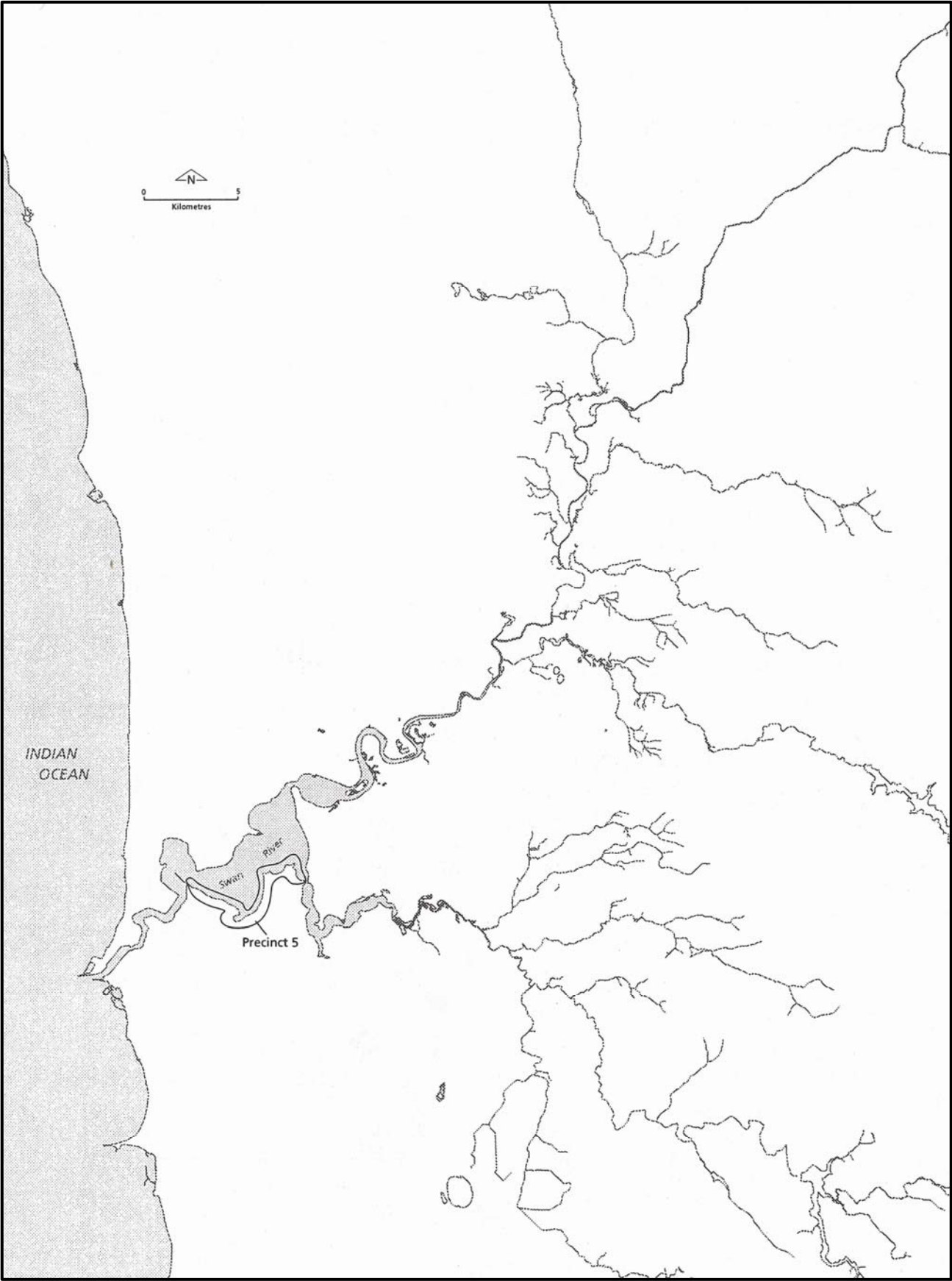


Precinct 5

South Melville Water Point Walter to Canning Bridge



Summary

South Melville Water Point Walter to Canning Bridge

The precinct is defined as between Point Walter and Canning Bridge. From the narrow mouth between Point Walter and Point Resolution, the river widens to Melville Water.

Lucky Bay is a large triangular shaped indent in Melville Water which stretches between Attadale and Point Dundas. The western foreshore of Lucky Bay has been infilled by dredging and rubbish fill and as a result is relatively flat and has little native riparian vegetation. The Melville Beach is a linear and narrow beach which has urban development built only metres from the high water line. Alfred Cove, which indents into a small bay within the centre of Lucky Bay, supports samphire flats, reeds and fringing woodland and is an important reserve for wading birds. The wetland itself is very attractive; however adjacent recreation and housing developments encroach on the reserve and give a limited view of the area. The Applecross headlands of Point Dundas and Point Heathcote jut into Melville Water and have several concave bays as part of an undulating foreshore. Point Dundas is at present, undergoing redevelopment as an exclusive residential area, while Point Heathcote is currently being considered for redevelopment of the old hospital site.

The residential areas adjacent to the foreshore have recently undergone an increase in demand due to their proximity to the river and city. There are several new prestigious homes of extreme designs. Generally, they appear removed from the foreshore area as most residential areas are separated by a road and wide foreshore reserve. The infilled foreshore is in most parts relatively topographically uninteresting. However, parts of the foreshore have fringing woodland which acts as a visual distraction from the flat playing fields of the adjacent foreshore reserves. Point Walter has recently been redeveloped to provide more attractive amenities and food outlets. The designs are an example of attractive and unobtrusive buildings and paved areas which take into consideration the local landform and vegetation communities.

Biophysical Processes

Geological Processes

The precinct is part of the Tamala Limestone Formation which formed about 10 000 years ago when the sea was at its lowest level. The coastal limestone has structures such as aeolian and marine bedding. The most recent transgression (Flandrian) occurred around 6 000 years ago and evidence of this process occurs as an undisturbed shallow fossil deposit at Alfred Cove. This consists of 2 metres of unlithified sands, clayey sands and shelly muds which were formed when the water level in the estuary was believed to be 0.5 metres higher than present (Yassini and Kendrick, 1986). As the water receded, more recent alluvial deposits formed over the shell beds.

