as appropriate over a ten year period. None of the projects are at a stage where they can be immediately implemented. They will all require further concept and design development, consultation, negotiation, costing and approvals before they can proceed.

7. Landmark Projects

It is proposed that action be taken to progress consultations and negotiations on Priority 1 projects, as identified below. These projects are spread evenly along the metropolitan coastline and include projects with an environmental emphasis, projects supporting passive recreation activities and potential redevelopment projects.

<table>
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<th>Precinct</th>
<th>LGA</th>
<th>Description of Project</th>
<th>Cost</th>
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<tr>
<td>Southern Sands</td>
<td>Onkaparinga</td>
<td>Washpool. Undertake consultation program and develop a comprehensive management plan for the Washpool area, setting out strategies for the future presentation, protection, interpretation and management of the public land. Provision of public art and interpretation at selected locations.</td>
<td>$170,000</td>
</tr>
<tr>
<td>Willunga Cliffs</td>
<td>Onkaparinga</td>
<td>Ochre Point. Undertake consultation program to bring together Aboriginal interests, the interests of the hang gliding community and environmental objectives for the area, and develop strategies for the revegetation and management of the area. Provision of public art and interpretive work at selected locations.</td>
<td>$100,000</td>
</tr>
<tr>
<td>Mid South Surf Coast</td>
<td>Onkaparinga</td>
<td>Port Noarlunga. Progressively implement the Port Noarlunga Foreshore Master Plan, including the Wearing Street Precinct Master Plan, generally modernising the foreshore hub, by upgrading indoor/outdoor dining facilities, rationalising car parking areas, making provision for bus drop off and divers’ preparation areas and additional shade, shelter and beach furniture. Provision of public art and interpretive work at selected locations.</td>
<td>$1,690,000</td>
</tr>
<tr>
<td>Mid South Surf Coast</td>
<td>Onkaparinga</td>
<td>Christie’s Beach. Develop plans and progressively prepare for the Beach Road/Esplanade area at Christie’s Beach to become the feature coastal village square for the south coast, incorporating a range of private sector</td>
<td>$1,000,000</td>
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**Coast Park Report**

**8. Recommendations**

1. Maintain an overarching body, based on the membership of the current Steering Committee (refer Section 7.3), to:
   - review and develop project proposals,
   - seek support from relevant State and Local authorities for agreed projects and associated priorities,
   - solicit required funds from all available sources,
   - provide the basis for integrated advice and recommendations on Coast Park projects, and
   - oversee project commissioning and implementation.

2. Initiate the proposed strategy for public art outlined in this report, progressively seek agreement from relevant local authorities for other identified priority 1 landmark projects (refer Sections 7.2 and 7.5) and, as agreements are reached following further public consultation, support the development of the respective projects.

3. Seek Local Government support for:
   - an integrated set of Council by-laws for Coast Park activities,
   - the designation of the entire Coast Park, including coastal land in private ownership, as a MOSS (Coastal) Zone in the Development Plan,
   - the progressive removal, subject to local area traffic analysis, of strip parking on the western side of Esplanades to enhance the pedestrian environment and open up space for a shared recreational pathway, and designation and enforcing reduced speed environments for all Esplanades and trafficable beaches,
   - the progressive refinement, consultation and implementation of priority 2 and 3 projects for the Cost Park as opportunities arise, agreements are reached and funds are made available.
1. Introduction

1.1 Background

Planning SA has commissioned a consultant team led by PPK Environment & Infrastructure Pty Ltd to prepare a concept plan for the development of a Coastal Linear Park along the entire Adelaide Metropolitan coastline between North Haven and Sellicks Beach.

The aims of the Coast Park Concept Plan are to:

- articulate an achievable vision for the re-vitalisation of the metropolitan coastline, focused on the potential for economic and cultural growth, recreation and environmental protection;
- provide a framework for directing public infrastructure investment that:
  < maximises the benefits of existing and planned development
  < maximises recreational and tourism opportunities along the coast
  < offers protection to ecologically sensitive areas of the coast
  < assists in the management of heritage/environmental/cultural sites, in their interpretation and use;
- outline an achievable program of physical works and projects and identify high priorities that will lead to the development of a cohesive coastal park (including both terrestrial and aquatic elements) within a ten-year time frame;
- identify tenure and zoning issues and provide strategies to reconcile conflicting interests.

1.2 Description of the Coast Park

The park extends along Adelaide's metropolitan coastline from Sellicks Beach in the south North Haven in the north – some 70 km of coastline.

It includes public land along the coast and offshore features. The landward extent of the Coast Park varies to include adjacent public land and, at key locations, other land that may be acquired and added to the public land resource, or that impacts on the Coast Park.

Adelaide’s metropolitan coast provides a rich diversity of experience and opportunity. It encompasses:

- areas where you can sunbake, surf, dive, swim or paddle
- areas where you can walk, cycle or drive along the coast
- marinas and river estuaries
- sandy beaches and sand dunes, as well as cliffs and rocks
- areas where access is available for launching of boats, and other craft
- areas of sand accretion and areas of sand erosion and depletion
- areas of native vegetation which supports an array of biodiversity, geological monuments and offshore reefs
- sites of significance to Aboriginal people together with jetties, shipwrecks and other areas of European heritage significance
- extensive areas of residential development and areas with a commercial and tourism focus
- areas developed many years ago and areas recently developed.

The Coast Park is an integral part of Adelaide’s open space network linking to watercourses and other public spaces adjacent to the coast. These public spaces in turn link with the Hills Face Zone and other open space land, forming the basis for Adelaide’s Metropolitan Open Space System (MOSS).

The area of the Coast Park and the linkages to the wider open space network are shown on Figure 1.1.

FIGURE 1.1 Area of the Coast Park and the Linkages to the Wider Open Space Network
1.3 **Steering Committee**

A Steering Committee has been appointed to oversee the development of the concept plan.

The Steering Committee members are:

- Rick Gibki, Planning SA
- Mark Mobbs, Planning SA
- Peter Dungey, Planning SA
- Terry Ryan, Transport SA
- Ian Smith, Transport SA
- David Crinion, SA Tourism Commission
- Paul Tulloch, DEH (National Parks and Wildlife SA)
- Bill Jeffrey, DEH (Heritage SA)
- Phil Freeman, Office of Recreation and Sport
- Ron Sanderson, Department of Environment and Heritage
- Leonie Scriven, Department of Environment and Heritage
- Ron Shattock, West Beach Trust
- Ross Oke, SA Urban Forest Biodiversity Program
- Jim Allen, City of Marion
- Des Fowles, City of Onkaparinga
- Laura Dixon, City of Onkaparinga
- Charles Sheffield, City of Holdfast Bay
- John Voigt, City of West Torrens
- Jan Cornish, City of Charles Sturt
- Shanti Ditter, City of Port Adelaide Enfield.

1.4 **Approach**

During the course of the investigations for this concept plan, two workshops were held with key stakeholders. These included representatives of Councils, relevant Government agencies and peak bodies with an interest in the coast.

Separate consultations were held with:

- a broader reference group, comprising representatives from a range of locally based clubs, residents groups and “friends” groups; and
- elected local government members.

A summary of the outcomes of the consultation was prepared and distributed both internally to the project team and Steering Committee, and externally to those who participated in the consultation. The issues and opportunities identified in the consultation were then considered by the design team in the preparation of the plan.

All relevant documentation, including reports, plans and policy statements, have been reviewed and, where appropriate, key recommendations from those documents have been reflected in the concept plan.

This report includes an inventory of existing conditions of the coast and analyses a range of issues relevant to the overall coastline. As part of the analysis, a series of precincts and potential activity nodes have been developed and the detailed strategies and actions for the Coast Park are outlined in this precinct analysis.

1.5 **The Vision and Values for The Coast Park**

One of the aims of the first stakeholders’ workshop was the development of an achievable vision for the Coast Park. Stakeholders were invited to identify where they considered the concept plan should be heading.

The vision for the Coast Park arising out of that process is:

“To provide and sustain a healthy, diverse and accessible Coast Park to be enjoyed by present and future generations”.

A set of goals were established to reinforce the vision to the Coast Park. They are:

- Maintain and enhance open space linkages ensuring free, safe and convenient access and facilities are available for all ages and abilities.
- Recognise, value and reinforce the diversity of the coastline, ensuring that development takes place in appropriate locations and that social, economic and environmental values are achieved.
- Provide appropriately for traffic and parking, ensuring convenient access for all people wishing to use the coast, taking into account the need for safety for pedestrians and cyclists.
- Recognise, value, protect and where possible, enhance sandy beaches, seagrass beds, remnant dunes, coastal reserves and buffers, and water quality along the coast.
- Pursue every opportunity to educate the community and decisions makers on the vision for, and the special value of, the coast, and the lessons learnt about the management of our coastline.

The stakeholders were also invited to describe their values for the Coast Park. These values represent the “ideals” for the metropolitan coastline. They can be grouped into several different topics or themes which highlight areas for consideration.

In summary, the values raised by stakeholders for the Coast Park are as follows:

**Environment**

- High water quality
- Sandy beaches
- Greater diversity of wildlife
- Improved habitats
- Healthy seagrass beds
- Coastal reserves and buffers
- Understanding of special value of coast
- Replenished wild fish stocks
- Sustainable activities
- Revegetated coastline
- Special areas protected
- Catchment management.

**Culture/Community**

- Valuing diversity of places
- Social, economic and environmental values achieved
- Involved and aware community with a sense of ownership for the coast
- Jetties and other cultural hotspots
- Conserving cultural heritage
- Tourism guided to appropriate locations
- Improved tourist facilities
- People places
- Quiet places
- Exciting places.
Access

- Safe and convenient access and facilities for users of all ages and abilities
- Managed vehicle and vessel access to beaches
- Continuity of access.

Uses

- Responsible use – balancing uses
- Human activity in appropriate locations
- Protected special areas
- Respect for other users.

Development

- Better architecture
- Development enhancing environment
- Development in appropriate locations
- All development to respect the coast.

Note: Some aspects of the above are more relevant to a range of other Government programs. They are beyond the terms of reference for the Coast Park Concept Plan.

1.6 Statement of Purposes for this Concept Plan

The concept plan is intended to guide and assist future decision making an allocation of funds for future projects that will reinforce the open and accessible features of the Coast Park, the linkages along the coast, and the diversity of experiences. It sets out a number of possible strategies and recommended actions for the Coast Park over a ten-year timeframe.

The concept plan is not:

- a coastal management plan for the protection of the metropolitan coastline and the management of sand; nor
- an environmental management plan for the water quality issues of Gulf St Vincent.

The State Government has commissioned separate investigations into sand management practices along the metropolitan coastline and into the health of the waters of the gulf. Whilst the outcomes of those investigations will have implications for issues canvassed in this report, they are outside the terms of reference of this study.

The proposals in the plan are concepts or ideas that are achievable over a ten year timeframe.

The proposals are not designed, nor are they committed or funded, projects.

It is intended that these concepts will in each instance and as the opportunity arises, be subject to further consideration and design development by the relevant authorities, including further public consultation, before any decisions are made on the final form of each project and before any funds are committed.
2. **Open Space – Supply and Demand**

This chapter details the current status of the Coast Park land holdings and features. It provides an overview of the demographic conditions and trends and discusses tourist visitation and future open space needs.

2.1 **Existing Land Holdings**

The existing land holdings and features along Adelaide’s metropolitan coastline are shown in the following set of maps 2.1 to 2.4.

The maps show the following data sets.

2.1.1 **National Parks and Wildlife Service NPWS Reserves**

The Coast Park includes six reserves constituted under the National Parks and Wildlife Act 1972. These reserves are shown in Table 2.10:

<table>
<thead>
<tr>
<th>NPWS Reserve</th>
<th>Area of reserve (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldinga Scrub Conservation Park</td>
<td>265</td>
</tr>
<tr>
<td>Moana Sands Conservation Park</td>
<td>21</td>
</tr>
<tr>
<td>Onkaparinga River Recreation Park*</td>
<td>290</td>
</tr>
<tr>
<td>Hallett Cove Conservation Park</td>
<td>50</td>
</tr>
<tr>
<td>Marino Conservation Park</td>
<td>30</td>
</tr>
<tr>
<td>Fort Glanville Conservation Park</td>
<td>5</td>
</tr>
</tbody>
</table>

*Links to Onkaparinga River National Park

2.1.2 **Aquatic Reserves**

There are two designated aquatic reserves (Table 2.2).

<table>
<thead>
<tr>
<th>Reserve</th>
<th>Area of Reserve (Approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldinga Reef Aquatic Reserve</td>
<td>505</td>
</tr>
<tr>
<td>Port Noarlunga Reef – Onkaparinga Estuary Aquatic Reserve</td>
<td>300</td>
</tr>
</tbody>
</table>

2.1.3 **Remnant Vegetation Areas**

The majority of Adelaide’s metropolitan coastline has been cleared of native vegetation and developed for residential, commercial or industrial purposes. However, areas of significant remnant vegetation can be identified along the coast, both within and outside of the park system and including some on privately owned land (see Table 2.3).

### Table 2.3 Flora Summary of Coastal Reserves

<table>
<thead>
<tr>
<th>Refer to Figure No.</th>
<th>Number on Map</th>
<th>Areas of Reserve (ha)</th>
<th>Areas of Remnant Vegetation (ha)</th>
<th>Total Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldinga Beach</td>
<td>2.1</td>
<td>2</td>
<td>25.5</td>
<td>10</td>
</tr>
<tr>
<td>Aldinga Cliffs</td>
<td>2.1</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Aldinga Scrub CP</td>
<td>2.1</td>
<td>3</td>
<td>265</td>
<td>212</td>
</tr>
<tr>
<td>Field River Estuary</td>
<td>2.2</td>
<td>15</td>
<td>4.5</td>
<td>3</td>
</tr>
<tr>
<td>Hallett Cove CP</td>
<td>2.2</td>
<td>16</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Headland Reserve</td>
<td>2.2</td>
<td>14</td>
<td>4.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Kingston Park</td>
<td>2.3</td>
<td>18</td>
<td>3.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Marino CP</td>
<td>2.2</td>
<td>17</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Moana Sands CP</td>
<td>2.2</td>
<td>12</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Maslin Beach</td>
<td>2.1</td>
<td>7</td>
<td>43.2</td>
<td>43</td>
</tr>
<tr>
<td>Minda Dunes</td>
<td>2.3</td>
<td>19</td>
<td>4.5</td>
<td>4</td>
</tr>
<tr>
<td>Ochre Point</td>
<td>2.1</td>
<td>8</td>
<td>57.5</td>
<td>50</td>
</tr>
<tr>
<td>Onkaparinga Estuary RP</td>
<td>2.2</td>
<td>11</td>
<td>290</td>
<td>250</td>
</tr>
<tr>
<td>Patawalonga Creek</td>
<td>2.3</td>
<td>20</td>
<td>49.9</td>
<td>-</td>
</tr>
<tr>
<td>Port Noarlunga Dunes</td>
<td>2.2</td>
<td>10</td>
<td>20.7</td>
<td>15.7</td>
</tr>
<tr>
<td>Port Noarlunga/Seaford Cliffs</td>
<td>2.2</td>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Port Willunga</td>
<td>2.1</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Port Willunga – Maslin Beach</td>
<td>2.1</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Point Malcolm/Fort Glanville</td>
<td>2.4</td>
<td>23</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Port Stenvac Scrub</td>
<td>2.2</td>
<td>13</td>
<td>229</td>
<td>24</td>
</tr>
<tr>
<td>Tennyson Dunes</td>
<td>2.4</td>
<td>22</td>
<td>19.9</td>
<td>10</td>
</tr>
<tr>
<td>Washpool/Wetland</td>
<td>2.1</td>
<td>1</td>
<td>22.6</td>
<td>20</td>
</tr>
<tr>
<td>West Beach Dunes</td>
<td>2.3</td>
<td>21</td>
<td>??</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Urban Forest Biodiversity Program

2.1.4 **Offshore Marine Reefs**

**Aldinga Reef**

Aldinga Reef is an extensive reef adjacent to Snapper Point and ranging in depth from 4 m down to 18–20 m. Sections of the reef can be accessed from the shore at low tide. The reef is an aquatic reserve and fishing is prohibited. A wide range of species is found at Aldinga Reef, and it is a popular dive location. The site is affected by run-off after rain periods.

