

# REGISTER OF HERITAGE PLACES - ASSESSMENT DOCUMENTATION

## 11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

The criteria adopted by the Heritage Council in November 1996 have been used to determine the cultural heritage significance of the place.

# PRINCIPAL AUSTRALIAN HISTORIC THEME(S)

•	1.4	Appreciating the natural wonders of Australia		
•	4.1.2	Making suburbs		
•	6.1	Forming associations, libraries and institutes for se		
		education		
•	8.1.1	Playing and watching organised sport		
•	8.2	Going to the beach		
•	2 3	Going on holiday		

8.3 Going on holiday
8.4 Eating and drinking
8.5.2 Helping other people
8.5.4 Pursuing common leisure interests

• 9.2.1 Being children

9.2.2 Joining youth organisations9.2.3 Being teenagers

# HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

•	405	Sport, recreation and entertainment
•	311	Hospitality industry and tourism
•	402	Education and Science
•	409	Environmental awareness

## 11. 1 AESTHETIC VALUE\*

The natural landscape and built elements of *Cottesloe Beach Precinct* display aesthetic characteristics. (Criterion 1.1)

The strong landscaped features, including the mature Norfolk Island Pines and open spaces, coupled with distinctive buildings collectively form a significant cultural environment. The accumulated effect of various

For consistency, all references to architectural style are taken from Apperly, Richard; Irving, Robert and Reynolds, Peter A Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present, Angus & Robertson, North Ryde, 1989

structures standing close to the beachfront contributes to the character of the area. (Criterion 1.4)

#### 11. 2. HISTORIC VALUE

With the successful promotion and establishment of *Cottesloe Beach Precinct* as Western Australia's premier recreational resort in the early 1900s, the beach strongly influenced the early development of Cottesloe as a holiday resort, with associated guesthouses, hotels, tearooms and other recreational facilities concentrated along Marine Terrace. (Criteria 2.1 & 2.2)

The development of *Cottesloe Beach Precinct* reflects the increasing popularity of beach swimming in the early decades of the 20<sup>th</sup> century. The remnant and replacement amenities provided at *Cottesloe Beach Precinct* illustrate changes in beach usage in Western Australia throughout the 20<sup>th</sup> century. (Criterion 2.2)

The Cottesloe Surf and Life Saving Club, the first of its type in Western Australia, was formed in 1909 and *Cottesloe Beach Precinct* was subsequently the site of the first beach patrols in the state. (Criteria 2.2 & 2.3)

Cottesloe Beach Precinct is associated with a number of organisations and individuals, including the Cottesloe Road Board (now Town of Cottesloe) which developed the beach and subsequently provided recreational amenities, often in association with the Public Works Department and private architectural firms and Sergeant John Smith, who established Royal Life Saving techniques in an organised form in Western Australia. (Criterion 2.3)

## 11. 3. SCIENTIFIC VALUE

Cottesloe Reef has educational and research values, providing school groups, universities and the general public the opportunity to observe the diversity of the reef ecosystem. (Criterion 3.1)

## 11. 4. SOCIAL VALUE

Cottesloe Beach Precinct is highly valued by the community as a social and recreational venue. Popular activities on the beach and adjacent reef include family gatherings, informal and formal swimming (including holiday swimming lessons), diving, volley ball, surfing and windsurfing. Cottesloe Beach Precinct has been the departure point for the Rottnest Island Swim since 1956. (Criterion 4.1)

Following community concern and input, a portion of Cottesloe Reef was declared a Fish Habitat Protection Area, illustrating the value of the place's marine environment to the local and wider community. (Criterion 4.1)

Having been one of Western Australia's premier beaches since the early 1990s, *Cottelsoe Beach* contributes to the community's sense of place. (Criterion 4.2)

As an iconic beach, *Cottesloe Beach Precinct* has achieved wide spread renown and continues to attract interstate and overseas tourists as well as locals, and is a prominent image used in the identification and portrayal of a distinctive Western Australian lifestyle. (Criterion 4.2)

## 12. DEGREE OF SIGNIFICANCE

## 12. 1. RARITY

Cottesloe Beach Precinct is rare as a suburban beach within the metropolitan area of Perth that stands at the edge of a residential area established in the Federation and Inter-War period. (Criterion 5.2)

# 12. 2 REPRESENTATIVENESS

The natural landscape of *Cottesloe Beach Precinct* is characteristic of beaches within the metropolitan area of Perth edged by limestone ridges forming a relatively narrow beach in front of a steep embankment. (Criterion 6.1)

As Western Australia's premier beach from the early 1900s to World War Two, *Cottesloe Beach Precinct* represented the iconic Australian beach lifestyle. For many interstate and overseas visitors, it continues to represent a distinctive Western Australian way of life associated with beach recreational activities. (Criterion 6.2)

## 12. 3 CONDITION

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# 12. 4 INTEGRITY

Cottesloe Beach Precinct has high integrity because it continues to serve as a suburban beach.

# 12. 5 AUTHENTICITY

The built elements of *Cottesloe Beach Precinct* are of moderate authenticity. However the development of *Cottesloe Beach Precinct* is characterised by change as is demonstrated by the various ways in which a range of elements have been placed in the beachscape over different periods. Often these elements have been either partly or completely removed due to changing attitudes towards beach going or to the effects of the very severe marine environment. Major elements of the landscape and marine environment have remained constant.

#### 13. SUPPORTING EVIDENCE

The documentary evidence has been compiled by Prue Griffin, Historian. The physical evidence has been compiled by Alan Kelsall, Kelsall Binet Architects.

#### 13. 1 DOCUMENTARY EVIDENCE

Cottesloe Beach Precinct is a foreshore recreation area including the beach, groyne, pylon, tearooms, surf life saving club and change rooms, Norfolk Island pines, landscaping and wading pools. The tearooms and change rooms are part of a three storey complex; the change rooms were built in 1983 and the tearooms were built on top in 1996. The surf life saving club is a two storey brick facility built in 1961 for the Cottesloe Surf Life Saving Club.