The soil around Alfred Cove consists of fine silt particles and sticky clays. The precinct consists of predominantly Karakatta Sands, which in places extend to 20 metres before reaching the underlying parent limestone. The overlying soil is infertile yellow and brown sands. These sands originally supported a woodland community with a thin loamy layer due to the decomposition of the leaf litter. Charles Fraser who was present on Stirling's 1827 exploratory voyage of the Swan River was misled by the abundant vegetation and described the on turning the soil up found it to contain a considerable quantity of loam even on the tops of the hills, the valleys and headlands are formed of the richest loams, and covered with the most luxuriant herbage'.

Topography

Overlying the limestone is the aeolian Spearwood Dune System which contributes to the precincts undulating topography (Seddon, 1972). The precinct comprises of two broad flat ridges which are separated by the shallow north-south orientated valley. The ridges are gently undulating and rise to a maximum height of 50 metres AHD; they are the geologically remnant dunes. The low lying area at Alfred Cove forms a flat plane which joins the gently sloping precinct foreshores. The Applecross area is situated on a headland which is topographically higher than the surrounding land. At both Point Dundas and Point Heathcote there are very narrow foreshores and steeply sloping hill faces. To the east of both of these hills are small curved bays which have comparatively gentle slopes.

Hydrological Processes

Water features

Along the western side of Lucky Bay and Alfred Cove shallow muddy waters have formed, while at Melville Beach and Point Walter narrow sandy beaches are present. At Point Walter a spit has formed as sediment has been deposited against the band of aeolianite which traverses the estuary. Large shell deposits occur in Lucky and Waylen Bays and a sand bank was originally present at Point Waylen. Within the eastern facing bays sands have accumulated due to the relatively sheltered weather conditions.

The topographically low areas of Alfred Cove are subject to stormwater runoff and there are several suburban drains which enter the area. In addition, it would be expected that groundwater through flow into the bay would be high due to the low topography. Excessive use of bore water would cause the fresh groundwater to become increasingly salty as the deeper salt water is drawn closer to the surface to replace the removed fresh water.

Bathymetry

Melville Water is the widest channel cross section of the Swan River. The river channel depth reaches to approximately 10 metres at Applecross and supports a permanent body of saline water at approximately than 5 metres. There is often a sharp halocline between the saline body and the overlying fresh water. A shallow sand bank along the Attadale foreshore to Pt Waylen is present, however much of this was dredged in the 1960s as part of a reclamation program. The bays around Pt Dundas to Canning Bridge are shallow and well protected, with wide shallow banks which are supported by seagrass beds.

Flooding

Historically, the tidal flats at Alfred Cove would have been subject to irregular submergence at times of high water levels associated with storms or high flood water discharge. Due to dredging and damming in the catchment the degree of inundation has been reduced due to the change in river velocity and reduction in the flood volume (Riggert, 1978).

Erosion and accretion

The Alfred Cove foreshore is considered very stable due to the maintenance of riparian vegetation. Melville foreshore is subject to seasonal erosion as the residential development is built very close to the beach. The foreshore is regularly eroded in high water conditions and local authorities and the Swan River Trust regularly renourish the foreshore with sand.

Vegetation Communities

Native

Karrakatta Complex

The Karrakatta Complex is the main vegetation community in the area. This complex is predominantly tuart (*Eucalyptus gomphocephala*), jarrah (*Eucalyptus marginata*) and marri (*Eucalyptus calophylla*). The understorey consisted of slender banksia (*Banksia attenuata*), firewood banksia (*Banksia menziesii*) and bull banksia (*Banksia grandis*). In addition, sheoak (*Allocasuarina fraseriana*) and peppermint (*Agonis flexuosa*) are also found. The communities which make up the complex are outlined below.

Halosarcia communities

The sheltered salt marshes at Alfred Cove are one of the few remaining samphire and low shrub communities along the Swan River (Murdoch University, 1989). Samphire (*Halosarcia* sp), beaded glasswort (*Sarcocornia blackiana*), creeping brookweed (*Samolus repens*), streaked arrow grass (*Triglochin striata*) and seablite (*Suaeda australis*) are very common in the intertidal area. On the higher foreshore sedges and rushes, such as shore rush (*Juncus kraussii*), marsh clubrush (*Bulboschoenus caldwellii*) and knotted club rush (*Isolepis nodosa*) are found.

Melaleuca communities

The swamp paperbarks (*Melaleuca raphiophylla*) occur along the foreshore in small islands of remnant vegetation. These are also often associated with the flooded gum (*Eucalyptus rudis*). The understorey often has rushes, such as shorerush (*Juncus kraussii*), bare twigrush (*Baumea juncea*) and bog rush (*Schoenus curvifolius*) depending on the degree of salinity. The swamp sheoak (*Casuarina obesa*) is present at Point Walter.

Dryandra communities

At Alfred Cove, parrot bush (*Dryandra sessilis*), red-eyed watde (*Acacia cyclops*), swamp sheoak (*Casuarina obesa*) and sedges (*Lepidosperma*) occur. The rocky headland of Heathcote supports a number of native shrubs including red-eyed wattle (*Acacia cyclops*), fanflower (*Scaevola nitida*) and cockies tongues (*Templetonia retusa*) (National Trust of Australia, 1991).

Banksia communities

A low open woodland of banksia (*Banksia* sp), sheoak (*Allocasuarina species*), parrot bush (*Dryandra sessilis*), tree smoke bush (*Conospermum triplinervium*) and woolly bush (*Adenanthus cygnorum*) occurs along Waylen Bay (Murdoch University, 1989). Originally, the residential area of the precinct would have included woodland of marri (*Eucalyptus calophylla*) and jarrah (*Eucalyptus marginata*), with a second storey of banksia and sheoak and a understorey of waljumei (*Jacksonia sericea*) and bacon and eggs (*Oxylobium capitatum*). Other species such as kangaroo paw (*Anigozanthos manglesii*) and cats paw (*Anigozanthos humilis*) would have also been prominent.

Exotic

Exotic species are prevalent along the foreshore and many of these have been intentionally planted. At Alfred Cove and Waylen Bay, pigface (**Carpobrotus edulis*) is a prominent species, and at Waylen Bay is the dominant riparian species retaining the beach foredune (Murdoch University, 1989). There is a considerable amount of the bright green kikuyu (**Pennisetum clandestinum*) which has encroached to the rush beds at Alfred Cove and flourishes due to the regular maintenance of the adjacent ovals. At Point Walter, one of the most significant features are the tall Norfolk pines (**Araucaria heterophylla*) and Moreton Bay fig (**Ficus macrophylla*) which have been planted at the base of the escarpment. Poplar (**Populus* sp) acts as a weed with several saplings present along the Point Walter and Applecross foreshores. Along Melville foreshore there are several flooded gums (*Eucalyptus rudis*) which remain although the understorey is a maintained lawn of buffalo (**Stenotaphrum secundatum*) and couch (**Cynodon dactylon*). At Point Heathcote there are a number of Japanese peppers (**Shinus terebinthifolius*) and a large stand of giant reed (**Arundo donax*).