**Southport Reef**

Located approximately 2 km south of the mouth of the Onkaparinga River, Southport Reef comprises a series of flat rock platforms with small patches of sand and occasional rocky outcrops. It is considered to be a healthy reef.

**Port Noarlunga Reef**

Port Noarlunga reef has mixed macroagal and invertebrate cover which varies according to depth and reef aspect. Monitoring work from 1996 to 1999 has shown a reduction in large brown macroalgae cover and an increase in the cover of mussels.
Horseshoe Reef

On the seaward side the Horseshoe Reef drops from a steep platform to a series of broken but generally very flat expanses of stone; towards shore the reef becomes narrower and steeper. The water depth over the reef varies between 3 m and 9 m. The reef is close to the Christies Beach sewage outfall (approx 700 m north of the reef), and is considered to be highly impacted due to anthropogenic influences in the area.

Hallett Cove Reef

Hallett Cove Reef is described as a boulder conglomerate reef with long narrow strips of undulating rock elevated approximately 1-2 m from the surrounding area of sand. It is a shallow water environment (approximately 5 m) containing a diverse macroalgae community and a number of benthic invertebrates. It is considered to be relatively un-impacted, but stormwater out-flow nearby may increase nutrient and sediment levels during periods of high rainfall.

Broken Bottom

Broken Bottom is similar in formation to the Semaphore Reef. The area is possibly influenced by nutrients and sedimentation from water discharge from the Patawalonga and dredging operations in the area. The high cover of foliaceous red and turfing algae indicates that the area is heavily degraded. Polychaetes are the dominant invertebrate life form, and a number of fish species are present in the area.

Semaphore Reef

Semaphore Reef comprises kankurised shell beds of low relief and narrow strips of rock platform. It is at a depth of 7.5-9 m and is some distance from shore. The reef is considered to be heavily degraded as a result of land-based pollution. This is reflected by the domination of red foliaceous algae and turf species on the reef surface. A number of benthic macroinvertebrate and fish species are also present.

2.1.5 Places and Areas of Historic Significance

There are many sites of historic significance along the metropolitan coastline, including historic buildings, jetties and shipwrecks. Some have formal status as an item or an area of State Heritage, such as the coastline between Aldinga and Maslin Beach and the historic Fort Glanville at Point Malcolm. Sites such as Kingston Park and Ochre Point have significance for Aboriginal people and, for the most part, are currently under negotiation to protect their cultural integrity. It is important that all these places are recognised in the development of the Coast Park for their potential as both culturally significant sites and tourism educational opportunities.

State Heritage places are identified and protected by legislation. Table 2.4 is a list of places entered in the State Heritage Register and Table 2.5 are those places listed on the Register of the National Estate.

2.1.6 Other Local and State Government Land Holdings

Other public land holdings shown on maps 2.1 to 2.4, include:

- Adelaide Shores – established under the West Beach Recreation Reserve Act.
- public reserves – Local and State Government owned
- relevant road reserves
- disused rail corridors.

Table 2.4 Metropolitan Coast – Places Entered in the State Heritage Register

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Street No.</th>
<th>Street</th>
<th>Suburb</th>
<th>HSA No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorial to the Wrecks of the “Star of Greece”</td>
<td>Main South Road</td>
<td>ALDINGA</td>
<td>ALDINGA</td>
<td>14076</td>
</tr>
<tr>
<td>Dwelling (former Temperance Hotel)</td>
<td>Aldinga Road</td>
<td>PORT WILLUNGA</td>
<td>PORT WILLUNGA</td>
<td>12796</td>
</tr>
<tr>
<td>Dwelling (former Seaview Hotel)</td>
<td>Port Willunga Road</td>
<td>MARSILIN</td>
<td>MARSILIN</td>
<td>4286</td>
</tr>
<tr>
<td>Maslin Bay to Aldinga Bay Coastal Cliff Section</td>
<td>Geophysical Site</td>
<td>ALDINGA</td>
<td>ALDINGA</td>
<td>14040</td>
</tr>
<tr>
<td>Dwelling (former Farm House)</td>
<td>84 &amp; 85 Griffiths Drive</td>
<td>PT NOARLUNGA</td>
<td>PT NOARLUNGA</td>
<td>14494</td>
</tr>
<tr>
<td>Pingleton Farm (Dwelling, Barn and Underground Tanks), Onkaparinga River National Park</td>
<td>Lot 1 Sauerbiers Road</td>
<td>PT NOARLUNGA</td>
<td>PT NOARLUNGA</td>
<td>11928</td>
</tr>
<tr>
<td>Dwelling and Domestic Outbuilding</td>
<td>40-50 Salfit Street</td>
<td>PT NOARLUNGA</td>
<td>PT NOARLUNGA</td>
<td>17770</td>
</tr>
<tr>
<td>Perry Homestead</td>
<td>60 Murray Road</td>
<td>PT NOARLUNGA</td>
<td>PT NOARLUNGA</td>
<td>12582</td>
</tr>
<tr>
<td>Port Noarlunga Hotel (former Military Guest House)</td>
<td>Gawler Street</td>
<td>PT NOARLUNGA</td>
<td>PT NOARLUNGA</td>
<td>14896</td>
</tr>
<tr>
<td>Hallett Cove Conservation Park and Sandison Reserve Geological Site</td>
<td>Cliff Top Crescent</td>
<td>HALLETT COVE</td>
<td>HALLETT COVE</td>
<td>14033</td>
</tr>
<tr>
<td>Kingston House (former Marino Homestead, dwelling and Marino Inn)</td>
<td>48 Kingston Court</td>
<td>KINGSTON PARK</td>
<td>KINGSTON PARK</td>
<td>10617</td>
</tr>
<tr>
<td>Dwelling – Hardy House</td>
<td>44 Maltround Terrace</td>
<td>SEACLIFF</td>
<td>SEACLIFF</td>
<td>14465</td>
</tr>
<tr>
<td>Brighton Municipal Offices and Council Chambers</td>
<td>24 Jetty Road</td>
<td>BRIGHTON</td>
<td>BRIGHTON</td>
<td>14464</td>
</tr>
<tr>
<td>Rogerston Building, Minda Home</td>
<td>12-16 King George Avenue</td>
<td>NORTH BRIGHTON</td>
<td>NORTH BRIGHTON</td>
<td>14473</td>
</tr>
<tr>
<td>Minda Home Complex (former Brighton House)</td>
<td>12-16 King George Avenue</td>
<td>NORTH BRIGHTON</td>
<td>NORTH BRIGHTON</td>
<td>10630</td>
</tr>
<tr>
<td>Verco Building, Minda Home</td>
<td>12-16 King George Avenue</td>
<td>NORTH BRIGHTON</td>
<td>NORTH BRIGHTON</td>
<td>14474</td>
</tr>
<tr>
<td>Parade Hall (former Dwelling), Sacred Heart College</td>
<td>Brighton Road</td>
<td>SEABOROUGH PARK</td>
<td>SEABOROUGH PARK</td>
<td>13837</td>
</tr>
<tr>
<td>Dwelling (“Glenara”)</td>
<td>32 South Esplanade</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>10603</td>
</tr>
<tr>
<td>Dwelling (“Blanche Villa”)</td>
<td>34 Broadway</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>13579</td>
</tr>
<tr>
<td>Dwelling (“Russell Court”)</td>
<td>5 Olive Street</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12033</td>
</tr>
<tr>
<td>Dwelling (“Colona”)</td>
<td>5 Roberts Street</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12027</td>
</tr>
<tr>
<td>Dwelling</td>
<td>62 Moseley Street</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>13854</td>
</tr>
<tr>
<td>Dwelling (‘Seafield Tower’)</td>
<td>6-7 South Esplanade</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12029</td>
</tr>
<tr>
<td>Dwelling (“Stormont”)</td>
<td>14 South Esplanade</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12599</td>
</tr>
<tr>
<td>Albert Hall (former Dwelling)</td>
<td>16 South Esplanade</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12598</td>
</tr>
<tr>
<td>Colley Reserve Rotunda</td>
<td>Colley Reserve</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>13614</td>
</tr>
<tr>
<td>Glenelg Town Hall (originally Institute)</td>
<td>Moseley Square</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12003</td>
</tr>
<tr>
<td>Pioneers Memorial, Glenelg</td>
<td>Moseley Square</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12002</td>
</tr>
<tr>
<td>Glenelg Post Office &amp; Dwelling</td>
<td>15 Moseley Square</td>
<td>GLENELG</td>
<td>GLENELG</td>
<td>12013</td>
</tr>
<tr>
<td>former Del Monte Guest House</td>
<td>208 Esplanade</td>
<td>HENLEY BEACH</td>
<td>HENLEY BEACH</td>
<td>14638</td>
</tr>
<tr>
<td>Ramsay Hotel</td>
<td>328 Seaview Road</td>
<td>HENLEY BEACH</td>
<td>HENLEY BEACH</td>
<td>14637</td>
</tr>
<tr>
<td>Henley Beach Town Hall, Council Chambers &amp; War Memorial</td>
<td>378 Seaview Road</td>
<td>HENLEY BEACH</td>
<td>HENLEY BEACH</td>
<td>10558</td>
</tr>
<tr>
<td>Scout Heritage Centre, sometime Grange Scout Hall (former Municipal Tramways Trust Converter Station)</td>
<td>19 Reidie Street</td>
<td>HENLEY BEACH</td>
<td>HENLEY BEACH</td>
<td>14633</td>
</tr>
<tr>
<td>Temple Uniting (former Congregational) Church</td>
<td>214 Military Road</td>
<td>HENLEY BEACH</td>
<td>HENLEY BEACH</td>
<td>14634</td>
</tr>
<tr>
<td>Charles Sturt Memorial Museum (former dwelling “The Grange”)</td>
<td>Jetty Street</td>
<td>GRANGE</td>
<td>GRANGE</td>
<td>10567</td>
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<tr>
<td>Street Ayes’ Anglican Church</td>
<td>270 Military Road</td>
<td>GRANGE</td>
<td>GRANGE</td>
<td>14632</td>
</tr>
<tr>
<td>Dwelling (“The Marines”)</td>
<td>499-513 Esplanade</td>
<td>GRANGE</td>
<td>GRANGE</td>
<td>14320</td>
</tr>
<tr>
<td>Dwelling (former Escliff Court House)</td>
<td>175-177 Military Road</td>
<td>TENNYSON</td>
<td>TENNYSON</td>
<td>11971</td>
</tr>
<tr>
<td>Dwelling (“Bower Cottages”)</td>
<td>200 Bower Road</td>
<td>SEAFORD PARK</td>
<td>SEAFORD PARK</td>
<td>11958</td>
</tr>
<tr>
<td>Fort Glanville, Fort Glanville Conservation Park</td>
<td>349 Military Road</td>
<td>SEAFORD PARK</td>
<td>SEAFORD PARK</td>
<td>10569</td>
</tr>
<tr>
<td>Glenelg Hall Senior Citizens Clubrooms (former</td>
<td>Park Avenue</td>
<td>SEAFORD PARK</td>
<td>SEAFORD PARK</td>
<td>10929</td>
</tr>
</tbody>
</table>
2.2 Demographic Changes, Trends and Implications

2.2.1 Coast Park Use

One million people reside within a one hour drive of Adelaide's coast. People who access the coast live mostly within the Adelaide metropolitan area and surrounding regions or visit from intrastate, interstate or overseas.

A Beach User Study of Adelaide Beaches found that 70% of Adelaide residents (almost 520,000 people) aged over 15 years visited at least one Adelaide beach in 1996. In addition the same study established that about 10% of beach users (75,000 persons) visited from outside the metropolitan area, interstate or overseas.

Fifteen years after the Beach User Study it is probable that more than 550,000 Adelaide residents aged over 15 years visit the coast per annum, and more than 80,000 persons visit from intrastate, interstate or overseas each year.

2.2.2 Population and Population Growth

The Estimated Resident Population for the Adelaide Statistical Division in 1998 was 1,088,300. The population is projected to increase over the next 20 years to an estimated 1,145,600 according to the Australian Bureau of Statistics. ABS figures indicate growth in Adelaide's population will be relatively slow over this period with growth in outer suburbs flattening out and more people choosing to live in inner and middle suburbs of Adelaide. Increasing numbers of people are expected to demand housing in suburbs...
adjacent the metropolitan coastline over this period and high density housing is likely to be the preferred form of residential development.

The median age of the population is projected to increase from 34 years in 1998 to approximately 46 years in 2051. Other population trends relate to the age of the population. The number of children aged 0-4 years is projected to decline and the number of people aged 65 years and over (particularly 85 years and over) is projected to increase which is likely to influence the types of facilities/activities needed.

### 2.2.3 Family and Household Types

The changing rate of family formation and the ageing of the population will lead to an increase in the number of households within metropolitan Adelaide. Lone person households are projected to show the greatest percentage increase, this is particularly related to the ageing of the population and the fact that older women, in particular, are more likely to live alone than others.

Another key factor influencing households is the average size of households. The average household size is projected to decline from 2.6 persons per household in 1996 to 2.3 or 2.4 persons per household in 2021. Furthermore, the number of children of any age living in two-parent families is projected to decline, this is associated with declining fertility and with the increasing tendency for children to live in one-parent families. In addition, of all family types, couple families without children are projected to increase most rapidly between 1996 and 2021.