In September 1896, a portion of crown land between Perth and Fremantle was subdivided and given the name 'Cottesloe' by the Governor Sir Frederick Napier Broome. The name originates from the title Baron Cottesloe of Swanbourne and Hardwick bestowed upon Thomas Fremantle, brother of Captain Charles Fremantle, in 1874.1

Although the route for the Perth-Fremantle road, which was constructed by convict gangs in the 1860s, went through Cottesloe very little settlement occurred until the 1890s. Even the construction of the Fremantle to Guildford railway line in 1881 provoked no great surge of settlement. By 1893, there were still only six permanent residents in Cottesloe.<sup>2</sup>

The area developed more rapidly after 1895 when the Western Australian Government granted £100 to the improvement of the Perth to Fremantle Road and £100 toward its ongoing maintenance. Cottesloe and the adjacent settlements at Buckland Hill and Mosman Park thus became more accessible for residents and holidaymakers.<sup>3</sup> In the same year, 1895, Cottesloe was declared a road board and was able to levy funds from its residents.<sup>4</sup>

The gold discoveries in the east of Western Australia in the 1890s brought great wealth to the state. The beachside location of Cottesloe and the significant wealth now present in the colony saw Cottesloe develop as one of the prestigious suburbs of Perth. In the late 1890s, many elaborate residences and holiday cottages of the Colony's prominent families were constructed in Cottesloe.<sup>5</sup>

Before the settlement of Cottesloe in the late 1890s the beach was not regularly visited. However it was not unusual for the beach to be used as a

Marchant James, Ruth *Heritage of Pines: A History of Cottesloe*, Town of Cottesloe, Second Edition, 1992, pp. 3 &15.

Ibid, pp.10; *In Retrospect 1897 –1907*, Brochure by F.A. Mosely, St Columba's manse, cited in Marchant James, op. cit., p. 15.

Marchant James, op cit., p. 12.

<sup>4</sup> Cottesloe Roads Board Minutes, SROWA, Cons 6187, item 1, 1895 to 1905.

Marchant James, op. cit., pp. 7 and 15.

camping ground for 'afghans' and their camels before trekking to the north along the coast or east to the goldfields.<sup>6</sup>

It has been stated that residents of Perth preferred river swimming to ocean swimming before the 1900s.<sup>7</sup> But at Cottesloe ocean bathing gained popularity by 1898 because there were requests to the Roads Boards to erect bathing pavilions and sell refreshments on the beach.<sup>8</sup>

Swimming was an activity that was controlled by the authorities. Bathing costumes and behaviour at the beach were highly regulated, following the example of the English seaside resort.<sup>9</sup> For instance, a typical notice on the Cottesloe beach in 1898 stated:

Regulation costume for men and women, dress of dark material of serge, flannel or flannelette extending over the shoulder to the knee. Those in swimsuits should not loiter on the beach or on the jetty. 10

Nevertheless some bathers did not comply with the regulations and were sent letters of complaint from the Roads Board. For example Mr Burt received a letter stating that his two sons had been bathing at Cottesloe without trunks contrary to the by laws. Mr Burt courteously replied thanking the Roads Board for informing him that his sons had been bathing without trunks.<sup>11</sup>

A necessary part of bathing in the 1900s were bathing boxes used as changing facilities. Between 1906 and 1908, a Mr Page had the lease from the Cottesloe Roads Board to provide bathing boxes. These wooden structures on wheels were divided in two, providing rooms for males and females. The Cottesloe Roads Board replaced Page's Bathing boxes in 1909 with a wooden bathing pavilion and extra bathing boxes on the beachfront beyond the Cottesloe Hotel on the corner of John Street and Marine Terrace. 13

The rise in popularity of *Cottesloe Beach Precinct* as the favoured beach resort in the 1890s was a result of several factors. *Cottesloe Beach Precinct* has some protection from the strong summer sea breezes and the reefs offshore make the swimming at Cottesloe less dangerous than other beaches on the metropolitan coast. New roads and the nearby railway stations made *Cottesloe Beach Precinct* more accessible. The beach is also easily accessed by pedestrians, different to steep cliffs of some other beaches. By 1900, beach swimming had become a popular recreational activity.<sup>14</sup>

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<sup>6</sup> Marchant James, op. cit., p. 23.

Marchant James, op. cit., p. 76.

<sup>8</sup> Cottesloe Roads Board Minutes, 9 December 1898, Cons 6187, item 1, SROWA.

Huntsman, Leone Sand in Our Souls The Beach in Australian History Melbourne University Press, 2001, p. 43.

As quoted in Marchant James, op. cit., p.23.

Minutes of the Cottesloe Roads Board, 10 Jan 1899, Cons 6187, item 1, SROWA.

Laurie, Maxine and Laurie, Jacqueline *Ten Decades A Photographic History of the Town of Cottesloe* Town of Cottesloe 1995, p. 15

Marchant James, op. cit. p. 23 and Laurie et al, op. cit. p.15.

Marchant James, op. cit., p. 76.

In February 1899, the Cottesloe Roads Board wrote to the government of the day;

with a view of providing life saving appliances at Cottesloe and Cottesloe Beach in the nature of life lines, the Engineer in Chief be requested to advise the Board which would be the most economical and effective means of allowing this end. 15

The Public Works Department replied regarding the provision of a mole into the sea at Mudurup Rocks<sup>16</sup> and life saving appliances, unfortunately the detail of the reply was contained within an Engineers report that has not been located.<sup>17</sup> The groyne was not built at this time as a 1906 plan drawn for a jetty shows no groyne off Mudurup Rocks. 18 Photographic evidence of the jetty construction does not show evidence of any groyne or mole.19

The Cottesloe Roads Board realised the asset the beach was to the community and sought ways to accommodate visitors to the beach. In 1904, a small jetty 150 feet long and 18 feet wide was built by the Roads Board at Cottesloe Beach Precinct. The jetty only lasted four months before it was washed away by severe winter storms.<sup>20</sup>

In 1906, a more substantial structure opposite Forrest Street was designed by the Public Works Department. This jetty was built by contractors Atkins & Law over a period of 2 years for the cost of £1290. It had a wide promenade and included a rotunda in the middle where a brass band played every Sunday and public holiday.<sup>21</sup> The state government handed the jetty to the Cottesloe Roads Board shortly after its construction.<sup>22</sup> extremely popular and on one day in the 1900s, it was recorded that 16,000 people travelled by train to visit the beach. In the first year temporary open air dance floors were placed on stands alongside the pier. The sturdy wooden structure built high above the sea remained the focal point for most outdoor activities at Cottesloe Beach Precinct.23 The function of the pier was primarily for promenade and pleasure it was not an adapted fishing or harbour facility as occurred at other beaches in Western Australia or in other states.<sup>24</sup> Nevertheless recreational fishing had no doubt occurred from the jetty since its construction and boats berthed at the jetty to off-load holiday makers in the early decades of the 20<sup>th</sup> century.<sup>25</sup>

Cottesloe Beach Precinct was the premier beach in Western Australia from the 1900s until World War Two. The beach often featured in postcards of

<sup>15</sup> Cottesloe Roads Board Minutes, 10 February 1899, Cons 6187, item 1, SROWA.