Historical Land use & Resulting Environmental Changes

The area was first explored in 1801 by the French party lead by Ensign Francois Heirisson on the Naturaliste. Waylen Bay was originally known as Frenchman's Bay as the party camped here. The 1827 exploratory party led by Stirling named Point Heathcote after G. G. Heathcote, midshipman on H.M.S. Success. It is believed that Point Dundas was named in honour of Lieutenant Richard Dundas who was stationed in New South Wales.

The first land grants in the precinct were made in 1830 to those migrants who followed the first settlers in the Swan River Colony. The earlier settlers had claimed the more fertile soils of the Upper Swan leaving the relatively infertile soils of Melville. Land was allocated to John Adams, Alfred Waylen, Lionel Lukin, Joseph Cooper, Archibald Butler and John Hole Duffield. Their grants were placed to enable easy access to the river which would be the major transport link for many years. At the time of the grant allocations, the site of the capital had not been determined and Point Heathcote was considered a favourable option.

Those settlers who had located on the Canning side of Melville were enthusiastic and were eager to develop their properties. However, the only properties to have any form of development along Melville Water were those owned by Butler and Waylen who both constructed homes. At Butler's Pembroke Farm, there was little progress, as he realised that he would be better investing in the Avon with his brother. Waylen at his Point Walter property had applied for an ale and spirit licence and also was intent on establishing a ferry service to his proposed ale house. A number of misfortunes occurred at his property including one of his labourers being speared to death after another labourer had killed an Aboriginal for stealing potatoes. In 1831, after being granted land at Preston River he left the colony for two years returning to build a more successful property. Lukin and Hole Duffield did not develop their properties and were uninterested in the land.

In 1837, Waylen was able to cut a channel in the Point Walter spit and although constantly silting up, it was heavily used. The point became a popular stopping point between Perth and Fremantle. Waylen leased his recently built inn and the channel was tolled, however, he was more interested in establishing Bull's Creek as a river port. In the 1850s several of the properties changed hand, but the majority of the land was used for rough grazing country for cattle and horses. Waylen ran cattle in the Alfred Cove area for many years.

The native understorey was greatly reduced by to heavy grazing. Jarrah and tuart were cut for firewood, sheoak for shingles and banksia for firewood. The banksia was quick to recover from this intensive harvesting, however the eucalypts were replaced by only a few small saplings. From the 1840s to the turn of the century the area was mainly used for grazing.

By the 1850s the steamers were the dominant form of river transport and these were too big to pass through Point Walter spit. The channel was poorly maintained and by the 1860s was unused. In 1862 the half way house became a picnic ground. The first trip that year was by the Working Men's Association Picnic when 450 people arrived by ferry and spent the day with several types of entertainment.

In January 1850, the Canning Bridge located at Hell's Gate was open to the public. It was built by Solomon Cook and a gang of prisoners from Fremantle. The bridge was tolled; however the Canning Road leading to the bridge was a sandy track for many years and the road was difficult to traverse.

In 1896, Alexander Matheson built jetties at Attadale, Applecross and Coffee Point for his proposed ferry service. A boat building yard was established at Coffee Point and several boats were built and maintained at this location. The ferry service was quickly overtaken by the buses.

By 1900 the Canning Bridge Hotel was located on the western bank of the Canning River confluence and was a popular recreational location. This was later replaced by the Raffles Motel/Hotel.

In 1914, a tram service was built between Stock Road and Point Walter. It was aimed at encouraging visitors to the Point; however most people arrived by road or by boat. Despite this, the point became a popular location due to the several attractions, such as, dancing and side shows. The cost of running such entertainments was high and as the popularity of the area declined there was increasing pressures on local council's finances.

By 1930 much of the Melville land was under modest agricultural development. The increase in Perth's population had given rise to the demand for perishables such as milk, fruit, vegetables and eggs. W.D. Atwell and subsequently Arthur Groves ran the Atwell House and dairy at Alfred Cove for many years, and had approximately 100 dairy cows which grazed in the fringing woodlands.

At the turn of the century, increasing numbers of Fremantle workers bought land in the Melville area for their homes, from where they would commute to Fremantle. Areas such as Palmyra, Richmond and Plympton developed into suburbs. Subdividers of Attadale, Applecross and Mount Pleasant directed their attention to attracting Perth's business men and public servants, who could afford to commute to the city. The land was slow to be taken up, however a few families did move to the area when the Wireless Hill radio transmitter was built in 1911.

From 1948 to 1972 the former military camp overlooking Melville Water was a shelter for immigrants while they found accommodation. The site was crowded and uncomfortable and most often a rather uninspiring and difficult introduction to the country.

By the 1950s the shorelines of Melville were seriously degraded. Erosion had exposed many limestone boulders in the shallows at Point Walter. Applecross was fouled with an algal bloom. In 1961, 30 000 tonnes of clean sand were pumped onto Point Walter Beach to replenish the sand. There was a plan by the Public Works Department to fill in Waylen Bay, but it, this was later abandoned due to general public outcry. However, the Applecross foreshore was filled in to cover the algal blooms which had developed in the small bay and the land became a flat playing field.

The large flat areas of Troy and Tompkins Parks are the result of the use of the area between 1952 and 1964 for disposal of domestic and building wastes which were covered with sanitary landfill. The Attadale foreshore was cleared of natural vegetation and the river bed was dredged and the soil used to fill the foreshore. The area was also used as a rubbish dump for domestic waste and liquid effluent. At Point Waylen, the Civil Aviation Transmitter was constructed in 1958 and still plays an important role in communication for Perth Airport; however, it has been proposed that it should be removed (Murdoch University, 1989). The Majestic Hotel at Point Dundas was originally built for Governor Sir Gerard Smith who at no time ever resided at the house. It was bought by G. Forster who lived there for five years and eventually the house became the Hotel. By the 1970s, the Majestic Hotel's income had decreased and several redevelopment proposals had been tendered. They included a international holiday centre in 1969, a casino, hotel, marina and yacht club complex in 1974, and 1982 a 32 storey hotel by Bond Corporation. The latter was rejected, so a second proposal of a high density residential and commercial development was proposed and again rejected.