These trends are likely to influence both the types of housing being created and the location of higher density housing. It will also affect the types of facilities and services required in different areas to cater for the population changes. It is expected that the coast will need to provide for the needs of an increasing number of elderly people and also single people.

### 2.2.4 Property Valuation

The price of coastal frontage property is predicted to continue to rise. The suburbs of Glenelg, Brighton, Somerton Park, West Beach, Henley Beach, Grange and Tennyson have already experienced this trend. The suburbs of Semaphore, Largs Bay and Tairora are now following this trend and in the future it is expected that the southern suburbs of Christies Beach, Port Noarlunga, Moana, Seafiff and Aldinga will be similarly influenced particularly as transportation links to these areas improve.

### 2.2.5 Transportation

Statistics indicate that the majority of beach users travel by private vehicle and park within or immediately adjacent the Coast Park. This trend is expected to continue unless other transport options become more attractive. (These issues and options are discussed further in Chapter 4).

### 2.2.6 Coast Park Catchment Area

Generally residents of the northern suburbs of metropolitan Adelaide gravitate towards the Semaphore to North Haven area of the Coast Park. This trend will be strengthened in the future following the completion of the Port River Expressway.

The Coast Park area stretching from Tennyson to Seafiff tends to be used by residents of the central metropolitan Adelaide area and by tourists. The southern Coast Park area tends to be used principally by residents of the southern and central metropolitan Adelaide area.

### 2.2.7 Tourism and Recreation Trends

The Coast Park provides for a diversity of active and passive recreational pursuits and is an area highly used by the metropolitan population and tourists, particularly in summer months.

The trend in recreational pursuits is away from formal sports towards unstructured activities. These activities for young people are often associated with a sense of adventure, perhaps even danger (eg jet skis), a club type atmosphere that can be created at surf clubs, sailing clubs or hotels along the coast. For older people, the unstructured experiences are associated with opportunities to walk, relax and enjoy the views and ambience.

The Adelaide coastline offers a range of unstructured experiences, including:

- relaxing, sitting and sunbathing
- swimming
- walking, running and jogging
- playing with children
- playing beach orientated sport (e.g. volleyball, cricket)
- exercising dogs
- picnicking
- surfing and sailboarding
- fishing
- sailing
- scuba diving/snorkelling
- sighting
- bird-watching
- nature walks
- socialising.

In addition, a number of major events within Adelaide involve the Coast Park, including:

- Bay to Birdwood  (held bi-annually)
- Glenelg Jazz Festival  (11,800 spectators, held in October each year)
- numerous food and wine festivals such as Henley Square and Southern Vales.
- Tour Down Under (held in January each year)
- summer Sundays
- Bay to Birdwood
- Bay Sports Festival
- Proclamation Day
- City to Bay Fun Run
- Walk for Cure.

The City of Charles Sturt has recently initiated a Festival of the Coast which will commence in January each year and incorporate a number of events and activities to reinforce the unique cultural experience of the coast. The first Festival of the Coast will be conducted in 2001 and includes features such as an elaborate opening ceremony and parade between Henley Square and the Grange Jetty with beach fires, music, fine food and fireworks. Other activities to be held in conjunction with the Festival will be run by “Life. Be In It” and include numerous “Come and Try” activities such as windsurfing, sailing, swimming and walking.

Adelaide beaches rate highly as a destination for visitors from interstate and overseas. For example, an International Visitor Survey undertaken in 1998 of departing international visitors established that Adelaide beaches were the equal top place visited in South Australia that year. The other place of equal rating was the Adelaide Hills, Mt Lofty Summit and Hahndorf combined.

Tourism statistics produced by the South Australian Tourism Commission indicate that international, interstate and intrastate visitation (visitor numbers and visitor nights), have increased over the past 12 months. Visiter numbers and nights for South Australia are currently at the highest levels yet achieved.

### 2.2.8 Implications of Trends

The above mentioned demographic changes will have a number of implications on the suburbs adjacent the Coast Park and on the form and role of the Coast Park. These implications include:
2.3.1 Changes in Sand Management Practices

Adelaide's coastline particularly the section from Kingston Park to North Haven has been artificially managed for some time now. Increasing outside pressures indicate there can be no guarantee that the lengths and breadths of sandy beach will continue to be available along this section of the coastline into the future.

Adelaide's beaches, from Kingston Park to North Haven, are currently the subject of a separate major investigation by the Coast Protection Board into the best options for future sand protection and management. It is possible that future coastal management will involve breaking the coastline into a series of cells and may involve the construction of additional groynes or breakwaters to capture the sand. That is, sand on some sections of the coastline will be depleted and it will build up in other areas. Obviously this will have significant impacts for both on and off-shore activities.

The same section of the coast, from Kingston Park to North Haven, is essentially built out and there are only limited opportunities to add to the open space network in this area without the purchase and possibly redevelopment of privately owned land. Where available, it is desirable for additional land east of the beach to be strategically acquired and added to the Coast Park open space network, particularly where beaches are expected to be depleted in the future.

2.3.2 Coastal Cliffs

The cliffs along the southern coast, particularly south of Moana, are generally eroding. Erosion is being caused by inappropriate stormwater infrastructure, uncontrolled access and natural coastal processes such as storm events and strong winds.

In some sections, erosion will prevent a safe and environmentally sustainable coastal linear park being established, including walkways and bicycle tracks, within the existing foreshore reserve.

There is a requirement for land to be added to the foreshore reserve to support the construction of a public linear park, to maintain a public foreshore reserve into the future and to protect the coast from further encroachment by development. In some cases, management of dangerous eroding cliffs may mean public access cannot be provided. The areas where additional acquisitions will benefit the Coast Park are identified in the precinct analysis (Chapter 5).

2.3.3 Nodes and Sub Nodes

The concept plan identifies a number of nodes along the coastline. A node is defined as an area for focus in the Coast Park. It might be a recreational node, cultural node or conservation node. There are three levels of nodes suggested being:

- **Principal Node**
  - Node of significance to metropolitan Adelaide. Three principal nodes are proposed at Christies Beach, Glenelg and Semaphore.

- **Major Node**
  - Node of regional significance (eg. within one Council area or southern Adelaide).

- **Local Node**
  - Node of local significance (eg. local community focus or minor interest). Local nodes are often sites of significance because of their potential as a lookout or a rest area along the shared recreational pathway.

Concepts are included for the future development and/ or management of the principal and major nodes. In some instances additional open space is required to support the concept.

More detail on this is provided in the precinct analysis.

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2.3 Future Open Space Requirements

The trend towards higher density living adjacent to the coastline will mean that the Coast Park will have a local as well as a regional open space role, for an increasing number of people. There is also expected to be an ongoing high demand to use the Coast Park to support an increased emphasis on passive forms of physical activity such as walking or cycling.

In general terms, there is expected to be a limited availability of additional land for the Coast Park to expand and therefore operate effectively for these purposes. Hence, it will be important to facilitate improved access and safety along the entire length of the coast and to provide additional space in key "pinch point" locations through selective land acquisition over a period of time, as discussed below.

- increased demand for higher density living adjacent the coast, particularly between Seacliff and North Haven, in order to cater for the increasing number of smaller households, including:
  - lone person households
  - couple only families
  - one-parent families
  - ageing population, particularly women;

- increased demand to use the Coast Park and beach facilities by residents of metropolitan Adelaide and tourists;

- continued trend to drive to the coast by private vehicle given the projected increase in population and number of households;

- increased demand for improved accessibility to the Coast Park to cater for the needs of a generally older population, including:
  - access friendly walking tracks and viewing platforms
  - wheelchair accessible jetties and beaches
  - ability to drive along stretches of the coast in an uninterrupted manner
  - public transport along the coast
  - passenger drop off/pick up points along the coast
  - safe and convenient parking areas;

- increased demand for a safe, pleasant and convenient Coast Park environment particularly to enhance the health and safety of people recreating, including:
  - key pedestrian areas, public transport stops and car parks to be well lit
  - shelter from all weather
  - avoid dense planting
  - avoid narrow laneways and pathways
  - encourage high use of the Coast Park to maximise public surveillance
  - avoid crossing of busy roads
  - spaces for certain user groups or legitimate users
  - adequate facilities and spaces for youth
  - control the number of pedestrian routes – define safe routes;

- increased pressure to sell off public land, including surplus school sites and under-utilised open public space, for development purposes, with the principle being to enhance the value and use of remaining and strategically important open space areas and acquire additional open space in key areas to complement existing and long term linkages;

- trend to redevelop existing large residential allotments in the western suburbs for higher density housing, particularly resulting from the sale of housing developed in the two decades after World War II, and now being sold by people in the 65 to 80 year age group (e.g. Lockleys).

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3. Potential for Additional Open Space

This chapter examines the opportunities for additional open space to form part of, or be linked with, the Coast Park.

Deficiencies in open space are emerging in the following areas:

- Changes to sand management practices may result in reduced beach widths at a number of locations along the coast. Likewise with the erosion of coastal cliffs and dunes. This places more emphasis on the need for open space to be available above the beach/waters edge in those areas.
- Historic development patterns and inappropriate new development are slowly encroaching on the coastal reserve. Buffers and protected areas will need to be established.
- It is expected that the Coast Park will be increasingly used as the connections and pathways are enhanced. Access to the coast for the majority of users will continue to be by car and this, in turn places pressure on the system to provide additional off-street parking areas, set back from the foreshore.
- Increased emphasis is now being given to water resource considerations, with the establishment of catchment water management boards to manage the resource and reduce the quantities and pollutant levels in discharges to the coastal waters. Open areas at the downstream end of watercourses and drainage systems provide opportunities to support the board’s water resource management objectives, as well as providing potential open space for Coast Park purposes.

A major feature of the Coast Park is its continuous linear theme. Additional requirements for open space relate to the need to ensure that open and free access is available for all people, over the entire length of the park, both now and into the future.

These requirements can generally be addressed through the linkages that exist or that are able to be reinforced for the purposes of the Coast Park. Details of the proposed linkages are set out in the precinct analysis. Some general observations are below.

3.1 MOSS Linkages

The Metropolitan Open Space System (MOSS) comprises the State Government’s strategic framework for the implementation of regional open space in the Adelaide Metropolitan area.

The objective of MOSS is to create a linked system of public and privately owned land of an open or natural character, providing for a range of recreational uses as well as areas of virtual contrast to the built urban environment. The coastline provides a significant linkage along the length of Metropolitan Adelaide with the open space opportunities identified in MOSS. Integration of the Coast Park will provide a perimeter of open space around metropolitan Adelaide as well as perpendicular links through Adelaide.

The Coast Park should be strongly linked to the wider MOSS network extending inland from the coast. Key MOSS linkages include:

- East of Sellicks Beach along the Hills-Face of the Willunga scarp
- Inland of Silver Sands/Aldinga to the Aldinga Scrub, Washpool and surrounding MOSS zoned land
- East of Port Willunga to Old Aldinga Village along the Willunga Creek
- Areas of coastal landscape significance between Port Willunga and Ochre Point
- MOSS linkages inland of Moana along Pedler Creek to McLaren Vale and then to Willunga along the former railway reserve
- Significant open space linkages along the Onkaparinga Estuary to the Hills Face Zone
- Christie Creek linkage from north of Christie Beach inland to the Hills Face Zone
- Significant Field River open space linkage from Hallett Cove to Happy Valley
- MOSS linkages inland of Marino to O’Halloran Hill
- The large area of recreational open space managed by West Beach Trust and with connections to the Patawalonga catchment
- The River Torrens linear park, from the coastline to the Adelaide Hills
- Areas of MOSS zoned land at Gillman.

3.2 Linkages to Watercourses

Catchments corridors and other drainage lines provide the primary opportunity for open space linkages between the Coast Park and the wider Adelaide metropolitan open space system. The corridors are generally perpendicular to the coastline and reflect MOSS zoning.

Whilst much of the surface water flows from urban Adelaide have in the past been incorporated into underground pipe systems, the trend recently being implemented by catchment boards has been to open up areas of creek catchments for water rehabilitation projects such as wetlands. A number of significant opportunities are available for open space linkages with these projects along the coast, and partnerships with catchment Board should be further explored and developed.

The principal opportunities are at the following locations:

- Sellicks Creek
- Washpool (Aldinga Scrub)
- Willunga Creek
- Maslin Creek
- Pedler Creek
- Onkaparinga River
- Christie Creek
- Field River
- Patawalonga River/Sturt Creek/Patawalonga Lake
- River Torrens
- West Lakes
- Port River.

3.3 Linkages Along the Coast

There is a recognised demand for a public pathway, incorporating recreational cyclist facilities, along the entire length of the Adelaide coast. The major focus of implementation of a pathway up to this time has been in the area from Kingston Park to North Haven, with some sections at the northern end already developed as part of the Coastal Way project. An important section of shared recreational pathway also exists at Seaford. Other sections of the coast contain separated pedestrian pathways, which have the potential to be upgraded to shared recreational pathway status.

Over the next ten years action will be taken to complete the linkages along the coastline north of Kingston Park and to extend the pathway along the southern coastline. The path will incorporate, where necessary, boardwalks and cantilevered viewing platforms to ensure access along the entire coast. In environmentally sensitive areas the location of the shared path will require further investigation and consultation with the community. The path must meet minimum width and surface requirements to be suitable for shared use by pedestrians, cyclists, wheelchair users, prams, roller blades and other users.

The public pathway should be incorporated within existing coastal open space where available and where there is no open space link, opportunities to create one (e.g. through acquisition) should be explored.

Significant issues to be addressed include:
1. Perceptions of Private Ownership

There are key sections of the coast where private development is either close to the coastline or has encroached onto the coastal foreshore reserve. The clear policy position should be that private ownership issues should not hinder the creation of a public pathway along the foreshore. That is, where necessary, privately owned land should be acquired to ensure the ongoing sustainability of the coast and to provide public access to this important public resource.

2. Environmental Considerations

In some environmentally sensitive areas it may not be possible to ameliorate the impacts of the creation of a shared use path. Under these circumstances there may need to be a compromise with the location and/or form of the shared path. The shared path should not proceed if its development will be detrimental to the stability of the coastline or environmental protection imperatives.

3.4 Use of Road Reserves

Esplanades are located along approximately 40–50 percent of Adelaide’s metropolitan coastline. They are an integral component of the Coast Park.

The esplanades are generally narrow strips of land wedged between the foreshore and the line of urban development. These corridors are used to provide generally two-way vehicular movement, parking for vehicles and pedestrian movement. They provide primary access to the foreshore and beach for all users. In some cases, they form a primary north-south route.

There are only short lengths of the esplanade which provide for on-road or off-road bicycle facilities. Often there is insufficient space on the esplanade to provide for the safe movement of cyclists and pedestrians, as well as vehicles.