<sup>16</sup> The spelling of these rocks is variable including Moordoorup and Moodoorup. For this assessment the current spelling is used. Contact was made with the Geographic Names Department of DOLA but they had no origin for this name.

<sup>17</sup> Cottesloe Roads Board Minutes 14 April 1899, Cons 6187, item 1, SROWA.

<sup>18</sup> PWD 12770, Cons 1647, SROWA.

<sup>19</sup> Laurie, Maxine and Laurie, Jacqueline Ten Decades A photographic History of the Town of Cottesloe Town of Cottesloe 1995, p. 15

<sup>20</sup> Marchant James, op. cit., p. 24.

<sup>21</sup> Marchant James, op. cit., p. 24 and PWD plan 12082, Cons 1647, SROWA.

<sup>22</sup> Marchant James, op. cit., p. 24.

<sup>23</sup> Marchant James, op. cit., p. 24.

<sup>24</sup> Huntsman, op. cit. p. 39.

Marchant James, op. cit. p. 24.

Western Australia and Perth depicting the iconic beach lifestyle.<sup>26</sup> *Cottesloe Beach Precinct* continues to be a popular tourist destination for local, interstate and overseas visitors. It is featured in promotional material on Perth as one of the most popular beaches in Perth. Other beaches have similar facilities to *Cottesloe Beach Precinct* and the ease of access to metropolitan beaches has diminished, to some extent, the popularity of *Cottesloe Beach Precinct*.<sup>27</sup>

One outcome of the increasing popularity of beach swimming was that often people got into difficulties. As a result a group of motivated citizens got together to organise safety measures for the beach goers. Led by Sergeant John Smith<sup>28</sup> of the WA Police Department, who introduced the methods of the Royal Life Saving Society, the group formed weekend and holiday patrols, supported by the local Boy Scout Group (Ocean Troop 29). (The Scout Group had also learned the techniques of the Royal Life Saving Society.)

The Cottesloe Life Saving and Athletic Club was formed in 1909, the first club of its type to form in Western Australia. It was immediately resolved to raise funds for club rooms.<sup>29</sup> A two storey wooden clubrooms was erected on the beach in 1910.<sup>30</sup> The location of these clubrooms has not been conclusively established.<sup>31</sup> Photographic evidence from the period shows a cluster of timber buildings on the beach north and south of the jetty.<sup>32</sup> In 1936, the club moved to new premises on the beach at the northern end of the car park.<sup>33</sup> A 1953 plan of the beach shows this building had a square form with a verandah across the façade facing the ocean.<sup>34</sup> After the Second World War the clubrooms became seriously run down and were used only as a boatshed.<sup>35</sup>

In 1961, the Cottesloe Surf Life Saving Club negotiated with the Cottesloe Roads Board to gain the reserve above Mudurup Rocks as a site for new clubrooms. In 1961, building went ahead of the new clubrooms designed by architects Oldham Boas Ednie Brown.<sup>36</sup> The premises were opened in December 1961. Additions to the surf life saving club have taken place since that time. Plans drawn at this time also show that another building had existed on the beach south of the jetty. In 1961, the two brick toilet

BA488/1, Cottesloe Beach, Battye library.

See the Western Australian Tourism Website as an example.

A memorial drinking fountain was erected to John Smith on Marine Terrace in 1931.

The club has the nickname of 'The Premier Club' because it was the first surf life saving club formed in Western Australia.

Marchant James, op. cit. p. 76,77.

It is stated by Ruth Marchant James that the clubrooms were located near Peter's Pool.

<sup>32</sup> Laurie, et. al. op. cit. pages 21, 22, 27, 32 and 33.

<sup>33</sup> Laurie, et. al. op. cit. p. 33.

Sewerage Plan 1217, Metropolitan Water Supply Sewerage and Drainage Department, 1953, SROWA.

Marchant James, op. cit. p. 79.

Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

blocks which had flanked this building were still evident although only foundations remained of the central building.<sup>37</sup>

For the first half of the 20<sup>th</sup> century *Cottesloe Beach Precinct* maintained its position as the most popular beach in Perth. The natural advantages of *Cottesloe Beach Precinct* were enhanced by the accumulation of entertainments, guest houses, restaurants and tea rooms adjacent to the beach. A cluster of Tea Rooms were erected right on the beach, one of the largest and well documented was the Indiana Tea House located at the end of the jetty opposite Forrest Street.

The effects of World War One were most apparent for the Surf Life Saving Clubs because four fifths of the Cottesloe club members enlisted.38 Cottesloe Beach Precinct did not change markedly during the war period and in the 1920s the beach resumed its popularity. The focus of the beach changed with the construction of the Centenary Pavilion. In 1927, Architects Powell Cameron presented plans to the Town of Cottesloe for a new bathing dressing room and tea rooms on the site of the former 1909 pavilion. This building was opened in 1929 and known as the Centenary Pavilion.<sup>39</sup> The pavilion became the focus for beach activity at Cottesloe Beach Precinct until its demolition in 1982. Several restaurants were located within the pavilion. The top floor was a dance floor and in the 1940s and 1950s the 'Palais de Dance' was a popular venue for dancing and live music. In 1958, a new roof was built over the dance floor and in the 1960s the restaurants in the buildings underwent many alterations. The names of the restaurants suggest holiday destinations for example Mario's. Au Petit Paris and the Seacrest.<sup>40</sup> On the beach was 'Bowler's Fun Fair ' a side show for children and adults which included dodgem cars, an enclosed pool and stalls.41

The distinctive limestone walls which create the terraces to the north and south of the former pavilion were built by the Cottesloe Council using the labour of the unemployed during the depression years of the 1930s. Rate payers who had fallen behind in their rates could also pay off their debt by working for the council.

Other projects undertaken at this time were tree planting along the beach front and some pine trees were planted in adjacent Congdon Street. <sup>42</sup> The choice of Norfolk Island Pines for beach side suburbs has its roots in the creation of the 'Brighton of Sydney' at Manly. In the mid 19<sup>th</sup> century the area around manly was developed by Englishman Henry Gilbert Smith. In creating the seaside resort he copied the names and layout of Brighton in England. He chose to 'improve' the look of Manly by planting Norfolk Island pine trees throughout the area. The exact reason for his choice of the pine trees has not been discovered but it has been speculated that;

Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

<sup>&</sup>lt;sup>38</sup> Laurie, et. al. op. cit. p. 21.

Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

<sup>40</sup> Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

<sup>41</sup> Marchant James, op. cit. p. 26.

<sup>42</sup> Laurie, et. al. op. cit. p. 30.

The verticality of the pines provided a contrast to the low native heath; they might have been thought to help prevent sand movement. It might also have been the case that the characteristic pine shape and colouring of the Norfolk pines gave a more European look to the beach than the cabbage-tree palms and wildflowers indigenous to the area, and that they provided a 'frame' through which the ocean could be viewed. Whatever the reason, the planting of Norfolk pines established a fashion that was copied on many other Australian beaches, extending up to some of the Gold Coast beaches in Queensland, down to Tasmania, and across to Cottesloe and Scarborough in Western Australia.<sup>43</sup>

It is probable that the Cottesloe Roads Board were responsible for planting some pine trees on the beach front.<sup>44</sup> It is noted in the Council Minutes of 1899 that tree planting in Forrest Street had to be delayed until the footpaths were established although the type of tree is not specified.<sup>45</sup> In some streets private citizens were responsible for planting pine trees in the early twentieth century.<sup>46</sup>

The safety of the swimmers at Cottesloe was elevated as an issue with the tragic shark attack of a swimmer in 1925. The increasing popularity of surf life saving saw huge crowds of spectators and swimmers at the beach. Fears of shark attacks persisted and in 1936 the Council decided to erect a shark proof fence. The work began following reconstruction work on the jetty, under which the first of the pylons constructed to hold the nets was placed. The second pylon was situated 120 yards to the north. A net was to be strung between the two with flotation devices or 'dolphins' added to support the net. However the following winter violent storms wrecked the project and only the pylon which is still extant survived the storm. The achievement of swimming to the pylon and climbing up it is an important rite of passage for Cottesloe beachgoers since that time.<sup>47</sup> In 1995 the mast was broken off and was rebuilt but made more difficult to climb.

A sewerage plan surveyed in 1953 shows the pavilion, promenade and terraced lawns. Further south were two brick toilet blocks, a platform and two weatherboard buildings close to Marine Parade. North of the pavilion on the beach is a brick building with a verandah which was probably the location of the Cottesloe Surf Life Saving club.

Following the demolition of the jetty in 1952 the swimming area deteriorated without the protection of a jetty or breakwater and only a small area at the northern end of the beach was worth swimming in. Many regular swimmers had moved to north Cottesloe and the newer beaches which were being opened up during the 1950s and 60s.<sup>48</sup> The present day stone groyne was built in 1959-60. The 250 foot long groyne projects north west into the ocean rather than due west as the jetty had done. The new groyne was planned to counteract the effects of the changes caused by winter winds and waves which had almost washed the beach away.

<sup>43</sup> Huntsman, op. cit. p. 38-39.

What trees were planted on the beach front during the depression has not been established. Further research of the Cottesloe Roads board Minutes is necessary to clarify this point.

<sup>&</sup>lt;sup>45</sup> Cottesloe Roads Board Minutes, 14 July 1899, Cons 6187, item 1, SROWA.

<sup>46</sup> Laurie, et. al, p. 20.

<sup>47</sup> Laurie, et. al. op. cit. p. 33.

<sup>48</sup> Laurie, et. al. op. cit. p. 40.

The new groyne and the surf life saving club rooms were the first steps in a development of the beach in the early 1960s. In September 1962, architects F.G.B. Hawkins and D.D. Sands submitted a development proposal to the Town of Cottesloe. The plan included a concrete walkway from the pavilion to the groyne, a salt water wading pool and a boat shed for the surf life saving club under the walkway.<sup>49</sup> These new features were completed in 1963.

The new groyne did have the desired effect, providing better swimming conditions and a new build up of sand which made the beach attractive again. Unfortunately almost immediately the beach was subject to a build up in seaweed but this was found to be an intermittent problem that was resolved without further intervention.<sup>50</sup>

In the 1960s, surfing boomed as a popular sport and separate areas of the beach had to be designated for board riders.<sup>51</sup>

In 1979, the Town of Cottesloe undertook a study of *Cottesloe Beach Precinct* to plan for its future use. The consultants concluded that *Cottesloe Beach* was a 'family beach' that attracted users from outside the municipality. The report also concluded that the Centenary Pavilion should be demolished because restoration was not 'financially viable'. It was suggested that the tower be retained as the most recognisable feature of the building. However this was not done and in 1982, the centenary pavilion was demolished at the expiry of the tenants lease.<sup>52</sup> The northern section of the walkway joining the groyne to the pavilion was demolished in 1979.<sup>53</sup> The wading pool was drained and the remainder of the walkway was demolished shortly after. The wading pool is still extant although is currently unused.

In 1979, a memorial was built to commemorate the sesquicentennial of the foundation of the colony of Western Australia. The memorial takes the form of boulder alongside the path to the grassed area adjacent to the Surf life Saving Clubrooms. The memorial commemorates the arrival at Cottesloe Beach of Lieutenant Commander Milius in 1801. Milius was one of the officers aboard the French exploration ship *Naturaliste* commanded by Nicolas Baudin.

Increasing access to transport by car in the 1960s meant beachgoers were able to select from a wider range of beaches diminishing the popularity of *Cottesloe Beach Precinct*. The community's ready access to the beach and awareness of skin cancer has changed the patterns of use of the beach. It is not common now to make a trip to the beach for a whole day of activities. Short trips to the beach are more common seem to characterise the late twentieth century use of the beach. However new forms of entertainment at the beach are constantly evolving. The popularity of beach volleyball has seen the establishment of courts at *Cottesloe Beach Precinct*.

Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

<sup>&</sup>lt;sup>50</sup> Laurie, et. al., op. cit. p. 44.

<sup>&</sup>lt;sup>51</sup> Laurie, et. al., op. cit. p. 45.

<sup>&</sup>lt;sup>52</sup> Civil and Civic, Cottesloe Beach Development Report for the Town of Cottesloe, 1975 p. 36 and 43.

The West Australian, 24 October 1979, p. 3.