After several other owners and controversies the land was eventually cleared for a low density prestigious residential development. The land market, however, crashed at the time of release and the prices of the blocks were too expensive. By 1995 only a couple of blocks had been developed and the point remains a sandy block.

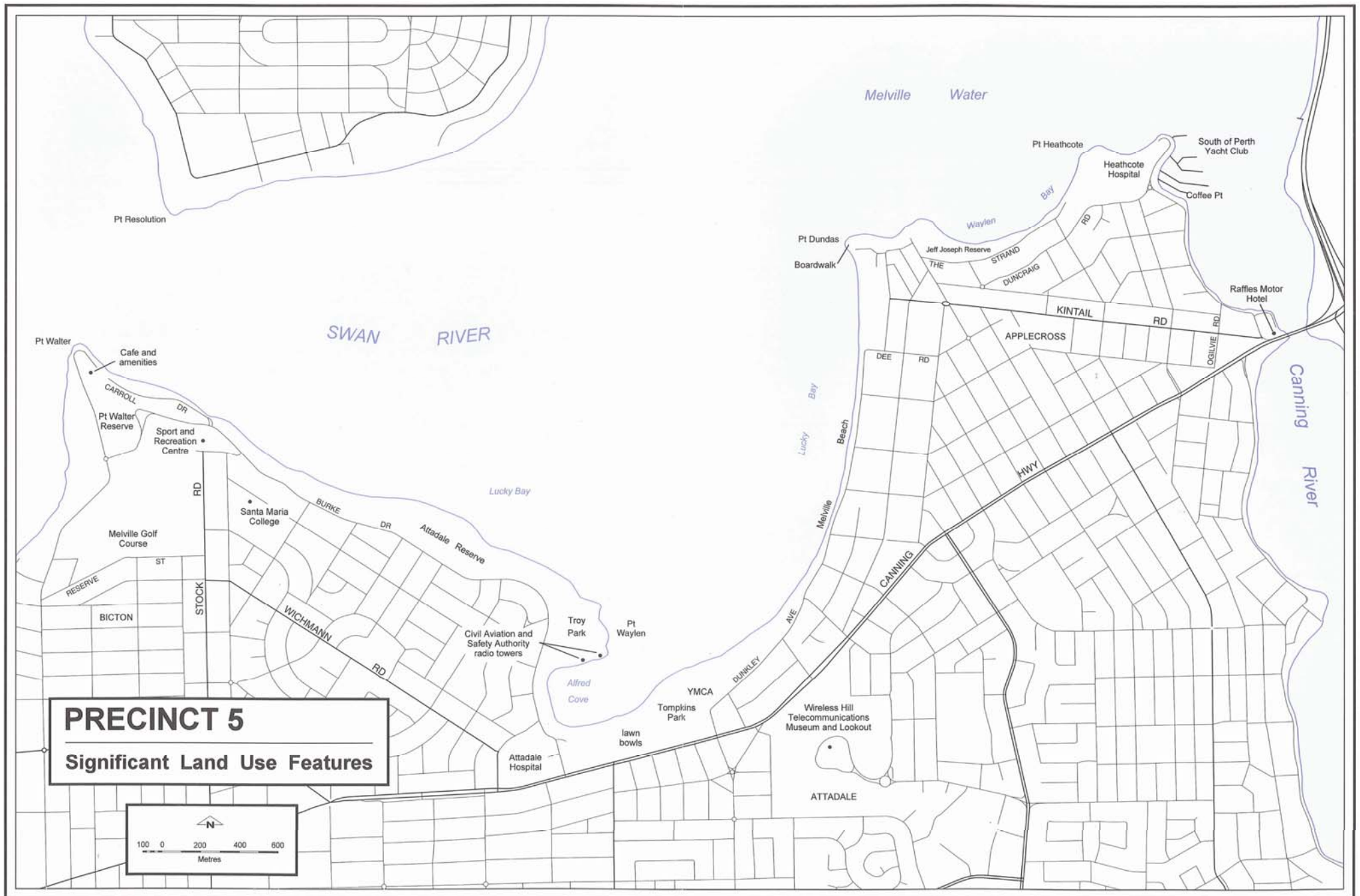
The South of Perth Yacht Club was relocated in 1962 to Point Heathcote. In 1972, it was hoped that a bridge would be built between Point Walter and Point Resolution, however among many considerations the cost was deemed too high.

Present Land Use and Social Patterns

The precinct is mainly made up of the suburbs of Applecross, Attadale, Bicton and Alfred Cove. Apart from a small section north of Dee Road, Applecross residential development does not go to the high water mark. Along Melville Beach Road, there is a very small foreshore road built on its back dunes. Adjacent is a line of predominantly post 1960s homes with a high degree of urban pride. Several of these blocks have been recently subdivided and new expensive homes have been constructed. The residential area in Attadale is behind Burke Drive, and has generally large homes which have been built over many decades. At Point Dundas an exclusive low density residential development is currently being built. The site had a limestone wall and metal railings built along the foreshore to retain the blocks. Unfortunately, due to the slow development of this site the fencing has been vandalised and this has not been fixed for over a year by the developer.

Heathcote Hospital has recently closed down and decisions are yet to be made regarding land use for the site. It is currently managed by the Health Department of Western Australia and the hospital will be relocated. The relocation could facilitate improved public access to the foreshore and ideal opportunities to sensitively redevelop or convert the old hospital into a new land use.

The Raffles Hotel/Motel is located at Canning Bridge, Applecross, and due to the need for bridge support has high retaining walls. The motel is painted rather gaudily and has a large advertising sign on its roof. The retaining banks are concreted and bituminised for a car park.



Recreation nodes

The facilities at Point Walter were recently upgraded and the area re landscaped. Road modifications and car parks were relocated away from the foreshore. A new kiosk and cafe replaced the old food outlet and amenity block. New barbecue facilities and a small amphitheatre were constructed. The result has been a successful relocation of traffic away from the foreshore and greater provision of foreshore available for recreational pursuits. The area is heavily used for swimming, fishing, prawning, sail boarding, boating and water skiing. The boat ramp provides a focus for boating activities.

Attadale Reserve is flat open grassland with some paperbarks which has a golf practice area. The area was infilled during the 1960s and as a result there is a flat open space. A dual use path runs adjacent to the foreshore and allows the user to view the remaining paperbarks and flooded gum, although unfortunately the understorey is poorly represented due to the flourishing kikuyu grass.