There are a number of opportunities in these areas to reclaim some of the esplanade reserve as useable open space, such as:

1. Where overhead electricity or telecommunication wires exist, they should progressively be placed underground. This not only benefits the amenity of the area, but it also frees up a corridor of land on the esplanade where a pathway could be constructed.
2. Strip parking along the esplanades particularly along the western edge consumes substantial areas and, subject to the outcome of local area traffic and parking investigations, could be progressively removed. This should be coordinated with a program to identify alternative areas that may be available for parking during peak periods (discussed further in Chapter 4).
3. Change the esplanade environment to be more of a park through which traffic can move in a calmed manner rather than being a main thoroughfare. This would work best with one-way traffic movement and/or narrower, more tactile carriageways that perhaps gently meander along the coast and would better provide for the safety of pedestrians and cyclists while maintaining vehicular access for residential and retail properties along the esplanade. This could mean facilitating east–west vehicular access using the arterial roads and making north–south travel along the Coast Park use a series of discontinuous links.
4. Change unused road reserves to open space use and, where the esplanade is contiguous with other public spaces, realign the road outside of the park or on its eastern edge.

Specific opportunities are identified in the precinct by precinct analysis in Chapter 5.

3.5 Potential Habitat Corridors

Habitat corridors provide opportunities for the movement of fauna and flora between areas of significant habitat value. This increases the potential for native fauna and flora to exist, and move within the urban environment and offers protection from introduced predator species (e.g. foxes, rabbits and feral cats).

A number of habitat corridors already exist, mainly in connection with riparian areas associated with watercourses (as listed in section 3.1) but also along some transport corridors. Future habitat corridors can be linked with transport corridors, particularly railway sites and rail reserves.

Where possible these potential habitat corridors should be enhanced through planting a suitable variety of appropriate locally endemic species. In addition, opportunities should be explored for the future role of the Coast Park itself to act as a habitat corridor along the length of the coast. These habitat linkages can be further enhanced by appropriate revegetation of dunes and reserves systems, and the incorporation of vegetation strips along side any new shared recreational pathways. Revegetation of these areas also has benefits with regard to dune and cliff stabilisation.
3.6 Conservation Areas

Several land parcels and offshore features have general conservation value.

In addition to the areas specifically identified in Chapter 2.1 of this report, limited areas of remnant dunes are identified along the coast. Some of the more significant areas are included within designated parks under the NPWS system. However, important remnant dunes also exist on private and council-owned land for example, at Minda, West Beach and Tennyson, while successful dune rebuilding programs are in place along many other parts of the coast.

Watercourse estuaries and offshore reefs, identified in Chapter 2, have conservation value to support the overall ecology of the gulf. Areas of conservation value along the coast are included in the Coast Park. The specific objectives for the management of those areas are set out in the precinct analysis, but generally will include protection of the area, complemented by strategic revegetation (buffer plantings, corridors, habitat for threatened species, etc) and control of access.
4. **Issues and Opportunities**

This chapter discusses key issues affecting the whole of the Coast Park.

4.1 **Access**

4.1.1 **Disabled Access**

At present access to the coast for people with disabilities is quite difficult due to a lack of and/or poorly coordinated transport. Access to the beach/sand areas is also difficult and while some beaches are suitable for wheelchairs (e.g. Aldinga/Silver Sands, Semaphore and Largs Bay), access through the dunes or down cliffs is not available. While the Coast Park is for all people and needs to be fully accessible along its whole length, it would not be practical, at least in the short term, to achieve this.

Therefore, fully accessible facilities should be progressively implemented, starting at node points and other attractions or key locations. Suggestions for improvements of access for disabled or less agile people include:

- ramps from the esplanade to sand and water
- disabled access compatible ramps and handrails attached to jetties for access to the water
- increased use of tactile devices to mark routes, crossing points and places of interest
- provision of disabled parking and good transport systems in close proximity to these facilities.

4.1.2 ** Provision for Older Persons**

South Australia has the fastest growing population of older persons of any state in Australia, with the projected increase in the number of people over 65 years being 15.4 percent in the ten years between 1996 and 2006.

The need for easy access for older people, as well as people with a disability, to the Coast Park remains a key priority. Opportunities should be maintained for older people to enjoy the ambience of being by the beach and appreciating the views.

Thus, whilst strip parking particularly on the western side may be eliminated to open up views and create space for bicycles and pedestrians, specific off-road parking areas are required at strategic locations for disabled or less-able persons and for short term use. The short-term car parks will be suitable for older people wanting to stop and absorb the views during a drive along the coast, as well as for general loading and unloading of equipment to support activities such as scuba diving, kayaking, other paddle sports, and fishing etc.

It is also essential to provide facilities such as shade and seating at regular intervals along the coast to address the needs of older persons in particular, but also the general public. Links with coastal based retirement villages/nursing homes should be enhanced to provide access for people of all abilities.

Opportunities for older persons will be further enhanced by proposals in this report relating to the upgrading of alfresco dining and coffee outlets, and the provision of land or water based taxi/transport services.

4.1.3 **Public Transport**

Currently, the Coast Park is easily accessible by private vehicle, and, as previously stated, the vast majority of users arrive by private vehicle. A substantial portion of Coast Park area is consumed by access roads, particularly esplanades and car parking areas, both on and off-street. This has been brought about by a high rate of car ownership and the convenience of driving to and parking at any point for almost the entire length of the metropolitan coast.

But it has also been caused by relatively low level of public transport services and the provision of suitable and convenient parking facilities to match even the highest peak holiday demands.

There are only 4 train or tram stations within 500 metres of the shoreline – the standard maximum access distance considered reasonable for public transport users. Bus services are better but in most cases do not specifically cater for the recreational user – services meander around suburbs and are infrequent at weekends or public holidays.

With increasing demand on open spaces, a need to reduce car parking areas and an environmental responsibility to reduce dependency of private vehicle use, public transport access to the coast should be enhanced and expanded.

A specific tourist or recreational service for beach visitors would certainly encourage public transport use as a method of accessing the coast. However, buses will not be able to compete with the private vehicle unless there is a special attraction incorporated (for example the Glenelg tram) or some unpopular demand management (for example, parking charges or restricted parking access). That is, a beach bus service, would be an attraction but patronage would not be high and it would require a relatively high subsidy to operate.

Public transport may be able to provide an alternative access means to nodes along the Coast Park where visitors will be relatively high if existing services can be improved and with some judicious parking management. Also buses would provide a necessary role in linking park and ride facilities located outside the Coast Park to the main activity nodes (refer below).

As public transport services are progressively improved on Sundays it will become more convenient for Adelaide residents to travel by public transport to the beach. Any additional revenue generated by these services would not be sufficient to cover the cost of the improved services.

The weekdays-only coastal cross suburban bus Route 340 (Port Adelaide – West Beach – Henley Beach – Glenelg – Marino) could be upgraded to operate on Saturdays and Sundays at a cost of about $150,000 per annum. This would improve access for tourists and locals to points of interest along the coast and make round trips possible along the coast. For example, City to Port Adelaide by train, Port Adelaide to Glenelg by bus, Glenelg to City by tram. The improved services could be designed to either serve or link with other services to points not on the current route such as Fort Glanville and Semaphore.

Public perceptions of public transport may in fact be a greater hindrance to its patronage than the lack of service. It is recommended that greater publicity be given about public transport access to the coast. Services could be advertised in coastal visitor brochures or flyers on coastal activities highlighting for example:

- The excellent connection provided by the tram service from the City to Glenelg;
- Access by train from the City to Noarlunga, Hallett Cove, Marino, Seafcliff, Brighton, Grange, Largs Bay and Outer Harbor; and
- Bus access from the City to Glenelg, West Beach, Henley Beach and Grange.

Where existing or a new service operates, it will be important to provide high quality facilities to facilitate bus movement and encourage usage, such as visible bus stop or interchange areas, indented bus bays on major roads to prevent delays to other vehicles, attractive bus shelters, locating bus stops/interchanges within nodal activity areas with adjacent complementary recreational activities (e.g. cafes), and good passenger information (e.g. real time information on time to next bus).

It is often difficult to recognise links to public transport from the foreshore area. Train stations and bus stops are normally located one street back from the beach and in most cases do not provide route or timetable information at the set-down points.
These linkages could be enhanced to improve access from the beach and facilitate increased use of public transport. Signage from the foreshore to transport links would assist in identifying the connections and could be incorporated with feature paving, tree planting and lighting. Timetable and route information should be provided at the stops and stations to encourage spontaneous use of public transport. Areas which would greatly benefit from these links include:

- Saltfleet Street bus stops to Port Noarlunga;
- Beach Road to Christies Beach;
- Hallett Cove Beach Railway Station to the beach;
- Marino, Seacliff and Brighton Railway Stations to the beach;
- Military Road and Seaview Road bus stops to the beach at West Beach, Henley Beach and Grange;
- Grange Railway Station to the beach; and
- Outer Harbor Train Route Stations to the beach at Largs Bay, Taperoo, and North Haven.

4.1.4 Car Parking

Dedicated parking areas and strip parking on many esplanades of the metropolitan coast are a convenience for many visitors, although they are an intrusion into the landscape from an amenity viewpoint. Reducing car parking in the Coast Park would not only allow significant enhancement of landscape amenity but also encourage the use of alternative transport means such as public transport or bicycle. However, convenient car parking will still be an essential element of the Coast Park and better provision of alternative transportation should be integral.

Over time, the space used for car parking areas will become a vital park resource and could be better utilised for other recreational or landscaping purposes. The aim would be to progressively and significantly reduce the amount of car parking provided along the coast. The could be achieved in the following ways:

- Progressively reducing long-term on-street parking along the beach front - initially from the western side of the road - would not only improve views along the coast but, as previously discussed, would open up additional areas for recreational use and enhance access for a shared recreational pathway. Some parking areas could be provided for disabled parking and short-term loading zones could be provided near beach access points. Implementation of the above would need to be subject to the outcome of local area traffic management investigations.

- Alternative areas could be provided within comfortable walking distance of the beach and shared parking facilities for peak times should be investigated, e.g. using school or shopping centre car parks open out-of-hours incorporating shuttle bus facilities.

- Consolidate car parking areas into key points along the coast by rationalising car park layout.

- Parking charges for remaining beach-front car parks may need to be imposed and restrictions made on the number of spaces provided. In this case, off-side car parks should be free or if a bus shuttle is to be provided, park and ride facility pricing should incorporate the bus service. There would need to be a differential charge applied too, i.e. park and ride facilities would need to be significantly cheaper than parking in the coast park.

Another required substitute for reduced coastal parking will be to improve facilities for drop off and set down, so that private vehicle access is maintained to a reasonable extent. This would include purpose designed zones where cars can be safely loaded and unloaded especially in the nodes where high numbers of children may be present.

4.1.5 Traffic Speed

The aim of the Coast Park is to provide a safe recreational facility for all users and to encourage walking, cycling and swimming. Vehicular traffic would be permitted to provide reasonable access either by public transport or private vehicles. Through traffic (for example commuters) would be discouraged and, over time, progressively eliminated.

The objective suggests a calmed traffic environment where pedestrian and cycling movement takes precedence over other traffic, and with the following characteristics:

- low vehicular speeds in general, for example not greater than 40 kph;
- shared zones in many places where pedestrians can move with safety within and across slow traffic zones (speeds in these areas would be as low as 10 kph under current regulations);
- many highly visible road crossing opportunities where roads exist – highly visible and where pedestrians or unmotorised vehicles have priority over motorised vehicles.

This would be envisaged also through major nodes, for example Glenelg and Henley Square, where there are high traffic volumes. In this case alternative bypass routes will be required to encourage through traffic to take another route. Roundabouts and speed humps cause hazards for cyclists and restrict suitability for organised sporting events such as triathalons and should be progressively removed as speed restrictions become better enforced.

4.2 Conflicting Activities

The Coast Park is primarily for the use and enjoyment of the general Adelaide population. Most activities are compatible with the use of the area for swimming, sunbathing, eating or a range of other generally passive activities.

In addition to the above, there is demand for the coast to be used for some activities that have the potential to conflict with the enjoyment and the experience of other users. An issue for the entire coastline is access along cliffs and dunes particularly where bike and walking paths are created. Access for these uses must be sensitively located to avoid damage to these areas as stated in 3.3. Other conflicting uses are outlined below:

4.2.1 Dogs and Horses

There is often debate in the media and the community about dogs and horses on metropolitan beaches. Horse activity is generally confined to the early hours of the morning at the most northern and most southern beaches, and is not seen to be detrimental to the enjoyment of others.

Dogs can be a nuisance to others if not restrained by a leash. Local government authorities have introduced a range of by laws to deal with this issue. There is no easy solution as there are quite strong polarised views in the community.

It is considered that the general enjoyment of the majority should prevail over interests of the minority. Hence, a set of integrated by-laws should be developed to control the free rein of dogs during times when the beaches are being used by others.

It is also important that by-laws relating to access for horses and dogs are integrated and clearly signposted for beach users to avoid confusion when moving along the beach from one Council area to another.

4.2.2 Jet Skis

Jet ski activity along the metropolitan coastline is becoming increasingly popular but is seen, in general, to cause a nuisance to other beach users and residents along the foreshore. It is important to maintain peaceful, safe beaches where all recreational activities are accommodated and managed in a balanced way.

Local government authorities advise that the main complaints about jet ski activity are from residents annoyed by disturbance in the early morning period. Dangerous situations also occur...
When motorised equipment is in close proximity to swimmers and children wading and, while most jet skiers use sensible practice, a number of irresponsible users create public negativity towards jet skis.

On the principle that the general enjoyment of the majority should prevail, it is considered that jet ski activities should be controlled along the metropolitan coastline.

In 1999, a review was conducted of existing regulations regarding jet skis and a number of recommendations were made to balance the conflicts. From 1 December 1999, all jet skis were allowed to operate between 8am and 8pm Monday to Saturday and 9am to 8pm on Sundays with seaside councils responsible for enforcement.

Other recommendations to come into effect through new jet ski legislation include:

- speed limit of 4 knots within 50 metres of a swimmer, diver, surfer or sailboarder
- Code of Conduct to be provided to all registered jet ski operators and displayed on all craft
- assistance to councils in enforcing the regulations.

An interagency committee has been set up by the Government to investigate and report on jet ski activity in South Australian waters. Action should be taken to implement appropriate measures in response to those investigations which may include the delineation of "no go" zones in environmentally sensitive areas and exclusion areas at popular swimming beaches where families and other passive recreational activities such as surfing are undertaken.