Cottesloe Beach Precinct is associated with the growing popularity of long distance open water swimming. The annual race to Rottnest leaves from Cottesloe Beach Precinct. This race which was first held in 1956 now draws almost 2000 competitors and claims to be the worlds largest open water swimming event as it crosses through an open water channel.<sup>54</sup>

In 1983, a new bathing pavilion and boatshed, designed by architects Brand Deykin and Hay, was erected on the site of the former Centenary Pavilion. This building was notable for its arched roof and low profile compared to the dominating presence of the Centenary Pavilion.<sup>55</sup>

The 1980s in Cottesloe was a period of new wealth in the district. Many successful players of the stock market sought property in Cottesloe which brought increasing wealth and vibrancy to the area. The period was also marked by an increasing awareness of environmental issues. Subsequently the Town of Cottesloe undertook the first programmes of dune restoration at *Cottesloe Beach Precinct*. The dual use cycle and pedestrian paths within *Cottesloe Beach Precinct* were established in this period.<sup>56</sup> The dual use path was named the Raia Roberts Path in honour of a former Town of Cottesloe Councillor,<sup>57</sup>

The Town of Cottesloe perceived the need for a change to the bathing pavilion by the mid 1990s and expressions of interest were called from architects to design a multi purpose building. The successful tenderer were architects Scanlon and Associates, whose design used the lower level of the 1983 pavilion as the basis of the new building. The surf life saving club used the facilities on the lower floor as they had previously. The public change rooms and take away food facility remained on the next floor and an additional storey was added for a restaurant.<sup>58</sup> This restaurant the 'Indiana Tearooms' was named after one of the original tea rooms located on the beach at the base of Forrest Street.<sup>59</sup> The new Indiana Tearooms are a much grander version of the timber single storey structure.

In 1992, a sundial monument was completed as part of a landscaping project on the southern grassed area of *Cottesloe Beach Precinct*. The project was funded by a bi-centennial grant which commended in 1989. Much of the work was done by volunteer labour and many difficulties were experienced in funding and material supplies consequently the completion of the project was delayed until 1992.<sup>60</sup> Designed by Considine and Griffiths, with technical advice from astrophysicist Tony Hooley, the sundial was derived from 18th century sundials in Jaipur, India. The project included a Sundial shelter which consists of a wall which provides sheltered viewing of the ocean. A final part of the project was a dolphin

Website for the Channel 9 Rottnest Channel Swim, www.rottnestchannelswim.com.au

Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

<sup>&</sup>lt;sup>56</sup> Laurie, et. al. op. cit. p. 52.

Information from the Town of Cottesloe, April 2003.

Plans held by the Town of Cottesloe, Cottesloe Civic Centre.

Photograph of 'The Indiana Tea House' 1918 (Battye Library 51773P) in Laurie et. al. op. cit. p.

Subiaco Post 30 March 1993, p. 3. and The Sunday Times 31 March 1991, p. 12.

monument in recognition of the work of the Surf Life Savers.<sup>61</sup> A grotto like shelter under the Sundial shelter was subsequently filled in. The project was designed by architects Considine and Griffiths.<sup>62</sup>

Cottesloe Beach Precinct is still a very popular beach in the metropolitan area. It is used for recreational swimming and in the summer months for vacation swimming lessons. Many regulars use the beach daily and have formed groups of regular swimmers for example the Cottesloe Polar Bears swim every day of the year. It was one of Cottesloe Polar Bears who was the victim of a fatal shark attack in November 2000. At the time the news reports stated the Cottesloe Beach Precinct was Western Australia's favourite beach.<sup>63</sup>

The Indiana Tea rooms continue to operate from the top floor of the pavilion building and the surf club have access to the lowest floor for boat storage. The surf club occupies the clubrooms above Mudurup Rocks and the venue is available for functions and well as club activities. The groyne is a popular fishing spot for line fishers. The grassed recreation area and the area under the southern pines are used extensively throughout the summer months by picnickers and sporting groups.

The Cottesloe Reef ecosystem extends approximately 1.5km off-shore from Cottesloe and extends intermittently for approximately 4.5 km along the coast from Cable Beach to North Street, Cottesloe and encompasses *Cottesloe Beach Precinct*. A section of the Cottesloe Reef encompassing the coastal waters of the Indian Ocean from North Street to the southern Town boundary and westwards for 800 metres from the high water mark was declared a Fish Habitat Protection Area (FHPA) under the *Fish Resource Management Act* (1994) in September 2001, a portion of which is in the study area. The FHPA recognises the popularity of the reef ecosystem and its vulnerability to human impact and aims to promote and encourage protection of the Cottesloe Reef ecosystem and to involve the community in its management.<sup>64</sup>

The reef was nominated for protection by the Cottesloe Marine Protection Group (CMPG) which was formed in 1988 by a group of local snorkellers concerned about the degradation of marine life and in particular damage to the reef. The area is now managed locally and has resulted in the improvement of environmental, economic and social conditions of the *Cottesloe Beach Precinct* area by creating a sense of community and ownership and helping to preserve a valuable public asset and tourism destination.<sup>65</sup> The reef continues to provide easy swimming and snorkelling

<sup>61</sup> Subiaco Post 30 March 1993, p. 3.

Information from the Town of Cottesloe, April 2003.

http://www.abc.net.au/wa/stories/s409786.htm Story of the anniversary of the attack at Cottesloe Beach, 6/11/2001.

<sup>64</sup> http://www.fish.wa.gov.au/hab/broc/cottesloehfhpa, accessed 1 October 2003. See also http://www.sustainability.dpc.wa.gov.au/CaseStudies/Cottesloe%20Reef/CottesloeReefprint. htm.

<sup>65</sup> http:

<sup>//</sup>www.sustainability.dpc.wa.gov.au/CaseStudies/Cottesloe%20Reef/CottesloeReefprint.htm, accessed 1 October 2003. See also, 'Plan of Management for the Cottesloe Reef Fish Habitat

at a short distance from the shore. Other activities, such as fishing, diving, surfing, bodyboarding and windsurfing remain popular in the reef area. The educational and research values of the reef are also important, providing school groups, universities and the general public the opportunity to observe the diversity of the ecosystem.<sup>66</sup>

## 13. 2 PHYSICAL EVIDENCE

For the purposes of this assessment of *Cottesloe Beach Precinct* the study area is defined as the land on the west side of the length of Marine Parade that runs between Napier Street in the north and Jarrad Street in the south.

The coastline of Western Australia between Fremantle and Watermans alternates between beaches that are edged either by limestone ridges or limestone outcrops and sandy beaches that are a continuation of the area of sand dunes that lie behind them. This distinction contributes greatly to the defining characteristics of the various beaches along the metropolitan area coastline and the manner in which the areas have been developed.