Alfred Cove provides a valuable opportunity to observe and study the visiting wading birds and the rare wetland community. The site did have a hide; however this was removed due to the high cost of maintenance. Again the kikuyu grass is a severe problem and indicates that nutrients from the adjacent residential gardens and ovals are entering the wetland.

Tompkins Park Reserve is composed of a number of ovals which are used by several sporting and recreational clubs. The clubs have several car parks which are partly hidden by planted native flora and the club houses are painted in green tones which reduce their prominence on the landscape. Atwell House at Alfred Cove is used as an arts centre and displays works produced by local people and members of the groups which meet at the centre.

Melville Water is heavily used by windsurfers as it is often subject to prevailing wind conditions. The relatively sheltered Melville Beach is considered to be an ideal location for the less experienced windsurfer and as a result classes often take place at the Cunningham Street car park.

The South of Perth Yacht Club is located at the confluence of the Swan and the Canning River and has a large area set aside for club activities. A tennis club is located at Waylen Bay foreshore and the area has several recreational facilities. Two water ski areas are located at Waylen Bay and Point Walter.

Public access

Melville City Council and the Swan River Trust have provided a raised walkway around the foreshore at Point Dundas and have replanted a reed species to reduce natural erosive processes around the point. The shallow water around the point is inaccessible to swimmers and near water users. The precinct has a well maintained dual use pathway all along the foreshore. There is a lookout at Point Heathcote which is linked to the Point Heathcote pathway and overlooks Melville Water. There is restricted access from the Point Dundas walkway to Dee Road as residences are built to the high water line and the adjacent beach is narrow due to erosive processes. Alfred Cove can be reached by a dual use pathway or via Troy and Tompkins Park reserves.

Sites of Nyungar & Wider Australian Community Significance

Nyungar significance

In summer, the Beeliar Nyungars used Alfred Cove (*Marradungup*) as a campsite for this was an area of the wetlands which was an abundant source of yams, crustaceans, turtles, and waterfowl. This name means place of death water (Collard *et al*, 1996). Beeliar Nyungars would regularly burn sections of this area which kept the understorey low and was considered a useful technique for flushing out game. The Melville area was originally open woodland as the result of centuries of burning by Nyungars (Cooper *et al*, 1989). The area was particularly admired for its open woodland by the early white explorers who found this landscape aesthetically pleasing (Seddon, 1972). Early colonists could not be persuaded to live in the area particularly at the time of Yagan. Yagan was a local Nyungar who continued to defend his custodial right to this area for some time after the Swan River Colony had been established (Uren, 1975). The Nyungar names for the area are *Dootanboro* (Melville Water) meaning the 'big pelican river', Point Walter or *Dyoondalup* meaning the 'place of white sand', Lucky Bay *Margamangup* meaning 'the place of the bird's nest in the tree', *Moondaap* (Point Dundas) meaning 'the blackness of the river bank', *Kooyagoordup* (Waylen Bay) referring to the place of the *kooyar* species of frog (Collard *et al*, 1996). *Goolugatup* (Point Heathcote) means the 'place of the children' and the Canning confluence is known as *Gabbi Kowangalup* the 'place where the water comes out of the hole'.

Other significance

Point Heathcote was where the 1827 exploratory trip camped and planted a garden to test the qualities of the soil. No report on the garden's success or failure was given (Seddon, 1972).

Point Heathcote was one of the sites considered for the capital of the Swan River colony as it was the site of the confluence of the Canning and Swan Rivers. However, the present Perth City location was chosen in preference due to the abundance of fresh water. The old Heathcote Hospital is one of the prominent features at Melville Water and has an attractive building opened in the 1929. Heathcote was built as the Heathcote Reception Home which was the result of a 1927 agreement which distinguished between the certified insane and the mentally ill (National Trust of Australia, 1991). Heathcote was for recoverable patients who could be separated from the senile, epileptic or mentally deficient based on legislative definitions of the time. There are 1940s and post war buildings.

Historically, the precinct was very isolated and as a consequence was slow to develop. Early colonisers, such as Alfred Waylen, were important in encouraging development in the area. Some of the water and land features adjoining his properties have been given his name. The Atwell family was associated with dairy farming in the area and their homestead is one of the earliest houses remaining in the district and is now used as an arts centre.

Conservation areas

Wetlands

Alfred Cove is part of the area under consideration for the Swan Estuary Marine Park and this wetland will be managed by CALM.