### 4.3.2 Mobile Catering Service

Other recommendations to come into effect through new jet ski legislation include:

- The opportunity could be made available for a private investor to establish a large pontoon 1–2 km out into the gulf, and for this to be run as a day-time recreational resort on a seasonal basis.
- Several clubs are set up along the coast to provide the main focus for boating and sailing activities in the gulf waters. Most clubs operate beach launching facilities for members. Particularly popular clubs are situated at Seafiff/Brighton and Largs Bay.
- These facilities are supplemented by protected public launching ramps at:
  - O’Sullivan Beach
  - Adelaide Shores
  - North Haven.

Boating and sailing activities are generally well managed and controlled. The activities are complementary to the activities of others and are benign in their impact on the enjoyment of others. Some conflicts do, however, occur between boats and divers where buffer distances are not acknowledged.

In addition, youth orientated groups such as Scouts Australia (SA) run programs for water-based activities at numerous sites along the coast, such as the Henley Sea Scouts, Port Noarlunga Sea Scouts and the Glenelg Scout Hall on the Patawalonga. Scouts Australia is also intending to establish a boating facility on the northern seaboard.

Good access to the water for young people with boating equipment, incorporating suitable parking for cars and trailers, should be maintained.

### 4.3.3 Pontoon Resort

The opportunity could be made available for a private investor to establish a large pontoon 1–2 km out into the gulf, and for this to be run as a day-time recreational resort on a seasonal basis.

A ferry ride out of Holdfast Shores Marina could be used to give access to the pontoon. A range of activities would be available during the course of a day on the pontoon, including snorkelling, diving, water slides, banana boat rides, para sailing. The day’s experience could include an optional trip to Edinburgh or similar.

### 4.3.4 Gulf Cruises

With the facilities now available at Glenelg, and its already strong tourism and cultural focus, opportunities are available to increase the use of the gulf waters for seasonal cruises (half day cruises, dinner cruises). Adelaide is blessed with a relatively mild climate and a fairly unique sunset view which would well suit these types of cruises.

### 4.3.5 Water Based Transport

In addition to the provision of movement corridors and linkages on land, it is also important to consider existing and potential water transport corridors. The jetty's along the coast and existing boat harbours provide immediate opportunities to focus on water based transport within the coastal area. Destinations outside the Coast Park such as Port Adelaide Inner Harbour, Wirrina Cove Resort, Cape Jervis, Yorke Peninsula and Kangaroo Island also form important tourism links as well as recreational connections. Better linkages from these regions would substantially increase convenience for travel to and from these areas.

Water based activities which would benefit from increased boat access and activity include:

- scuba diving on reefs and shipwrecks
- fishing
- sailing
- para sailing
- taxi/shuttle service between destinations
- scenic and interpretive cruises
- tall ship adventure cruises
- Sea Rescue vessels.

### 4.3 Commercial Opportunities

#### 4.3.1 Kiosks and Cafes

A feature of Adelaide’s life style is the popular alfresco dining experience. Excellent indoor/outdoor dining facilities are available at several key locations along the coast. The opportunity exists to extend the experience to other locations along the coast park.

Kiosk facilities are already provided at a number of nodes along the coast. Most of the kiosks could be quite readily upgraded to provide a café opportunity with quality coffee and outdoor table availability, at least on a seasonal basis. This could generally be achieved by the addition of a pergola and/or deck and shade structure to existing buildings.

Opportunities should also be available for surf life saving and sailing clubs to upgrade their facilities and provide a service to the public. Many interstate surf life saving clubs integrate club activities with hotel type meals and facilities open to the general public and maximise their unique foreshore location. The Henley Surf Life Saving Club is a good example of where this type of facility could be enhanced and expanded. Profits from the provision of facilities are fed back into supporting the clubs activities.

#### 4.3.2 Mobile Catering Service

Some kiosk facilities exist at Moana and Aldinga Beach through to Sellicks Beach, and opportunities exist to provide a quality mobile catering service onto the beach on a seasonal basis. Mobile catering would be particularly popular where vehicle access to the beach is permitted and will further add to the uniqueness of what Adelaide has to offer within its Coast Park. It could be provided in several ways such as catering vans or slow-speed motor driven/walk behind units which could be developed as an artwork/entertainment feature in their own right.

#### 4.3.3 Pontoon Resort

The opportunity could be made available for a private investor to establish a large pontoon 1–2 km out into the gulf, and for this to be run as a day-time recreational resort on a seasonal basis.

A ferry ride out of Holdfast Shores Marina could be used to give access to the pontoon. A range of activities would be available during the course of a day on the pontoon, including snorkelling, diving, water slides, banana boat rides, para sailing. The day’s experience could include an optional trip to Edinburgh or similar.

#### 4.3.4 Gulf Cruises

With the facilities now available at Glenelg, and its already strong tourism and cultural focus, opportunities are available to increase the use of the gulf waters for seasonal cruises (half day cruises, dinner cruises). Adelaide is blessed with a relatively mild climate and a fairly unique sunset view which would well suit these types of cruises.

#### 4.3.5 Water Based Transport

In addition to the provision of movement corridors and linkages on land, it is also important to consider existing and potential water transport corridors. The jetty's along the coast and existing boat harbours provide immediate opportunities to focus on water based transport within the coastal area. Destinations outside the Coast Park such as Port Adelaide Inner Harbour, Wirrina Cove Resort, Cape Jervis, Yorke Peninsula and Kangaroo Island also form important tourism links as well as recreational connections. Better linkages from these regions would substantially increase convenience for travel to and from these areas.

Water based activities which would benefit from increased boat access and activity include:

- scuba diving on reefs and shipwrecks
- fishing
- sailing
- para sailing
- taxi/shuttle service between destinations
- scenic and interpretive cruises
- tall ship adventure cruises
- Sea Rescue vessels.
4.3.6 Other

Numerous other commercial opportunities are available to improve visitor facilities particularly for tourists, such as the hire of beach towels, bicycles, windsurf equipment, deckchairs and beach shelters.

4.4 Development Adjacent the Coast

Urban development is naturally attracted to the coast. In many instances, building development, roads, car parks, drainage and public infrastructure occupy prime sites seeking to optimise on the coastal features for their own purpose. This has resulted in the “locking up” of land resources, coastal erosion, restricted access and the need for coastal protection works.

The reality of turning back the clock is well past, however, there are locations where insensitive development has occurred that should be restricted. As part of a long term vision the purchase and aggregation of sensitive sites as properties come onto the market would provide the opportunity for future re-development in a more appropriate manner without necessarily reducing urban density or amenity. Leaseback arrangements could be used which would effectively enable cost recovery over the longer term. This may also enable additional pocket parks to be created whilst facilitating coastal access.

The City of Charles Sturt has recently prepared a Coastal Plan Amendment Report (PAR) in response to increasing pressure on coastal resources by development. A number of key strategies are proposed which other councils should consider:

- provision of set-backs have been allocated for every section of the coast and vary depending on the condition of the beach and existing development lines; and
- inclusion of provisions to update development policies in response to coastal management measures as they are required to be implemented.

4.5 Rehabilitation Works

Fencing is used extensively in remedial and preventative works. Fences can be used to protect revegetated and natural areas by redirecting or formalising traffic and pedestrian access and also to rebuild damaged dunes. Brushes and mulches can also be used in conjunction with fencing to trap sand and provide shelter for revegetation.

The type of fence used should be both functional and visually suitable for the area. To choose a fence type, a number of factors should be considered, including:

- public use of the area;
- location of the fence;
- beach dynamics;
- sand drift caused by wind;
- the materials, labour and finance available;
- maintenance required;
- public acceptability;
- and what needs to be protected.

In many situations the seaward or frontal fence can be damaged or completely removed by high seas. In areas of high risk, fences should be of simple construction and easily maintained. Dune forming fences will not be successful on eroding coastlines where limited sand is in the beach system.

4.6 Cultural and Public Art Issues

Cultural activity can provide a strong sense of the people and activities which make each place unique. It can also create a link along the coast that is not achievable through any other means. Activities can relate to the cultural significance of Aboriginal and/or European history as well as contemporary issues/values.

Adelaide is widely recognised for its multi-culturalism and the coast is no exception. The influence of our diverse community is reflected in building styles, restaurants and activities. For example, the Greek community has a yearly coastal festival to celebrate the blessing of the waters. There are also a number of sites of Aboriginal significance along the coast, including parts of the Tijuju trail, some of which are just being discovered and others which have been the subject of negotiation for some time.

It is important to reinforce and maintain this cultural significance for future generations. Coastal cultural elements can be participatory events which involve locals and visitors alike or they can be installations and facilities which assist in the interpretation of cultural significance.

An important feature of the Coast Park will be to provide a focus at designated nodes for the development of cultural facilities and activities. These nodes will punctuate the linear nature of the coast and encourage the development of a unique experience at each node while maintaining an overall sense of being part of the Coast Park. The nodes will respond to the particular theme or local cultural identity of each place. Henley Square is an excellent example of where this type of node is already in place. The Square provides a unique local experience highlighting the diverse multi-cultural background of residents of the area and allows spaces for locals to gather in both informal and formal settings. Sunday afternoons sees a range of people from different age groups and cultural backgrounds sitting, talking, walking, or undertaking more energetic activities.

The development of a coastal theme would draw together the entire coastal experience and could be based on a widely recognised asset such as our unique sunset. Artwork could be commissioned along the foreshore that draws on the special nature of the sun setting over the water – perhaps have artists working with the reflected rays of the setting sun. This could be presented through the establishment of a family of forms or a palette of materials to be consistently used by artists that would create a sense of unity in artworks while maintaining and highlighting the unique features of each place, that is, diversity in unity.

In appropriate locations, a portion of the cost of capital works should be allocated towards engaging local artists to inform the design process to produce the best possible results for interpretation and visual amenity.
Some other suggested proposals for the development and interpretation of cultural significance in the Coast Park are:

- install a number of artworks which interpret the significance of particular sites or activities (eg. temporary installations to change with the seasons or permanent installations which create significance of their own). As the coastal environment is constantly changing there are many opportunities for artworks that are kinetic or environmentally reactive;
- maximise the natural features and existing infrastructure;
- exploiting the use of features such as jetties to provide an ideal location for artwork. This work can be seen from the shore and along the jetty against the seascape and also back from the water to the urban area and hills background – the perception of "looking out – looking in";
- headlands provide vista opportunities in both directions and are ideal locations for art installations;
- develop a calendar or brochure of coastal cultural events and places of significance for wide distribution to both locals and tourists;
- investigate the development of a series of rolling festival activities along the coast, building on the City of Charles Sturt’s “Festival of the Coast” and the “Festival of Water” held in Port Adelaide;
- develop a coordinated approach to heritage interpretation such as signage or artist installations;
- strategically redevelop feature buildings or sites which are degraded to reflect the diversity or build on the character of the area;
- investigate opportunities for the introduction of land-based interpretative artworks that relate to marine underwater heritage sites; and
- further develop a significant heritage trail that features the Tjilbruke Springs site and the entire length of the Tjilbruke Dreaming Trail.

Challenges and Possible Options

Funding of artwork of a scale suitable for such an expanse of coastline will be a major issue for Councils and the State Government. There are currently no sources of funds for major artwork commissions that can be applied for by local government, therefore any artwork projects are likely to be on a relatively small scale.

Consideration should be given to the provision of capital for the commissioning of Coast Park artwork on a dollar for dollar basis with the coastal Councils.

Building a co-operative cultural development approach among the coastal Councils will be vital to achieve any sense of unity along the coast park and essential in maximising the limit resources available for cultural activities.

4.7 Statutory Framework

Development and activities within and adjacent the Coast Park are controlled by numerous Acts and regulations such as Local Government Act, Native Vegetation Act and Native Title. The Development Act 1993 is particularly relevant in that it facilitates the policy contained with the Development Plan applicable to each local council.

Almost the entire coastal strip from Sellicks Beach to North Haven is designed Coastal Zone within each Council's Development Plan with few exceptions (refer Appendix B). Future provisions should be made to designate the entire coast as part of MOSS as discussed below.

The Planning Strategy acknowledges the need for developing a "coastal linear park" promoting access and enjoyment of the coast and managing the beaches to ensure coast protection, recreation, conservation and tourism. The outcome of this study should be used to further reinforce the Planning Strategy and provide additional direction specific to the key open space issues affecting the coast. In particular, the open space areas along the coast should be formally designated as part of the MOSS Zoned land for Adelaide, perhaps with a MOSS (Coastal) designation.

In addition, the Coastal Zone, applicable to individual councils could be further refined to guide coastal development activities, support enhanced coastal access, provide a consistent (metropolitan-wide) coastal development framework, whilst promoting coastal management, conservation, open space linkages and the like. Structure Plans and Concept Plans could be introduced to illustrate opportunities and preferred outcomes according to the hierarchy of nodes outlined in Chapter 5.

There is also identified a need to provide consistent Council by-laws and development regulations through local government areas. While the councils themselves must be involved in the development of these policies, it should be the responsibility of the overarching body to initiate their development.
5. Landscape Evaluation

This chapter provides an evaluation of the Adelaide metropolitan coastal landscape, including landforms, vegetation cover and the cultural landscape. It provides the basis for identifying the Coast Park precincts adopted for the analysis in Chapter 6.

5.1 Introduction

The landscape of the coast includes both the narrow coastal zone and the adjacent hinterland.

The present day landscape consists of a number of "layers".

- Its underlying landform and geological features.
- Its pre-European (and remnant) vegetation cover.
- The European human-modified "cultural landscape".

An appreciation of landscape is fundamental to the planning of the Coast Park, in order to:

- Conserve and enhance significant natural and cultural landscapes (e.g. coastal cliff formations).
- Identify appropriate local and coast-wide planting/streetscaping themes (e.g. local indigenous tree species).
- Integrate Coast Park works with coastal process (e.g. cliff/dune erosion).
- Provide the basis for a coast-wide interpretive strategy (e.g. coastal process, coastal villages, geological features etc).

The following sections summarise key aspects of each of the layers of the coastal landscape.

5.2 Landform

5.2.1 Introduction

The metropolitan coastline is an area of great diversity of scenic landscapes, of sandy beaches and dunes, bays, headlands and cliffs, shaped by the interaction of natural coastal processes, such as wind and wave erosion, tides and currents and longshore drift, on the underlying landforms. (Refer Figure 5.1)

5.2.2 Geological Context

The variety of coastal landforms are determined by ancient structural and sedimentary events. The Street Vincent Basin was formed by early tertiary block faulting and a series of sub-basins flanking the western margin of the Mount Lofty Ranges.

The Adelaide metropolitan region can be divided into three broad landform units based on the system of uplifted faults and basins.

- The Willunga Basin – between the Willunga fault line at Sellicks Beach and the Clarendon fault line at Ochre Point.
- The Eden Block and the Noarlunga Embayment – between Clarendon fault line and the Eden fault line, which meets the coast at Seaford/Marino.
- The Adelaide Plains – defined in the east by the Eden fault line.