The metropolitan area coastline is part of the Tamala Limestone Unit, which is formed by cementitious calcium carbonate of variable cementing. It is the variable cementing which determines the ability of the limestone to withstand the causes of erosion. In essence, this explains why areas of more cementitious limestone remain as limestone ridges or outcrops while areas of less cementitious limestone have been eroded and are now areas of dunes formed by the sand derived from the Tamala limestone.

The area around *Cottesloe Beach Precinct* is of the more cementitious limestone. This is demonstrated by the limestone ridge that overlooks the beach and the steep interface that exists between the land and beach, particularly in the area in front of the Seaview Golf Club. The reefs that edge much of the beach within the study area further illustrate this hardness of the limestone.<sup>67</sup>

The section of Marine Parade within the study area runs in a north south direction and is almost level. Marine Parade is set a short distance from the edge of where the land falls away quite steeply down to the beach. The distance varies, but on average is around thirty metres. Marine Parade runs along the edge of the flat land at such a height that the beach cannot be seen from the road.

The east side of Marine Parade, between Napier Street and Forrest Street, is lined by one and two storey buildings. These buildings include shops, hotels and flats. The most prominent building in the strip is the Inter-War Functionalist style, two-storey Cottesloe Hotel that stands opposite the carpark for *Cottesloe Beach Precinct*. The Late Twentieth-Century Perth Regional style Seapines Holiday Chalet development occupies the stretch

Protection Area', Fisheries Management Paper No. 155, Fisheries Western Australia and Cottesloe Marine Protection Group, September 2001.

<sup>66</sup> ibid.

Outline geological description obtained from conversation with David Foulsham (CP Eng), director of Soil and Rock Engineering Pty Ltd.

of street front between John and Forrest Streets. The south part of *Cottesloe Beach Precinct* is opposite the Seaview Golf Course.

Unlike most other beaches in the metropolitan area, *Cottesloe Beach Precinct*, as defined by the study area, is not a simple stretch of beach with a single easily identifiable character. The complexity of *Cottesloe Beach Precinct* in part derives from the geology of the land formation on which it stands and the various ways in which the land immediately to the east of the beach has been manipulated to fulfil a variety of purposes. The changes in use reflect the changes in beach recreation in general and to the place in particular.

The development of *Cottesloe Beach Precinct* demonstrates the way various elements, both building and landscaping, have been introduced to the urban beachscape and how often these elements have been either partly or completely removed due to changing attitudes or, more commonly, to the effects of the very severe marine environment.

For ease of description *Cottesloe Beach Precinct* has been divided into five zones. The five zones are arranged linearly from north to south and each zone extends from Marine Parade to the Ocean:

The recreational park

The carpark

The Indiana Tea House

The south beach

The headlands including Mudurup Rocks.

A sixth zone comprises the Cottesloe Reef ecosystem.

**Zone one**, the recreational park, is at the north end of the study area. It stretches between Eileen Street to Overton Gardens. This flat area of land is edged by Marine Parade on the east side and by a low limestone wall for the southern half of the west side. Dunes and low log post and rail fence edge the northern half. The limestone wall is curvilinear and this perhaps corresponds with the contour line at the outer edge of the upper area. The top of the wall undulates and varies in height between 450 mm to 750 mm. A two metre wide concrete footpath edges the wall. The grassed area has recently been planted with irregularly spaced Norfolk Island Pines Araucauria heterophylla. Hard landscaping elements include two circular planters formed by low limestone walls. There is amphitheatre/seating area formed in limestone at the south end of the recreational area covered by a tensile shade structure. The area also contains a mix of picnic tables and benches with an integral shade structure and a range of exercise equipment.

The land on the west side of the retaining wall slopes gently down to the level of the beach. A gap in the wall leads to a timber pathway edged by a log post and rail fence that provides a route through the dunes to the beach. This sloping ground is planted with coastal grasses and sedges and pigface *Carpobrotus sp.* and contains some limestone outcrops. The landward side of the beach consists of small dunes. Fairly near to the shore

there is an ocean-covered reef and there is a swimming area formed by a pool in the reef. The reef continues southward to about half way along the carport to the south of the recreational area.

**Zone two**, the car park area, edges Marine Parade and extends from Overton Gardens to John Street. The west side of the carpark is retained by a limestone wall topped by a tubular post and rail balustrade.

Both the east and west sides of the bitumenised carpark area are edged by concrete footpaths. Norfolk Island Pines have been planted recently in the car parking bays in Marine Parade. The carpark consists of a single row of car parking bays along the east and west sides and a double row along the centre.

Masonry steps descend from a point about midway along the west side of the car parking area to the road that runs along the rear edge of the beach and terminates at the steps. The landscaping of the interface between the upper level and the beach changes at these steps. The slightly manipulated natural landscape in front of the recreational areas continues to the north of the steps whereas to the south of the steps the interface is formed into three grassed terraces by limestone retaining walls. The walls are about 1200 mm high and each terrace is about 2.5 metres wide.

There is a low-level roadway about 200 metres long running along the rear edge of the beach. This road extends beyond the Indiana Tea House which stand in an area south of the carpark.

It is perhaps significant that the steps leading from the footpath not only signify a change in the landscaping of the interface but also coincide with the end of the reef which extends between there and North Cottesloe.

The retaining wall on the west side of the carpark curves towards Marine Parade to form the southern edge of the carpark. A set of concrete and limestone steps descends from the south west corner of the car park to the lower level road. These steps are more recent than the limestone walls that form the terraces.

The Indiana Tea House Building dominates **zone three**. This zone is about 120 metres long and runs from about John Street to Forrest Street. The building is about forty metres long and stands slightly north of centre in a grassed area. The line of the front face of the building runs along the rear edge of the low-level roadway. The area of grassed terraces that contains the Tea House building is bounded on both the north and south ends by roads which connect the low-level roadway at beach level to Marine Parade. The two narrow roads enter Marine Terrace roughly opposite John Street and Forrest Street.

In this zone the ground slopes from Marine Terrace down to the lower roadway. The greater distance allows the ground to have a more gentle gradient than that in front of the carpark. This area continues the line of the terracing in front of the carpark but the gentler slope allows the terracing walls to be lower (600-750 mm). A path running in a north south direction cuts across the grassed area. The line of the path coincides with the outer edge of the upper terrace in front the car parking area.

The upper terrace of the area containing the Indiana Tea House Building is semicircular in plan. The area is formed by the retaining wall at the outer edge and follows the line of the former roadway that used to lead to the front of the earlier pavilion. The former road surface has been removed and replaced by brick paving; the area has also been planted with She-oaks *Allocasuarina sp.* The upper terrace, which is enclosed by this roadway, is at the level of Marine Parade. Norfolk Island Pines have been planted beside the footpath that runs along the edge of the street.