System 6

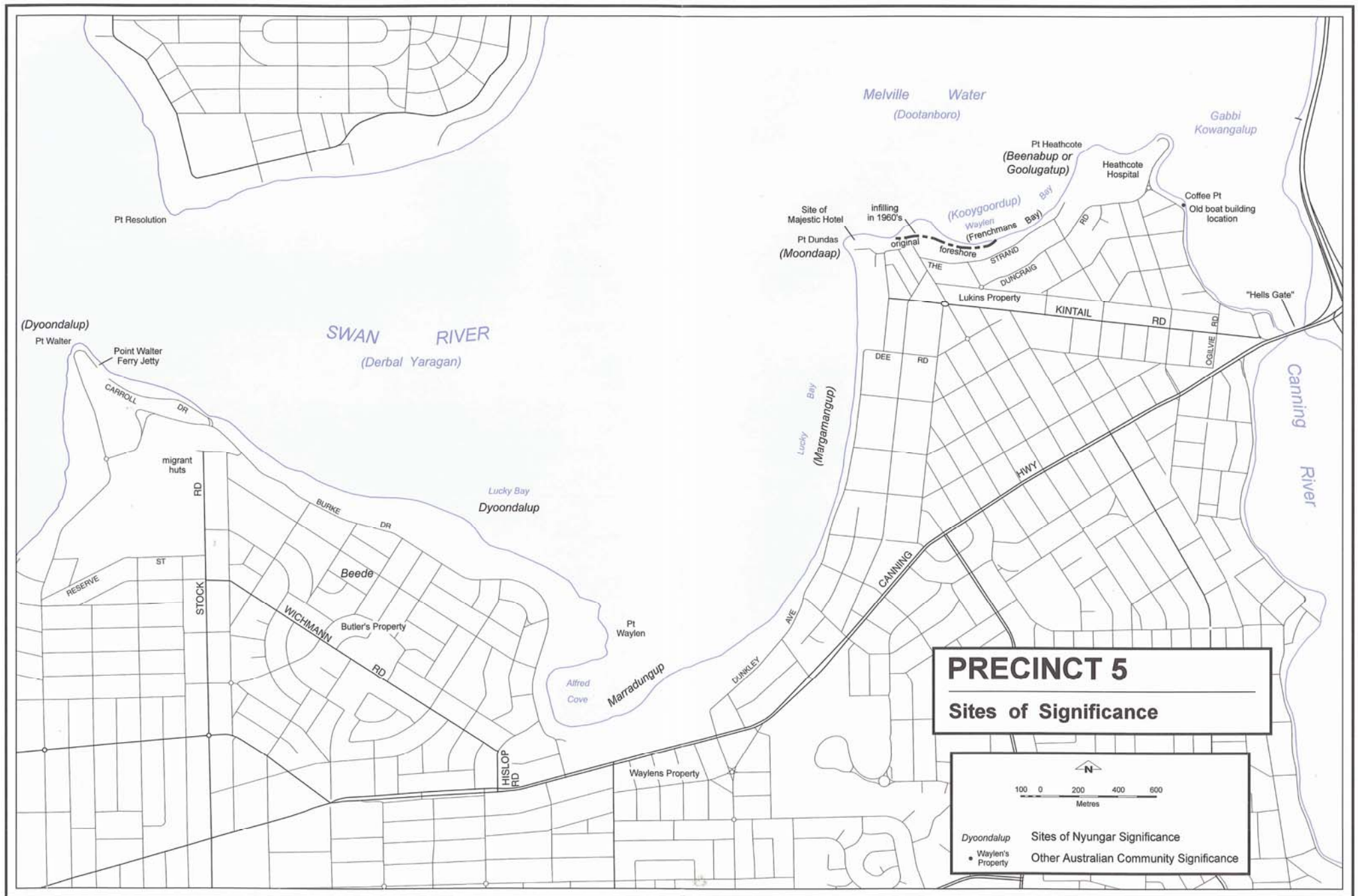
M61 Aquatic Reserve, Attadale

The recommended area comprises the tidal flats and salt marsh areas of Point Waylen and Alfred Cove. The vegetation community includes sedgeland, bulrush, closed heath and a narrow belt of low closed forest of swamp paperbark. In Alfred Cove, there is a fossil deposit of sea shells. The area is one of only three significant wading bird sites on the Swan River. Trans equatorial migratory species are found in great numbers on these tidal flats. The area is a regionally significant open space and has high zoological significance. The area is recommended to become a regional park. The park is currently being incorporated into the Swan Estuary Marine Park and Adjacent CALM Reserves Draft Management Plan (1995).

It was identified as having educational, conservational and recreational value.

M65 Point Heathcote Foreshore, Applecross

The recommended area is situated on the shore and steep slope behind Point Heathcote. The area consists of rocky headland of coastal limestone carrying a number of native shrubs and a low open woodland along Waylen Bay.



Landscape Description

Precinct Description

Waterform

Within this precinct there are several small bays and undulations within the wider river channel. At Point Walter, the water forms a gently undulating beach and the shape is of a sheltered bay due to the spit and the riparian structures along the foreshore. From western bank of Lucky Bay (Attadale Reserve) the river widens and becomes more linear until it curves around Pt Waylen into Alfred Cove. Alfred Cove is a particularly attractive enclave; the water broadens into a circular form as it enters the cove mouth between Troy and Tompkins Parks. The river then becomes a wide channel along Melville Beach which runs in a northerly direction. At Point Dundas, the river form curves around the small headland and the wide expanse of Melville Water are on either side. Waylen Bay is a small embayment which is bounded by Points Dundas and Heathcote and although the curve of the waterform is less than at Alfred Cove, the effect is still an enclosed and sheltered water body. Point Heathcote has a synodal water edge which juts into the long north-south orientated stretch of water which runs along the Como foreshore.

Natural riparian zone

One of the widest beaches in the precinct is located at Point Walter. The beach is gently sloping white sand and due to the relatively sheltered conditions and previous beach replenishment is a couple of metres wide. In contrast, the narrow beach at Melville Beach is open to prevailing weather conditions, the lack of vegetation has resulted in seasonal erosion and steep narrow concave slopes. The Melville City Council regularly reclaims the foreshore between Pt Dundas and Dee Road, Applecross. The new beach is uncompacted sand which eventually takes a more natural gradient and if planted with riparian vegetation would be held in place.

Along the Melville reserve from Carroll Drive there are several stands of reeds which spread into the high tide zone to the edge of the riparian zone. The reeds, attractive long thin spiky form has a soft brushy effect and their clumpy form make the foreshore line irregular and undulating. There are several paperbarks and sheoaks which have branches which curve over the water's edge. There is a break in the riparian vegetation at Burke Drive golf practice area, which has a narrow sandy beach. The riparian vegetation is abundant in Alfred Cove and is several metres wide in places. The result is a pleasing effect with the brushy reeds and low red samphires forming curved nodes in the waterform.

Heathcote has a relatively wide sandy beach facing the prevailing weather conditions. This is possibly due to the natural vegetation which supports the sandy beach to the high tide line. A steep embankment is present on the northern part of the headland and a narrow sandy beach has formed in the concave bend within the headland. From Coffee Point the small sheltered bay to Canning Bridge has a narrow white beach dotted with riparian vegetation.

Landform

Point Walter has a quite steeply sloping face to the relatively high undulating land. The steep face has been cut back to a more gradual slope around the kiosk area to enable easier access to the foreshore and the undulating hill behind the foreshore. Attadale becomes more gently sloping and the foreshore area broadens into a flat plane. The topographically low flat land becomes intertidal at Alfred, Cove. At Tompkins Park, the land is a wide reclaimed playing field which narrows to Melville Beach. There is little foreshore along Melville Beach and Dunkley Avenue and it is only metres from the water and adjacent residential area, which is very gently sloping. From Dee Road, the Pt Dundas headland rises quickly and steeply, however the slope is not gradual due to residential blocks cut in the limestone in step form. The steep land declines sharply towards the Waylen Bay foreshore which due to reclamation in the 1960s is very flat compared with the sloping hills behind the bay. Pt Heathcote is a steeply sloping limestone outcrop. This is suffering from small landslides in the steeper unvegetated areas. The hill gradient rapidly decreases towards Coffee Point which is a flat embayment.