These basins were subsequently subject to sedimentation, then marine inundation and sandstone and limestone deposition followed by withdrawal of the sea (Tertiary era). This was followed by the Quaternary era alluvial sequence through erosion of the uplands to the east.

FIGURE 5.1: Landforms
From Sellicks Beach to Marino the uplifted landforms have been eroded to create a landscape of coastal cliffs, bays and headlands, depending on local geology. From Sellicks Beach to O’Sullivan Beach the landscape of cliff and beaches reflects the more easily eroded Tertiary sandstone and limestone layers and clay sediments. From O’Sullivan Beach to Marino the landscape of steep coastal cliffs and extensive intertidal rock platforms reflects the underlying harder Cambrian and Pre-cambrian rocks of the Eden block.

From Marino to Outer Harbor the coastline is a continuous stretch of sandy beaches and dunes backed by the Adelaide Plains.

5.2.3 Landform Units

For the purposes of this study the coastline has been divided into the following landform units:

a. Willunga Basin

The Willunga Basin extends from the Willunga scarp at Sellicks Beach to the Clarendon scarp at Ochre Point to the north. Coastal process have created a series of bays and headlands in the Tertiary landforms throughout this area.

(a) Sellicks Beach

- Sellicks Beach is bounded by the Willunga Fault Scarp and its outwash plain. The clay and gravel cliffs are of recent origin (sedimentary deposits) and are increasing in height.
- Further south the cliffs extend to the SW and are of older Cambrian age. The cliffs are formed of Heatherdale Shale, a mudstone containing harder nodules, evident as pebbles on the beach and wave-cut platform. The coastal cliffs then extend onwards to Myponga Beach.

(b) Aldinga Scrub/Washpool

- The area comprises a continuous sandy beach and mobile dune system.
- At Aldinga Scrub the coastal sands extend inland to semi-stabilised dunes.
- The adjacent low lying coastal plains drain to the washpool wetland.
- Aldinga Scrub is the only existing example of coastal scrubland of its kind in South Australia and the last substantial remnant of coastal scrubland in the Adelaide region.

(c) Snapper Point

- A reef of Hallett Cove sandstone occurs at Snapper Point as an extensive and easily accessible horizontal rock platform.
- South of Snapper Point the coastal cliffs are fronted by a row of vegetated dunes.

(d) Port Willunga/Maslin Beach

- The coastal cliff and bays at Port Willunga and Maslin Beach comprise a distinctive and picturesque south coast landscape.
- The different strata in the cliffs illustrate the geological history of the coastline, including sedimentation and later outwash from the uplifted ranges of the Willunga Fault.
- Rare exposures of old fossiliferous sediments are of scientific and educational value.
- The area is listed as a geological site by the National Estate.
- At Port Willunga the coastal cliffs back a line of low vegetated dunes to Willunga Creek.
- Blanche Point illustrates the various geological layers, including the older Maslin Sands, Torquay Limestone, Blanche Point Formation, Hallet Cove Sandstone, Mottled Clay and sand Calcrite and recent soils. Gulf Rock comprises an eroded section of the cliff and is a good example of a "sea-stack".
- The former Readymix Sand Quarry has created a man-made amphitheatre, excavating the layer of South Maslin Sands.
- At Ochre Point, the pre-Cambrian sediments thrown up along the Ochre Cove – Clarendon Fault are exposed as the source of ochre within the steep sided gullies.
- Ochre Point includes an intertidal quartzite reef on the Ochre Cove - Clarendon fault.

b. Noarlunga Basin

The Noarlunga Embayment, between Ochre Point and O’Sullivan Beach, consists of sandy beaches, eroded Tertiary era cliffs and intertidal erosion benches and reefs.

(a) Moana

- The area comprises a sandy beach backed by dunes incorporated in the Moana Sands Conservation Park.

(b) Seaford

- The area comprises a stretch of reefs and sandy beaches backed by coastal cliffs.

(c) Port Noarlunga

- The lower reaches of the Onkaparinga River form part of a tidal estuary which has arisen since the formation of the Gulf Street. Vincent approximately 7,000 years ago. The River formerly flowed out across an alluvial plan which is now the Gulf Street. Vincent, but now discharges to the sea from the southern end of a narrow spit and dune system. The Noarlunga Reef, located approximately 400 metres off shore, provides a protected, low energy environment along the immediate coast.
- Onkaparinga Estuary is the third largest in South Australia and the only one in the Adelaide region which is ecologically intact.
- The cliffs at the Rivermouth define the southern end of the Port Noarlunga landscape. The tertiary limestone/sandstone cliffs show the various layers of clays and sands, the softer layers being more easily eroded creating ever changing ledges.
- Port Noarlunga Reef is a good example of a linear off-shore reef (abandoned by the retreating cliffs) and is of scientific as well as recreational and scenic significance.

(d) Christies Beach

- The beach at Christies Beach was once backed by low dunes, now removed. The beach is bounded to the north by cliffs at the boat harbour (Rocky Point) and to the south by Witton Bluff. The headland consists of softer tertiary limestone cliffs, now screened by rock works to stabilise the continuous cliff top road. A platform shelf has also developed between Witton Bluff and the Port Noarlunga jetty.
- Horseshoe reef off Christies Beach is an exposed limestone formation.
- A "sea-stack" was once evident off Witton bluff, which has not collapsed.

(c. Eden Block

The area between O’Sullivan Beach and Marino comprises a landscape of steep rocky cliffs and shore platforms reflecting the underlying resistant rock geology.

The area is also characterised by extensive wave-cut intertidal rock platforms rather than sandy beaches.

(a) Curlew Point (Port Stanvac)

- Port Stanvac scrub provides the best intact example of low shrubland.

(b) Field River

- Coastal cliffs extend from the mouth of Field River to Curlew Point.
- Redgums and reeds and rushes extended up the Field River Valley.
- Coastal dunes are found adjacent to the river mouth.
(c) Hallett Cove
- Hallett Cove contains some of the world’s best preserved Permian glacial features contained in the Hallett Cove Conservation Park. The locality includes a variety of coastal landforms including the “amphitheatre”, Waterfall Creek, Black Cliff and wave cut shore platform.
- Significant remnant vegetation is conserved in Hallett Cove Conservation Park.
- Coastal dunes are found adjacent to the amphitheatre.
- This is an area of considerable scientific/educational value.

(d) Marino
- The landscape at Marino is characterised by steep rocky cliffs and a wave cut shore platform on the beach.
- Coastal vegetation has been typically cleared for housing to the cliff edge.
- Remnants of drier coastal vegetation are found in the Marino Conservation Park.

5.3 Vegetation

The pre-European vegetation of the coastline reflects the underlying physical landscape described in the previous section.

Coastal vegetation can be divided into the following major communities:

Coastal Dune Shrubland
Open heath association, gradational in character (i.e. foredune, backdune, etc). Olearia exillaris (daily bush) - Acacia Longifolia (coastal wattle).

Coastal Cliff Heathland
Low shrubland. Acacia ligulata (umbrella bush) – Acacia acinacea (wreath wattle) – Pomaderris paniculosa.

Saltmarsh
- Low shrubland.
- Samphire and Marsh Saltbush species.

Riparian Woodland
- Typically E. camaldulensis – E. Leucoxylon with reeds etc. along streamlines.

Woodland
- Inland of the coastal strip the landscape comprised a variety of woodland plant communities (e.g. E. fasciculosa, E. porosa, Callicrith preissi).

The pre-European vegetation of the coast has been substantially cleared for agricultural use and later urban development. Significant areas of remnant vegetation (as well as contemporary writings) provide the best picture of the character of the original landscape. These include:

Willunga Basin
- Aldinga Scrub/Washpool
- Silver Sands Dunes

Noarlunga Embayment
- Ochre Point
- Moana Sands Conservation Park
- Onkaparinga Outlet

Eden Block
- Tingara Drive Reserve
- Port Stanvac Scrub
- Field River
- Hallett Cove Conservation Park
- Marino Conservation Park

Adelaide Plains
- Minda Dunes
- Estcourt House Dunes
5.4 Cultural Landscape

5.4.1 Introduction

The human or culture landscape overlays the physical landscape and pre-European vegetation of the coastline.

This includes both current land use patterns, and the “memory” of past occupation and use of the coast.

Cultural themes include:

- Maritime use of the coast.
- Access and communications.
- Agriculture.
- Coastal “villages”.
- The coast as a pleasure resort.
- Urbanisation of the coast.

5.4.2 Southern Region

The southern region of Adelaide from Sellicks Beach to Marino was extensively cleared for agricultural use. Settlement was limited to a number of coastal/rural villages set in the open rural landscape, often linked to inland villages. These included:

- Port Willunga/Old Aldinga
- Port Noarlunga/Old Noarlunga
- Christies Beach.

Subdivision and shack development also took place at a number of scenic coastal resort locations and beaches, including:

- Sellicks Beach
- Aldinga Beach
- Maslin Beach
- Moana Beach
- Hallett Cove.

Subsequent urban development has submerged the rural landscape and coastal villages of the Eden Block and the Noarlunga Basin.

The identity of the southern villages of the Willunga Basin, Sellicks Beach and Port Willunga, however, is still intact due to the current policies of protecting the viticultural landscape of the Southern Vales.

The Southern Vales and coastline also represents a unique cultural artists landscape to be preserved for its scenic as well as geological value.

5.4.3 Adelaide Plains

The region of the Adelaide Plains was laid out by Colonel Light, including radial road connections to historic Glenelg and Port Adelaide. The coastline between Kingston Park and Grange Road was laid out in sections, west of Brighton Road and Tapleys Hill Road.

The process of dunes removal and deterioration (trough grazing, sand mining, wood gathering etc.) began early, with a lack of appreciation of the role of the dune system in protecting foreshore development.

Coastal sections were developed progressively by subdivision resulting in a number of coastal “villages” with development served by Adelaide’s radial rail and tram (horse and later electric) network, but with little connection along the coast.

Early coastal “villages” developed at the sites of landings and safe anchorages and included:

- Brighton/Seacliff
- Glenelg/Somerton
- Grange/Henley Beach
- Semaphore/Largs Bay.

These coastal villages later developed as coastal pleasure resorts easily accessible to the metropolitan population.

Other historic focal points include:

- Kingston Park (indigenous and historic focus)
- Fort Glanville/Point Malcolm.

Metropolitan development has since submerged these separate village entities (refer Figure 5.2).
The pattern of urbanisation can be briefly summarised as follows:

FIGURE 5.2: 1939 – Population 325,000
1840 – 1860
Slow urbanisation and development of villages outside the City, including Glenelg and Port Adelaide. The “reed beds” area behind the coastal dunes remained untouched.

1860 – 1880
Urban expansion, but slow to the west of the City. Road and rail links to Port Adelaide encouraged development there. Horse trams were introduced in 1878.

1880 – 1900
Boom period with extensive sub-division. Townships developed at Glenelg, Brighton and Semaphore and Henley and Grange, with railways constructed to service them.

1900 – 1940
Most of the Adelaide Plains were developed, with the exception of the poorly drained Cowandilla Plains, between Glenelg and Port Adelaide, retaining the identity of the coastal villages. Electric trams were introduced 1909. Brighton railway was built in 1913 and the rail system modernised in 1920s. Expansion of Henley/Grange and Semaphore/Largs into separate Linear developments. Expansion of Glenelg towards Brighton which had developed as a coastal node.

1940 – 2000
Urban expansion took place into the southern region including Hallett Cove, Seaford and Noarlunga. This period saw the development of West Lakes in the remaining area of the Cowandilla Plains, North Haven on LeFevre Peninsula and the redevelopment of Glenelg under the Holdfast Shores project.

5.5 Introduction to the Coast Park Precincts
The key landscape values of the coastline (both natural and cultural) have been used as the basis for underlying eight precincts along the metropolitan coastline.

They are as follows:

5.5.1 Willunga Basin
Precinct 1 – Southern Sands
Precinct 1 covers an area from Sellicks Beach to and including Aldinga Beach.

It exhibits high natural landscape values, as a consequence of the Sellicks cliffs, the continuous stretch of sandy beach and remnant frontal dunes, the significant remnant vegetation of Aldinga scrub and the washpool, and the Aldinga reef and headland.

The Willunga scarp provides a scenic backdrop to the coastal landscape of the precinct.

Precinct 2 – Willunga Cliffs
Precinct 2 covers an area from Snapper Point to Ochre Point.

It has high natural and cultural landscape value. The coastal landscape of cliff and sandy bay is of significant scenic as well as scientific value.

The coastal cliffs are part of the broader landscape of Willunga Basin.

Port Willunga village forms a cultural focal point with heritage significance associated with its past history and events.

Port Willunga also has significant historic linkages to the village of Old Aldinga and further inland to Willunga.

Maslin Beach is of more recent cultural significance.

5.5.2 Noarlunga Basin
Precinct 3 – Mid South Surf Coast
Precinct 3 covers the south west beaches from Moana to O’Sullivan Beach.

The focal area for this precinct in terms of both scenic and cultural landscape value is Port Noarlunga, with a unique collection of landscape elements including coastal cliffs and headlands and dunes, the estuary off-shore reefs, jetty and historic village.

Port Noarlunga also has significant historic linkages inland to Old Noarlunga along the Onkaparinga estuary.

Moana and Christies Beach represent coastal resort villages now surrounded by urban development.

The coastline from Moana to Southport is also urbanised, but remains a focal area for local “surf culture” with a series of popular and locally named surf beaches.

The coastal cliff and dune landscape at the northern end of the precinct has been significantly altered by development of the boat launching facility, sewage treatment works and oil refinery.

Precinct 4 – Cove Conservation
The precinct covers the area from Port Stanvac to Marino Rocks.

The unique landscape value of this precinct comprises the steep hard rock cliff formations and rocky shore platforms.

Past development has encroached to the cliff edge in any areas, highlighting the significance of the Hallett Cove and Marino Conservation Park, in conserving parts of the original unique geological landscape.
5.5.3 Adelaide Plains

**Precinct 5 – Holdfast Bay**

The precinct covers the area from Kingston Park to Glenelg north.

The original coastal dune landscape of the area has all but been lost to coastal strip development, with the exception of the Minda dunes.

The identity of the original coastal villages should be restored and reinforced including the major historic node of Glenelg, the coastal villages of Brighton and Seadill and the historic node of Kingston Park.

**Precinct 6 – Adelaide Shores**

This precinct covers the public land contained within the Glenelg Sewage Treatment Works and West Beach Recreation Reserve.

The recreation reserve is an example of the planned allocation of land for public recreational use after the second world war.

**Precinct 7 – Torrens Beaches**

The precinct covers the beaches from West Beach to Point Malcolm.