The Indiana Tea House Building, which was erected in the 1990s, incorporates the 1960s surf lifesaving building. This building had changing rooms at the upper level and boat storage facilities below. These facilities remain and, apart from the removal of the vaulted roof that used to be above the shower area of the changing rooms, the building appears to have remained largely intact. The 1960s surf lifesaving building is constructed of Besser ribbed concrete blocks.

The site steps down under the Indiana Tea House Building so that the eastern side of the building is two storeys high and the west side has three storeys. The new building was built around the existing changing rooms. This was achieved by locating the completely new main café/restaurant area on the top floor of the building and by adding a new kiosk to the east side of the building in front of the earlier changing rooms. The changing rooms occupy the western half of the middle level and are entered from corridors at the north and south ends of the kiosk. The path that runs across the grassed area passes under the upper storey to run in front of the kiosk shop counter. The pathway widens in front of the kiosk to form a circular courtyard formed by enclosing storey-high walls. The area contains a mature Canary Island Date Palm Pheonix canariensis. A set of steps in the east side of the courtyard lead up to the semicircular pathway that edges the upper terrace. The walls enclosing the circular courtyard support ramps on the north and south sides. The ramps rise from the semicircular pathway to the restaurant level of the building.

The lowest level of the Indiana Tea House building coincides with the level of the low-level roadway. This level contains the earlier boat storage facilities, which are in effect housed in the undercroft formed by the piers supporting the upper levels of Indiana Tea House Building.

A set of steps provides access from the low-level road down to the beach. This semicircular set of steps is placed on the centre line of the Indiana Tea House Building. The rear edge of the steps abuts the retaining wall that runs along the back of the beach. The set of steps includes a boat ramp.

The Indiana Tea House building dominates the beach front of *Cottesloe Beach Precinct*. The building stands as an exuberant mix of the eclectic elements of the Late Twentieth Century Post-Modern and Australian Nostalgic styles. The building has areas of walling of face limestone blockwork mixed with areas of rendered masonry. The roof is of green 'Colorbond' finished, corrugated steel. The composition of the building is organised around the square tower-like elements at each of the four corners. The upper levels of the north and south facades contain a large

bow window set between the corner towers. These appear to be to be supported on an arch spanning the opening. The west face of the building is dominated by a large facetted bay supported by piers which, at ground level, form the arcaded undercroft that runs across the entire west face. The building has a variety of roof types. The main area is covered by a gambrel with a ridge running in the north/south direction. The half gables display expressed trusses. The corner towers have pyramidal shaped roofs that are topped by solid lantern-like features. The central bay of the west facade has an octagonal roof that is capped in a similar fashion to the others.

The pylon is the surviving remnant of the scheme to protect Cottesloe with a shark net enclosure. The pylon stands about eighty metres off shore in front of the Indiana Tea House. The structure consists of a cylindrical concrete base that rises about three metres above water level. A circular metal post, about three metres high, is fixed to the top of the base. This post has a pointed top and was installed recently and it does not match the original.

**Zone four**, is the south part of the beach. It runs southward from the roadway that forms the end of zone three around to the groyne, which terminates the sand beach area of *Cottesloe Beach Precinct*. This zone does not include the headland that overlooks the groyne. The headland is seen as part of zone five, which includes the more unchanged natural landscape of Mudurup Rocks.

With only minor variation *Cottesloe Beach Precinct* runs virtually in a north/south direction for most of its length, whereas this southernmost part curves out towards the west to follow the outline of the promontory formed by the headland and continued by the groyne.

The zone consists of two parts: the grassed terrace which runs from Marine Parade down to the pathway that runs along the rear edge of the beach and the beach itself. The grassed terracing in this zone, while similar to that in zone three, is less formal in its design. The upper area of the grassed terracing is raised slightly above Marine Parade and is flat. The flat area varies in width to suit the natural topography and ranges from a few metres at the northern end to about twenty metres where it broadens out to become part of the headlands. Where the land slopes away the gradient is similar gradient to that of zone three. The terracing here does not follow a straight line but instead curves to perhaps compliment the contours of the earlier natural landform. The pathways across this area follow the same lines as the terracing.

The Cottesloe Surf Life Saving Club building stands at the southern extremity of zone four. The building stands on the flat land set back about 10-15 metres from the stone outcrop that forms the face of the headland. The building is set at a similar distance from Marine Parade. The two-storey Cottesloe Surf Life Saving Club building consists of a main block with ancillary wings along the north side. The upper level of the main block contains the hall. When The Cottesloe Surf Life Saving Club building was constructed it displayed the aesthetic characteristics of the Post–War International style, with areas of unrelieved glazing set between the expressed structural portal fame. This was particularly true of the main

block. The building was altered in the 1990s. These alterations include the addition, at first floor level, of a broad verandah to the north face of the building and a facetted bay to the west face. The changes have now given the building almost the feel of the Late Twentieth Century Australian Nostalgic style.

Two concrete pathways, about four metres wide, run across the upper section of the terrace. One path runs beside the edge of Marine Parade. The other one, named the Raia Roberts Path, runs along the centre of the area and leads off past the west face of the Cottesloe Surf Life Saving Club building.

A memorial to Lieutenant Commander Milius stands on the upper part of the grassed area. The memorial is a sandstone boulder to which a bronze plaque has been added. In June 1801 Lieutenant Commander Milius led the group from the ship *Naturaliste* that carried out a survey of the environs of Cottesloe.

The north end of the grassed area is planted with twelve Norfolk Island Pines arranged in three rows. The south end of the area is planted as an informal grove of She-oaks Casuarina sp. and Rottnest Island Teatrees Melaleuca lanceolata.

A wide brick pathway runs around to the groyne from the rear edge of the beach. The path is set at the same level as the beach. Set in from the northern third of the pathway are a number of temporary beach volleyball courts with timber net posts. A row of open log-construction shelters is set in from the southern third of the pathway. The structures have pyramidal roofs covered by shadecloth.

Adjacent to the shelters is the paddling pool. The paddling pool is about 37 metres long and is of a polygonal shape with the facetting reflecting the line of the former concrete walkway that used to be over the area now occupied by the pathway. The paddling pool is a form of concrete tank with concrete sides. The pool varies in depth between about 10,000 and 750 mm. The concrete is painted a blue colour. The pool was empty at the time the inspections were carried out for this assessment.

The groyne is about 150 metres long, about 100 metres of which extends into the sea. The groyne is constructed from randomly placed granite boulders and is topped by a four and a half metre wide concrete roadway.