Vegetation

The vegetation at Point Walter is dominated by Norfolk pines, Morton bay figs and poplars along the foreshore. There is maintained lawn as well as a few sparse dune species. At the steeply inclined cliff adjacent to the boat launching car park, there is a low formed scrub community. There are also several prominent bamboo stands which dominate the cliff vegetation with their long stems and contrast sharply with the dull dusty green clumpy forms of the native bushland.

Along Attadale foreshore, there are several isolated trees adjacent to the maintained kikuyu grass of the golf practice area. There is a stand of attractive and mature paperbarks and river gums. These have particularly pleasing bark and leaf forms and it is unfortunate that the kikuyu grass is the dominant understorey. The adjacent foreshore has several large clumps of reeds which have a needle like dark green form and due to their clumpy nature give the foreshore an irregular form.

Like Attadale, Troy Park has several mature river gums and paperbarks with little original understorey. However, close to Alfred Cove the wetland vegetation community is quite spectacular, particularly with the red samphire and adjacent dark green reeds. There is also bulrush present which forms soft brown downy flowering bodies. The colour tones of the wetland are rather overwhelmed by the bright green of the kikuyu grass edging the wetland.

Melville foreshore has several introduced flame trees and also a few sparse stands of native species. There is little riparian vegetation except the reeds recently replanted at Point Dundas by the Swan River Trust. There is a wide band of reeds at Jeff Joseph Park and a few isolated stands of rivergum. The Melville City Council is currently planting a few new seedlings within the present stands.

Point Heathcote has a good stand of open shrub communities which are in relatively good condition; however, in places where vegetation has been removed, the slope is so great that erosion is a serious problem. The bushes are particularly attractive and the viewer does not see the Heathcote Hospital from the pathway through the vegetation community. There is a large stand of bamboo adjacent to the South of Perth Yacht Club and there are several flame trees along Coffee Point which due to their vivid flowers and spreading form are quite dominant form. There is lawn along Coffee Point and several patches of reeds which encroach into the river.

Riparian land use

At Point Walter there is an old jetty which was originally frequented by day trippers, and on special occasions is still used by tourist ferries. The jetty is a reminder of the historic value of the area as a recreational node. The new kiosks are in keeping with the historic nature of the area, however, the designs are modern and the building materials are visually of minimal intrusion due to the soft limestone colours and light gum green roofs. The Waylen Bay jetty at Applecross does not attract as many recreational users and is a rather isolated structure.

At Point Dundas a limestone retaining wall has recently been constructed around the headland. This has resulted in a very narrow riparian zone. Water reaches the wall and reeds have been planted adjacent to the wall to restrict sediment movement against the vertical wall. At the Raffles Hotel, there is a vertical limestone wall which supports the land around the hotel and the Canning Bridge, the limestone wall is well weathered being built at the turn of the century, however the bank is an unattractive concrete surface.

Access to the South of Perth Yacht Club is slightly restricted by club activities; however a dual use pathway encourages public access to the foreshore. The marina is in the bay at Coffee Point and is not an intrusive structure into the river.

Land use

The suburbs of Applecross, Attadale, Bicton and Alfred Cove front onto the river landscape. The Melville and Canning Beach Roads have urban developments on a flat topography so the front row of houses adjacent to the beach are the dominant land use element presented to the river user. These houses have a high degree of urban pride and of architectural styles typical of the era in which they were built. There are some more extreme architectural styles along Burke Drive, although, being set back from the river, these houses are less visually intrusive to the river viewer. The building of Santa Maria College is a prominent feature to the river user, as it is set on the higher topography of the Attadale hills and is visually in keeping with the urban use of the area. At Point Dundas, an exclusive low density residential development is currently being built. The few houses which have been constructed are very extravagant and bold in style. There has been no attempt to maximise visual quality of the site by linking the blocks with a 'transition' zone between the water and the urban development as the two elements are separated by a limestone wall.

The Sports Recreation Camp at Point Walter has low visual impact on the landscape. The site has been successfully redeveloped without substantial effect on the surrounding open woodland. Its buildings are simple and functional. The kiosk is an excellent example of how a recreational node can be compact and unobtrusive and at the same time functional and attractive. Heathcote is an attractive and prominent building on the landscape. It has a brown brick tower which rises above the tree canopy. The building itself is institutional in style, however the brown brick buildings are quite pleasing to the viewer for their age and non residential style.

The Raffles Motel is a prominent feature at Canning Bridge. It has a bright blue and white motel and the hotel is painted cream. Its *Moderne* style is in keeping with the adjacent local town hall, however, due to an advertising bill board, the architectural line of the building has been compromised.

Landscape Interpretation

Dominant Landscape Character

Originally the precinct would have had a natural landscape type characterised by the undulating forms of the Spearwood Dunes with more recent fluvial deposits in places such as Alfred Cove. The vegetation would have been mainly low open forest with fringing estuarine vegetation communities. Now the dominant landscape character type is suburban. The houses around the foreshore have a high sense of urban pride and due to the mainly flat nature only the first row of houses is prominent. The other dominant landscape character type is recreational.

At Point Water, Burke Drive and Alfred Cove the fringing vegetation and any remnant vegetation acts as parkland effect to the dominant grassed areas used for recreational purposes. The South of Perth Yacht club is a recreational landscape as is Waylen Bay. The samphire flats at Alfred Cove have been classified as a natural landscape character as they appear relatively undisturbed. Unfortunately, the suburban area encroaches on the viewscape so it was difficult to determine whether the wetland area should be classified as parkland or natural. The latter was chosen as the vegetation was in relatively good condition and due to fencing around the wetland the area can only be viewed rather than physically accessed. Within the fencing the wetland appears to have had little human influence.

Significant Viewsapes

All along this precinct's foreshore, the views of Melville Water and the opposite banks are particularly significant. At Point Heathcote and Point Dundas, the city skyline is an important focal point of the panoramic viewsapes. From the river the views are limited by the first hill rise which is the limit of the viewsapes horizon. From the Canning Bridge area the viewscape is guided by the almost linear South Perth foreshore and the v-shaped opening of Melville Water.

Conforming and Non Conforming Elements in the Landscape

Point Dundas is one of the visually significant points on the river to both the water and land based user. It is unfortunate that the recent redevelopment did not undertake to develop the headland as an area of high visual quality. It would have been very beneficial to have a transitory zone between the foreshore and the first row of residential properties. This zone could have graded the foreshore vegetation to low shrubland which would merge into residential gardens. As it is the properties have high walls in addition to the limestone retaining wall which creates a strong visual barrier. Foreshore access should have included an

area of at least 50 metres not simply be restricted to a walkway. This would not only have given adequate access but also played an important visual role in the headland's landscape. It is also important to note that the strong geometric modern designs of the houses accentuate the isolating effect, however the design of the house should not be the issue in landscape opportunities, rather it how to best develop a high quality landscape within the allocated land use.