The original landscape if this precinct comprised coastal dunes backed by low lowing swampy land (the reedbeds). The coastline remained a distinct entity until the areas of swampland was developed. The identity of the original coastal villages, originally served by tram and rail transport should be restored, including Henley Beach and Grange.

The significant remnant dunes of Estcourt House are a reminder of the scale of the original coastal dunes.

**Precinct 8 – Northern Maritime**

This precinct covers the area from Semaphore South to North Haven.

The LeFevre Peninsula was originally an area of extensive dunes, now lost to development. Only the coastal foredunes remain, backing a sandy beach subject to sand accretion.

Semaphore and Largs Bay were the original early coastal villages, with linkages inland to the historic Port Adelaide centre.
6. **Precinct Analysis and Concepts**

In the following section, a summary of the investigations for each precinct is outlined. As a result of the extensive review of existing reports, plans and proposals, a table and concept plan has been prepared for each precinct which highlights the proposals put forward in these documents and identifies those which could be achieved through the Coast Park Plan. The analysis and recommendations for each Precinct is presented as follows:

- An introduction to the Precinct including landscape character and summary of attributes and an overall map of the coast indicating the Precinct’s location within the context of the whole Park. Key documents relating to this precinct and reviewed in the investigations are listed on this page.
- Overall map of the Precinct showing existing characteristics and proposed Coast Park opportunities such as sub-precincts, nodes and linkages.
- The Precinct is broken down into Sub-Precincts and each is summarised in a Pressure-State-Response Table - a summary of the current state, any issues and proposals for each area. Following this breakdown, is a list of the recommendations for that sub-precinct including proposed actions, responsibilities, priority and estimated funding requirements. It is accompanied by photographs illustrating key features or issues for this sub-precinct.
- Following the recommendations table is a concept plan for each of the proposed nodes which highlights the proposed actions for each focus area.
- This pattern is repeated for each of the sub-precincts within the eight Precincts.

A number of headings are used in the tables as explained below:

- **Landscape Character**: Description of the landscape features of the precinct in terms of its geographic, geological and natural environment including any waterways or creeks.
- **Leisure, Recreation & Tourism**: Popular activities in the area, tourism assets and facilities.
- **Access & Linkages**: Vehicular, pedestrian and cycle connections with other precincts and within the precinct, accessibility for all users such as disabled access, ramps, stairs, signage, etc.
- **Adjacent Activities**: Nearby land uses and activities that may affect the Coast Park such as industry, recreational areas, waterways.
- **Nodes**: Areas for focus in the Coast Park.
- **Principal Node**: Node of significance to metropolitan Adelaide.
- **Major Node**: Node of regional significance (eg. within one Council area or southern Adelaide).
- **Local Node**: Node of local significance (eg. local community focus or minor interest).
7. **Implementation and Recommendations**

This sections summarises recommended actions for the Coast Park from the analysis in Chapter 6, canvases management considerations and sets out recommendations for implementation over a ten year time frame.

7.1 **Budget for Coast Park Potential Projects**

In the precinct analysis in Chapter 6 of this report, approximately 60 projects are identified as potential Coast Park projects, at a total cost of some $20 million. Approximately $9 million of this overall cost is set against identified Priority 1 projects. These projects are presented as potential landmark projects, any of which could be used to launch the concept plan for the Coast Park.

A summary of the cost distribution for Priority 1 projects and total projects for each precinct is contained in Table 7.1.

### Table 7.1 Distribution of Project Costs Across Coast Park

<table>
<thead>
<tr>
<th>Precinct</th>
<th>Cost of Priority 1 Projects ($000s)</th>
<th>Cost of All Projects ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precinct 1</td>
<td>$170</td>
<td>$1,770</td>
</tr>
<tr>
<td>Precinct 2</td>
<td>$100</td>
<td>$1,860</td>
</tr>
<tr>
<td>Precinct 3</td>
<td>$2,690</td>
<td>$5,740</td>
</tr>
<tr>
<td>Precinct 4</td>
<td>$610</td>
<td>$1,770</td>
</tr>
<tr>
<td>Precinct 5</td>
<td>$1,780</td>
<td>$4,060</td>
</tr>
<tr>
<td>Precinct 6</td>
<td>$280</td>
<td>$280</td>
</tr>
<tr>
<td>Precinct 7</td>
<td>$1,670</td>
<td>$2,930</td>
</tr>
<tr>
<td>Precinct 8</td>
<td>$1,470</td>
<td>$1,990</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8,970</strong></td>
<td><strong>$20,000</strong></td>
</tr>
</tbody>
</table>

7.2 **Potential Priority 1 Landmark Projects**

The potential Priority 1 Landmark Projects are spread evenly along the coastline and include projects with an environmental emphasis, projects supporting interpretative artwork, projects supporting unstructured recreation activities and works to support possible commercial redevelopment projects. They are summarised in Table 7.2 below.

### Table 7.2 Summary of Priority 1 Projects

<table>
<thead>
<tr>
<th>Precinct</th>
<th>LGA</th>
<th>Description of Project</th>
<th>Cost ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Sands</td>
<td>Onkaparinga</td>
<td>Washpool. Undertake consultation program and develop a comprehensive management plan for the Washpool area, setting out strategies for the future presentation, protection, interpretation and management of the public land. Provision of public art and interpretive work at selected locations.</td>
<td>$170,000</td>
</tr>
<tr>
<td>Willunga Cliffs</td>
<td>Onkaparinga</td>
<td>Ochre Point. Undertake consultation program to bring together Aboriginal interests, the interests of the hang gliding community and environmental objectives for the area, and develop strategies for the revegetation and management of the area. Provision of public art and interpretive work at selected locations.</td>
<td>$100,000</td>
</tr>
<tr>
<td>Mid South Surf</td>
<td>Onkaparinga</td>
<td>Port Noarlunga. Progressively implement the Port Noarlunga Foreshore Master Plan, including the Wearing Street Precinct Master Plan, generally modernising the foreshore hub, by upgrading indoor/outdoor dining facilities, rationalising car parking areas, making provision for bus drop off and divers’ preparation areas, additional shade, shelter, beach furniture and provision for a major piece of public art. Provision of public art and interpretive work at selected locations.</td>
<td>$1,690,000</td>
</tr>
<tr>
<td>Mid South Surf</td>
<td>Onkaparinga</td>
<td>Christies Beach. Develop plans and progressively prepare for the Beach Road/Esplanade area at Christies Beach to become the feature coastal village square for the south coast, incorporating a range of private sector retail and commercial opportunities set around a village platform offering direct access to the coast, but retaining and rationalising Lions Park. The immediate priorities are to commission a master planning study for the area and to acquire additional land as it becomes available, to open up the public spaces and to provide interpretative artwork.</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Cove Conservation</td>
<td>Marion</td>
<td>Hallet Cove – Marino Rocks Walking Trail. Further develop the cliff top south of Marino Rocks with a world class walking track, incorporating steps, footbridges, markers and rails where needed to enhance public safety. Provision of public art and interpretive work at selected locations.</td>
<td>$610,000</td>
</tr>
<tr>
<td>Holdfast Bay</td>
<td>Holdfast Bay</td>
<td>South Esplanade. Revitalise the South Esplanade between Somerton and Moseley Square at Glenelg, including the provision of a safe pathway for cyclists through the area. Provision of public art and interpretive work at selected locations.</td>
<td>$1,780,000</td>
</tr>
<tr>
<td>Adelaide Shores</td>
<td>West Torrens and Charles Sturt</td>
<td>Adelaide Shores Shared Recreational Pathway. Development of a shared recreational pathway through Adelaide Shores, behind the existing dunes, including negotiating with West Beach Trust on the pathway alignment and provision for public artwork.</td>
<td>$280,000</td>
</tr>
<tr>
<td>Precinct</td>
<td>LGA</td>
<td>Description of Project</td>
<td>Cost</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Torrens Beaches</td>
<td>Charles Sturt</td>
<td>River Torrens Linear Park Link Take advantage of the existing concrete platform at the mouth of the River Torrens, to provide an alternative (dry weather) pathway to link the River Torrens linear park to the coast and in particular the Esplanade on the northern side of the River, under Seaview Road bridge.</td>
<td>$180,000</td>
</tr>
<tr>
<td>Torrens Beaches</td>
<td>Charles Sturt</td>
<td>Henley Square Develop plans and progressively prepare for a primarily private sector project to enhance the area, including rationalising car parking areas and redevelopment opportunities on the eastern side of Seaview Road. The immediate priorities are to commission a master planning study for the area, to commission a major piece of public art and to progressively acquire strategic sites as they become available. Provision of public art and interpretive work at selected locations.</td>
<td>$1,690,000</td>
</tr>
<tr>
<td>Northern Maritime</td>
<td>Port Adelaide Enfield</td>
<td>Semaphore Implement the provision of passive leisure and recreation facilities as proposed in the Semaphore Foreshore master Plan, reinforcing the area as an exciting coastal node linking to the commercial areas along Semaphore Road and recreating the area’s historic coastal focus. Works will include upgrading the public pathways, rationalising the entertainment facilities, a major piece of public art and lighting.</td>
<td>$950,000</td>
</tr>
<tr>
<td>Northern Maritime</td>
<td>Port Adelaide Enfield</td>
<td>Largs Bay Prepare a master plan for the Largs Bay foreshore and proceed to upgrade the area by enhancing and rebuilding the area’s coastal village focus, reinforcing its cultural/heritage significance, creating an environment for new commercial opportunities and provision for artwork</td>
<td>$520,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>$8,970,000</td>
</tr>
</tbody>
</table>

7.3 Possible Funding Sources

**Local Government**

Local Government is the principle authority with care, control and management of coastal reserves. The coastal councils themselves inject considerable resources into the development and maintenance of the coast. They often achieve funding for a range of projects from the sources identified below, usually on a dollar for dollar basis.

**Planning and Development Fund**

This fund is used for the purchase and development of regional open space for passive, unstructured recreation or conservation purposes. It is administered by Planning SA.

**Coast Protection Board**

The Board determines grants for Councils for capital works projects. Funded projects generally relate to the maintenance of beach amenity, protection works, sand drift control and associated investigations.

**State Bicycle Fund**

BikeSouth, through Transport SA administers this fund to support a range of cycling initiatives. The establishment of a shared recreational path along the coast (the Coastal Way) is a key project under this program.

**Art for Public Places**

This program provides minor funding for the development of public art. It is administered through Arts SA.

**Catchment Management Funds**

The three catchment water management boards along the metropolitan coastline (Onkaparinga, Patawalonga and Torrens) receive levy funds which the boards use for integrated water management projects within their areas of responsibility. This includes projects that have implications for stormwater discharges into the sea.

**Office of Recreation and Sport**

Funding is available through the Greenways project for the implementation of trails and more generally for recreation and sport facilities.

**National Parks and Wildlife Service**

The Service administers funding for a range of projects for the management, conservation and interpretation of its designated reserves.

**Tourism SA**

Funding is available to support development of assets where the works will produce tangible returns for the South Australian economy.

**Federal Government Programs**

The Federal Government supports a range of programs providing grants, which can be accessed for suitable projects, upon application to the relevant authority. They include:

- The National Heritage Program
- Clean Seas program
- Coascare
- Biodiversity Program
- Greenhouse Credits.

It is anticipated that funds for approved Coast Park projects will be sourced from combination of the above.
7.4 Management Framework

Attraction of funds from the available programs is likely to be more effective where partnerships can be established between local government and community groups to support the initiative. In these circumstances it is highly desirable for an integrated process to be set up to agree and coordinate the various activities.

It is suggested that the Steering Committee established for the Coast Park project continue to meet on an as required basis to oversee the implementation process arising out of this report. This would include the review and design development of the suggested projects and associated funding priorities. The Committee would provide the framework for coordinated and integrated advice to the relevant authorities and funding agencies.

Decisions on allocations of funds from the Planning and Development Funds towards Coast Park projects must remain the responsibility of the Planning Minister.

7.5 Implementation Strategy for Public Art

Section 4.6 of this report provides comment on the use of public art within the Coast Park, including some images of artwork used successfully in other places.

The recommendations in Chapter 6 highlight the areas in which artworks would be beneficial both in aesthetic and interpretive terms. Two parallel projects are suggested below to provide a linking structure to the Coast Park and contribute a significant cultural dimension to the Adelaide metropolitan coastline. A public arts selection group could be established to commission and review the artworks and a project manager could be appointed to oversee these artwork installations.

Project “Looking out - Looking in” - Coastal Landmark Artworks

Initially development of three key artworks should be commissioned. These should be conceptually relevant to their location on the coast between sea and land and would be of sufficient scale to form a strong visual feature in the linear landscape of the coast. Artists should be asked to develop designs that explore the concept of the coast line and a viewer’s experience of looking out to sea and into the hills.

A limited competition process is recommended as it is the accepted commissioning model used by Arts SA’s Public Art Planning and Design program and is for publicly funded projects of this nature, the most transparent and equitable process. The process includes: advertising the brief, selecting preferred artists, further developing designs and reviewing and fabricating the installations.

Project “Resting Places - Learning Places” - Seating and Interpretative Artworks

It is proposed that a group of professional artists work with local communities to develop initially twelve artwork environments at key nodal points along the coast. Each of the nodal environments will provide seating and creative interpretive artwork to establish a convivial place to rest and learn about the location’s history, environment and people. The interpretative works may be either sculptural or graphic in form.

The process should provide an opportunity for local artists/residents to work with skilled professional artists on the design of the twelve sites. Three lead artists could be appointed with each being responsible for the development of four nodal environments for the park.

Up to twelve artworks should be commissioned at locations such as Sellicks Beach, Aldinga Beach, Port Willunga, Moana, Seaford, Christies Beach, Hallett Cove, Marino Rocks, Kingston Park, Brighton, Adelaide Shores and Grange.

7.6 General Guidelines

In addition to the specific projects outlined above a number of consistent guidelines should apply across the Coast Park.

Management

- Adopt and advocate best practice in coastal management – lead by example.
- Integrate closely with the work of Catchment Boards and local government.
- Jetty maintenance/upgrades should include creating disabled access as an essential improvement (eg. ramps and handrails).
- Upgrade maintenance routines to improve the amenity of the Coast Park through weed eradication, vegetation management, and maintenance of access paths/steps/ramps and path surfaces.
- Involve community groups in projects to facilitate a sense of ownership and maximise use of resources.
- Undertake a public awareness/education campaign aimed at reducing dumping of garden and other wastes in dune areas, the impacts of domestic animals on native vegetation and birds and reptiles and the proper use of the Coast Park.
- Minimise the impact of industry and future urban development on the coastal environment eg. through Development Plans.

Tourism and Culture

- Develop promotional material such as a brochures indicating path access, open space reserves, recreational areas, car parking, significant features, facilities and interpretive information.
- Link accommodation with bicycle/walking tours, tourist information and cultural events.
- Provide a coastal theme while maintaining the unique experience of each precinct.
- Recognise and promote the European and Aboriginal significance of particular areas for example the Tijlbruke Springs at Kingston Park.