**Zone five** extends southward from the headlands to part way along the cove opposite the Seaview Golf Course. The study area stops opposite Jarrad Street. This area is characterised by the natural landscape that had until recently, although degraded, remained largely untouched. The upper part of the area is undulating and occupies most of the zone. The interface between the upper area falls away very steeply to the beach below and runs southward along the coast to the area in front of the Cable Station Building. There is a reef formation in the ocean in this area.

In the 1990s, as one of the Bi-centenary grants allocation, the area was landscaped into a form of natural parkland. Two monuments formed part of the scheme. One is the large sundial for reading local solar time. The

sundial is based on one of the Yantra in the Observatory of Jai Singh, in Jaipur, India, which was built in the eighteenth century by Sawai Jai Singh, the founder king of Jaipur. The Cottesloe sundial consists of two right angle triangular elements standing about a metre apart. Two arched segments rise up either side of the central elements. The triangular elements [nonom walls] are of limestone construction and the curved segment [shadow plates] is of stainless steel.

The other monument in the group is a free-standing wall with a rectangular opening in it. The ashlar limestone wall is capped by a row of stones on edge. To the south of the wall is a roughly circular area edged by a low limestone seat and paved with a mosaic of rocks and tiles that depicts a shell. There is random rubble limestone pitching to the west side of the limestone seat and the leading edge of this wall supports the sculpture of a dolphin.

The Raia Roberts Path continues past the west side of the Cottesloe Surf Life Saving Club building in Zone 4 and then turns sharply and runs west until it is approximately two meters from the edge of the road where it turns towards the south. This path then runs parallel with the road and continues south past the upper monument and the carpark set into the west side of Marine Parade at the south end of the zone. A winding concrete pathway, approximately 1500mm wide, connects with the Raia Roberts Path near the south side of the Cottesloe Surf Life Saving Club building and runs down through the parkland to the sundial monument. This path then continues up through the parkland to reconnect with the Raia Roberts Path just to the south of the upper monument.

The development of *Cottesloe Beach Precinct* is characterised by change as is demonstrated by the various ways in which the landscape has been manipulated and by the range of elements that have been placed in the beachscape over different periods. Often these elements have been either partly or completely removed due to changing attitudes towards beach going or, more commonly, to the effects of the very severe marine environment.

These elements include:

The limestone walling and grassed terraces

The timber jetties (demolished)

The proposed Shark-net (remnant remains)

The original timber Indiana Tea House (demolished)

The groyne

The raised concrete walkway (demolished)

The Cottesloe Surf Life Saving Club building

The concrete paddling pool

The Inter-war Cottesloe Pavilion (demolished)

The 1960s Changing rooms (built over)

The 1990s Indiana Tea House development

## The 1990s Sundial and development of Mudurup Rocks

The **Cottesloe Reef** ecosystem (a portion of which is in the study area) extends approximately 1.5km off-shore from Cottesloe Beach and is one of only two main reef systems on Perth's metropolitan coastline. Cottesloe Reef is composed of limestone pinnacles and elevated platforms and water-eroded outcrops, with kelp beds, sponge gardens and patches of sea grass.<sup>68</sup>.

The reef provides habitat and shelter for a rich and diverse array of marine fauna and flora. In addition to many species of finfish, shellfish, crayfish, stingrays, Port Jackson sharks frequent the reef and the weedy seadragon and rarely seen leafy seadragon shelter in the weeds. Port Jackson sharks use the reef as a nursery area and weedy seadragons breed in the weeds. The reef also provides a sheltered habitat for other delicate animals such as feather stars, sponges, sea cucumbers and reef corals. <sup>69</sup>

#### 13. 3 COMPARATIVE INFORMATION

There are nine places with similar characteristics as this place in the Heritage Council of Western Australia's database. None are on the State Register. The place most similar is City Beach (09108) which is recognised for its social and recreational characteristics and as the site of the formation of the City Beach Surf life Saving Club. Coogee Beach and Jetty (10164) has a similarity to Cottesloe Beach Precinct for its beach but Cottesloe Beach Precinct has lost its jetty. Due to their similar social and recreational characteristics, various river beaches such as Como Beach and Jetty (4749), and White Beach, Dalkeith (13618) also hold some comparison. Other places outside the metropolitan area include; Horrocks Beach (8920), Kununurra Swimming Beach and Tree (9593), Sandy Beach, Walpole (11399), South Beach Horse Exercise Area (16120) and Town Beach Site, Broome (4861)

There are no surf life saving clubs on the database, except for the Surfside complex in Yallingup which has associations with surfing but not necessarily surf life saving.

The natural landscape of *Cottesloe Beach Precinct* is similar to the stretch of coastline from Trigg Island north to Watermans. However this area does not provide either the same natural or manmade amenities as *Cottesloe Beach Precinct*. This is in part due to the Cottesloe being more a mix of limestone outcrops combined with some areas of dune as opposed to a continuous limestone embankment. This difference has allowed Cottesloe to be manipulated more, particularly at the interface where the grassed terracing has been formed. Cottesloe has a wider beach and fewer reefs.

Cottesloe Beach Precinct is rare for its cluster of cultural features in a natural setting. The built landscape of Cottesloe Beach Precinct reflects the urban environment that it runs along the fringe of.

http://www.fish.wa.gov.au/hab/broc/cottesloehfhpa, accessed 1 October 2003.

Ibid.'http://www.sustainability.dpc.wa.gov.au/CaseStudies/Cottesloe%20Reef/CottesloeReefprint.htm, accessed, 1 October 2003.

Cottesloe Beach Precinct / North Cottesloe is rare as a one of the older established suburban beaches that stands at the edge of a residential area established in the Federation and Inter-War period. The residential area in the vicinity of City Beach, is Post-War development. The area around the beaches of Scarborough / North Beach were first establish as holiday destinations with holiday houses being typical throughout.

Cottesloe Reef is one of two marine reef systems in the Perth metropolitan area. The other is at Marmion, where the Marmion Marine Park was established in the 1980s following concern regarding the area's degradation. The lack of community consultation regarding the Marmion Marine Park resulted in uncertainty over the boundaries and little public appreciation of the place's values and marine life.<sup>70</sup>

#### 13.4 REFERENCES

No key references.

## 13. 5 FURTHER RESEARCH

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http://www.sustainability.dpc.wa.gov.au/CaseStudies/Cottesloe%20Reef/CottesloeReefprint.htm, accessed, 1 October 2003