The Environment and Development

- Develop urban design guidelines to promote good design for street furniture, landscaping, signage, structures and lighting.
- Upgrade Development Plans to include set-backs, buffer, appropriate materials, heights, scale, design character, colours and designate conservation areas.
- Maximise opportunities to create habitat corridors along the coast through the park and other east-west linkages.
- Protect significant areas through their designation as Conservation Parks.
- Install fences in dune erosion areas to assist with sand build-up and to control access.
- Allow for rapid updating of Development Plans as coast protection/management measures change.
- Protect and enhance the conservation values of remnant sand dunes by supporting and promoting the activities of volunteer groups.
- Provide board and chain walkways where tracks are necessary through dunes – allow sand to permeate through walkway and direct access through dunes.

Traffic and Transport

- Integrate public transport termination points with coastal nodes.
- Develop a road network and support facilities that reduce traffic congestion and hazards and is able to cater for visitor levels during peak use periods.
- Encourage parking away from the coast and increase public transport access.
- Develop a specific tourist or recreational bus type service to operate both to and along the coast responsive to seasonal demand.
- Change unused road reserves to open space.
Where an Esplanade is adjacent an open space area and the opportunity exists, realign the road to integrate the recreation area with the beach.

**Coastal Linear Park Design**

- Provide access for disabled people: via ramps from the Esplanade or jetties to hard sand and the water; disabled toilets; tactile paving; and; provision of disabled parking and good transport systems in close proximity to these facilities.
- Where possible walking tracks, access to jetties and viewing platforms should be suitable for wheelchairs and prams.
- Negotiate access through privately owned areas such as Minda Homes, Port Stanvac.
- Link with off-shore resources such as reefs, diving, fishing and shipwrecks.
- Develop cycling destinations points for short rides (eg. Henley Square to Point Malcolm).
- Target and develop major useable open space for large coastal events at Semaphore, Fort Glanville, Henley Square, Adelaide Shores, Glenelg, Christie's Beach, Moana, Aldinga Beach.
- Incorporate theme planting/coordinated along the coast.
- Develop a Coast Park logo for use on banners, furniture and publications.
- Use tactile paving to mark routes and crossing points or features.
- Use appropriate materials i.e. materials that blend with the surrounding environment or have a coastal/nautical theme and are durable in the harsh environment of the coast.
- Regularly update the Coast Park plan to include achieved projects and revise proposals in consideration of developing issues.
- Create theme related rides such as festival ride, historical ride, marine ride.
- Where possible use local materials and manufacturers/artists in development of furniture, etc.
- Maximise passive surveillance of the Park to facilitate safety.

### 7.6.1 Essential Facilities to be Provided in the Coast Park

- Shade/shelter
- Seating
- Bins
- Dog faeces bag dispensers and bins
- Bicycle parking
- Holding rails at crossing points
- Rest areas and toilet facilities
- Streetscape lighting
- Feature lighting
- 3 phase power for performance
- Wind protection
- Flag poles/banners
- Eating venues offering a range of options from exclusive to inexpensive (fish and chip).
- Accommodation
- Toilet facilities should incorporate: disabled access, showers, changing area, syringe disposal, lighting, regular cleaning and rubbish collection.

### 7.6.2 Criteria for Positioning of Shared Recreation Path

- Noise
- Grades and sightline along paths and at intersections
- Minimise number of road or driveway crossings
- Path width to be 3m for shared use
- Theme related rides
- Maintenance such as sweeping gravel, grass to reduce slipping, repairing surfaces, line marking and trimming vegetation
- Alignment of side entry pits, manhole covers and overhanging tree branches.

### 7.7 Recommendations

1. Maintain an overarching body, based on the membership of the current Steering Committee (refer Section 7.3), to:
   - review and develop project proposals
   - seek support from relevant State and Local authorities for agreed projects and associated priorities.
   - solicit required funds from all available sources
   - provide the basis for integrated advice and recommendations on Coast Park projects,
   - oversee project commissioning and implementation.

2. Initiate the proposed strategy for public art outlined in this report, progressively seek agreement from relevant local authorities for other identified Priority 1 Landmark Projects (refer Sections 7.2 and 7.5) and, as agreements are reached following further public consultation, support the development of the respective projects.

3. Seek Local Government support for:
   - an integrated set of Council by-laws for Coast Park activities;
   - the designation of the entire Coast Park, including coastal land in private ownership as a MOSS (Coastal) zone in the Development Plan
   - the progressive removal, subject to local area traffic analysis, of strip parking on the western side of Esplanades, to enhance the pedestrian environment and open up space for a shared recreational pathway.
   - designating and enforcing reduced speed environments for all Esplanades and trafficable beaches, and
   - the progressive refinement, consultation and implementation of priority 2 and 3 projects for the Coast Park as opportunities arise, agreements are reached and funds are made available.
Appendix A

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Appendix B

Zoning Maps
Appendix C

Cost Benefit Evaluation
Cost Benefit Evaluation

Introduction

An economic evaluation of a public project entails the identification of the benefits and costs of undertaking the project. The process entails identifying all the benefits and costs, and then providing a quantification of the underlying value. It should be recognised that the nature of public projects means that “analysis of the risks, benefits and costs. Inevitably also entails uncertainties and requires informed professional judgement”. This is particularly the case in the assessment of this project, given that there is very little direct, or even indirect, information available on the use of the Adelaide metropolitan coastal area. Therefore the evaluation will require a series of assumptions that can only be based on judgements. It must at best be considered indicative of orders of magnitude only, and the test of the analysis is whether the assumptions used are reasonable in the context of the analysis.

The Coast Park concept can be summarised as facilitating and promoting increased recreational and entertainment activity in the coastal region of Adelaide.

In summary form, the benefits arising from the developments proposed include:

- Promotion – the increased profile of the concept of a coast park, and the identification of precincts etc will increase public perception of the recreation and other options available in the area;
- Integration – the improved linkages between areas will extend the use of area and provide for multiplier uses;
- Awareness – the increased signage and linkage development will improve awareness of available activities and other interesting factors of the area;
- Infrastructure – provision of infrastructure will increase in the value inherent in use by increasing the quality of the experience. This entails public infrastructure such as car parking and other facilities which will reduce risk and enhance safety as well as improve amenity, and also potentially commercial infrastructure – including food outlets.

The expected outcomes that arise from these benefits by which we can consider value include:

- Increased general usage of the area – the improvements and information about the area will attract additional users to the area;
- Increased amenity in existing uses, including issues such as increased safety, increased flexibility in use, improved environment; and
- Environmental protection – improved longevity of use by protection of environment – which will be reflected in non-use values.

The financial costs identified within the report include two sets of data.

The first is that specifically identified in report relating to Priority 1 Landmark Projects to the value of the order of $9m.

Secondly, the precinct-by-precinct analysis indicates a total project budget of approximately $20 million, which is (inclusive of the above).

Other costs include indirect or intangible costs. Typically one would consider in this context costs such as the potential for congestion, transition costs (eg inconvenience from changeover) loss of value from existing uses etc. These costs are unlikely to be significant in the framework of this project.

The analysis is undertaken in two parts. In the first instance there is a broad level quantitative assessment of the impact over the project as a whole. This is an order of magnitude, or an indicative estimate, and is provided from a generally conservative context.

Broad Level Assessment

To assess the overall level of benefits from the Coast Park development there is limited evidence available.

The evaluation is based on the report Economic Value of Adelaide Metropolitan Beaches, prepared in 1992 by the SA Centre for Economic Studies. This report analysed the underlying value of Adelaide metropolitan beaches from Seafiff through to Outer Harbour (within the context of evaluating the underlying value of the sand replenishment program). The information in this report, and the key conclusions included:

There were some 4 million visits to these beaches annually (based on a 1986 ABS special study), or an average number of visits of 11,000 visits per day. The intrinsic value in these uses averaged a net “value” per visit of $2.50-$3.50 (upgraded to 2000 dollars). This is derived by using evidence from a number of different studies, applying various valuation techniques. Therefore, the total annual value of $10 - $14 million (2000 dollars).

- There was an additional value associated with the impact of beach access on property values. The value obviously varies from house to house based on distance from the beach and access to it. After allowing via statistical modelling for other factors like water views there was an estimated aggregate value of $6 million in annualised terms (updated to 2000 dollars).
- Other benefits – the impact of beach access on property rates was estimated at an annual value of $0.3 million.
- Other aspects of the value of beach were qualitatively discussed, including increased options for special events, the general tourism impact etc.

On the basis of these factors, there is an estimated value of $16 to $20 million per annum from access to the beach.

Therefore if we extend the values to include the South Coast, the underlying value of beach use is estimated at some $24 to $30 million per annum with a visitation level of 6 million per year.

The issue under investigation relates to how the recommendations, and the Coast Park development will affect these underlying values in use. Consistent with the discussion above of the benefits and outcomes relating to the Coast Park an indicative perspective of the value in the improvements can be considered as follows:

Assume an average increase of 5% in value of use for 50% of the existing users – an increase in value therefore of the order of $0.3 million per annum

Assume a 5% increase in use with an underlying value in use over costs of use at $3.15 per visit (ie the average value of $3.00 increased by 5%). Therefore the value associated with the underlying use is $0.6 million3.

Based on this assumption, the increased value through beach use would be of the order of $0.9 million per year. It should be noted that over the last 15 years socio-demographic changes are likely to have increased the uses of the coastal area that will benefit from the Coast Park type concept. The ageing of the population will have increased the underlying demand for general walking areas, etc. General taste shifts towards recreational activities such as cycling also will affect the benefits. Overall, it is possible that these benefits are likely to be conservative.

In present value terms therefore this would be $6 million over 10 years or $10 million over 20 years – relative to the costs proposed above.

However it must be recognised that this is only a partial valuation. It includes only beach use, in the context of the 1986 beach survey. There are a number of other factors to be considered.

- The valuation above does not include the value of the Coast Park and near beach area for a range of other recreational uses – walking, cycling etc. While there are no formal statistics to assess these uses (unless that use also includes a beach visit), but it would not seem unreasonable to assume that new alternative uses and values would be at least half that of actual beach uses (while the underlying or pre park uses might be less than half, the Coast Park concept will provide more of a stimulus to these other uses, and the underlying value may actually be greater). Therefore it would seem reasonable to place an estimate of $0.5 million per year on these type of uses.

- The improvements provide infrastructure advantages along the whole area, which will enhance the prosect of the area holding special events, or reduce the costs in holding events. An example of a specific event in the

1 US Environmental Protection Agency, Guidelines for Preparing Economic Analyses September 2000, page 3. Note that this point specifically is discussing the evaluation of regulation, but equally applies to public program evaluation.

2 Note that the values are adjusted for the visits by residents to beaches, therefore avoiding double counting.

3 This assumes the value increases from zero to this level when a visit is initiated.
area is the Jazz Festival at Glenelg, which has an attendance of 11,000. As an indicative valuation we could assume that there are a range of events that could be held with this new focus for the area, attracting a total of say 30,000 new uses (ie the equivalent of 3 Jazz Festivals). The intrinsic value of attending a special event would be greater than the general use of the beach, although special events will sometimes entail an entrance fee that offsets the intrinsic value. If a net value of $3 is assumed, then the additional annual value will be $0.1 million annually.

- Tourists represent over 10% of beach visits (based on the 1986 survey). While the estimates of value as specified above include the value of the visit, it does not include the community benefit of their spend as a tourist, perhaps staying an extra day, or in a marketing sense improving the experience of their stay. If this is (conservatively) assumed to be equal to the initial value of the visit, and also to achieve a 5% increase due to the improvements associated with a Coast Park concept, this result in an additional value of a further $0.1 million per year.

The Coast Park concept also includes a range of environmental improvements. This will not only add to the value of a specific use, but increase what is known as non-use value. People will place a value on a resource because it exists – rather than because it is used. This is known as existence value (a feeling of value because of the protection of the environment) or options value (a value because the option exists to use the area at some time, even if you don't use it in a particular period). This value will vary extensively from activity to activity. One would expect it would be a very high proportion of value in icons like the Great Barrier Reef, or Ayers Rock, or even constructed items like the Sydney Opera House. It would not seem unreasonable, given the importance put on the coast, to suggest that the underlying value from non-use benefits would be of the order of 25% of use value, or an annual amount of $0.4 million.

Given this discussion, this suggests a not unreasonable estimate of value attributable to the Coast Park improvements of the order of $2 million per year. This would imply a $14 - $22 million in present value terms relative to costs. Ongoing maintenance costs would also exist but are likely to be relatively small. However the proportional improvements in value could well be higher than that assumed (perhaps even of the order of 10%) which would increase the value to as high as $40 million over 20 years.

Specific Examples

While the above represents a generalised or broad level assessment of the benefits, it is useful, in order to assess the achievability, to consider a number of specific examples. These would include:

- For a number of precincts, the improvements include the provision of a look-out area, and a car park upgrade/provision of facilities. For example – the Sellicks Beach area has a suggested spend of $300,000, which will involve upgrading a lookout area, improving the car park area, (including upgraded services such as the upgrading of toilet block, landscaping). If the area attracted visitor numbers 200,000 (ie average of 550 per day). Car park improvements need to be valued at a little over 50c per visitor to justify the spending in just one year. However the expenditure will provide services for a number of years and so it would need an average of only 100 users per day valuing the improvements at 50c.

- The recommendations for the Marino Rocks to Hallett Cove area entail the establishment of a great coastal walk. The estimated cost would be of the order of $500,000. There are limited walks of similar prominence in Adelaide (one example is Morialta) and therefore this could add significant value to the options for such activities in Adelaide. This cost would be “recovered” over 5 years if as small a number as 60 people per day, or up to 25,000 per year, with a value on the improvements of the order of $5.

- The Torrens Linear Park, Seaview Road Underpass involves costs of $180,000. This would provide an opportunity for cyclists to ride down under the Seaview Road bridge and have direct access to the coast, including other activities. Again this would require only some 100 users per day, valuing the activity at less that $1 to make it worthwhile or to “recover” the cost over 5 years

These specific examples illustrate that the implied values in use could generally be expected to cover the costs, and confirm that in a general cost benefit sense the project seems to be justified. It should be noted that this discussion is in the context of “isolated” components of the scheme, and one would expect value to be added by the consideration of the whole concept, rather than partial pieces.

Conclusions

While there is little definitive evidence to provide valuations of the benefits accruing from the proposed development program a broad based valuation suggests that the order of magnitude of benefits would be well in excess of costs. This is further supported by a review of project components, which suggest that the underlying number of users would need to be small to balance values out with costs.

More detailed evaluation would require specific survey work to test the underlying values – which is beyond the scope of this analysis.