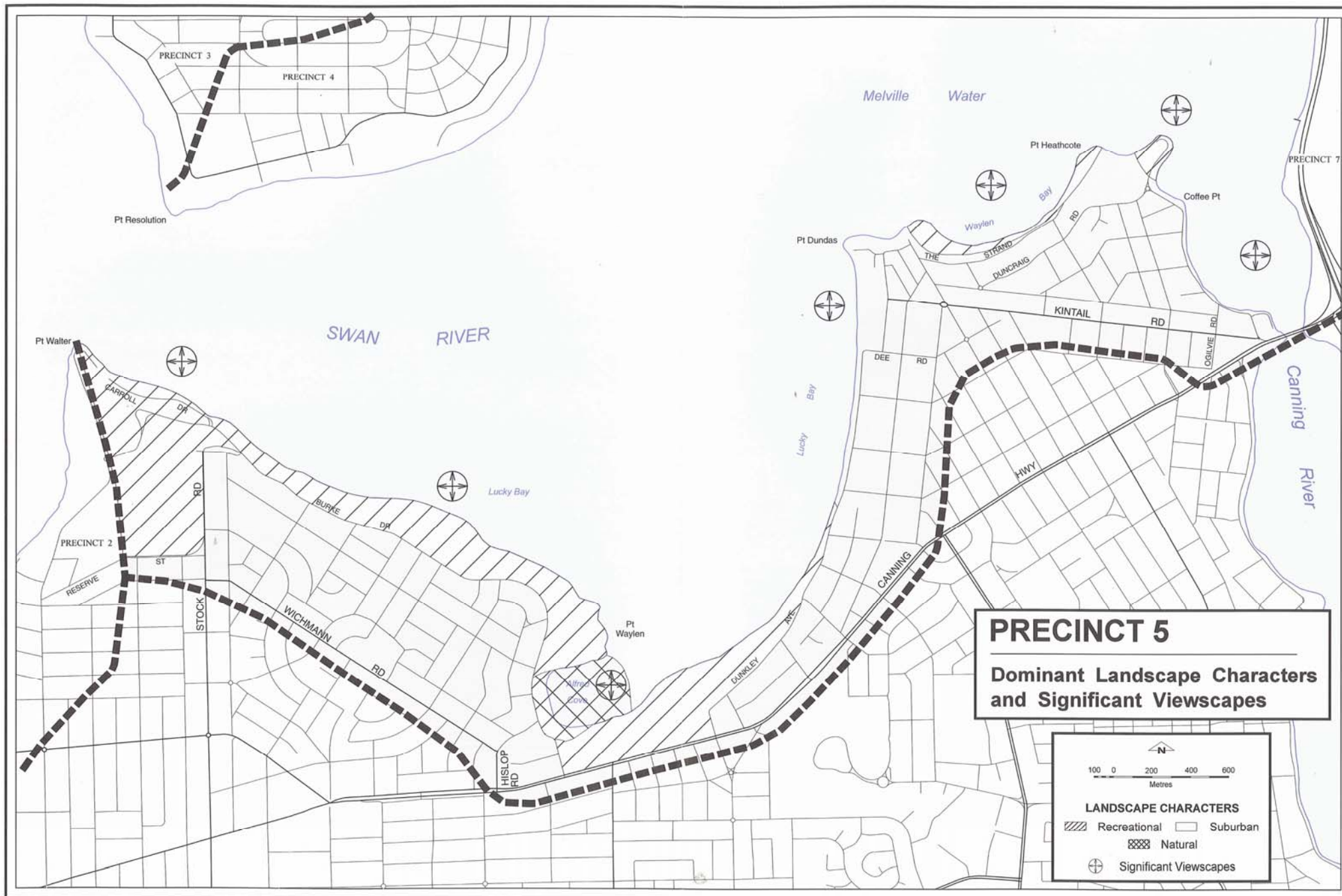
Heathcote Hospital site is an excellent opportunity to sensitively redevelop or change the land use of the present buildings. The buildings are attractive and it would be good to incorporate at least some of these structures into the new land use. It would also be a good opportunity to stabilise the banks and return the site to a more natural gradient. This would overcome the problem with bank erosion and would facilitate the re-establishment of vegetation in sites of high erosion.

The Raffles Hotel is more strictly an issue for local councils; however as it is a prominent river precinct feature it may be relevant to discuss it here. It would be beneficial if the bill board could be removed allowing the original design of the hotel to be appreciated and it would be an ideal opportunity to link the hotel and the *moderne* or art deco design of the adjacent town hall in a 'historical zone'.

Melville Beach is regularly reclaimed and it would be visually more acceptable if the reclamation could be associated with vegetation planting which would help create a visually more natural foreshore.

The foreshore adjacent to the Attadale golf practice area and Troy Park has some very attractive paperbark and flooded gums. There is the opportunity to restore the understorey which is heavily infested with weeds including the vivid green kikuyu which detracts from the soft colours of the native vegetation.

Jeff Joseph Park at present has a flat and uninteresting landscape due to infilling and previous use as a rubbish dump. The area presents an exciting opportunity re-landscaping to incorporate a more interesting landform.



Recommendations for Maintenance and Enhancement of the Present Landscape Character

- Consider the opportunities which the Heathcote Hospital and Raffles Hotel sites have for enhancing the landscape character taking to consideration the values of the present buildings and the opportunities to improve the vegetation condition, particularly at Heathcote.
- The area adjacent to the Attadale golf practice area and Troy Park has the potential to be restored. Sensitive vegetation replanting could help recreate a natural understorey and the whole area could be included in the Alfred Cove management zone. Replanting the understorey would provide the viewer with a more pleasing landscape due to the multi layering and diversity of a paperbark and river gum community.
- At Jeff Joseph Park a slightly undulating landscape could help focus and link the present jetty to the recreation area. Planting of curved gardens of low lying native shrubs and understorey species could create interesting nodes and reduce the sparseness of the area. The landscaped gardens could incorporate native species in informal (non geometric) shapes. The area does not have to be 'natural' in that grassed areas and 'parkland' design would be quite visually acceptable as the bay is surrounded by suburban development.

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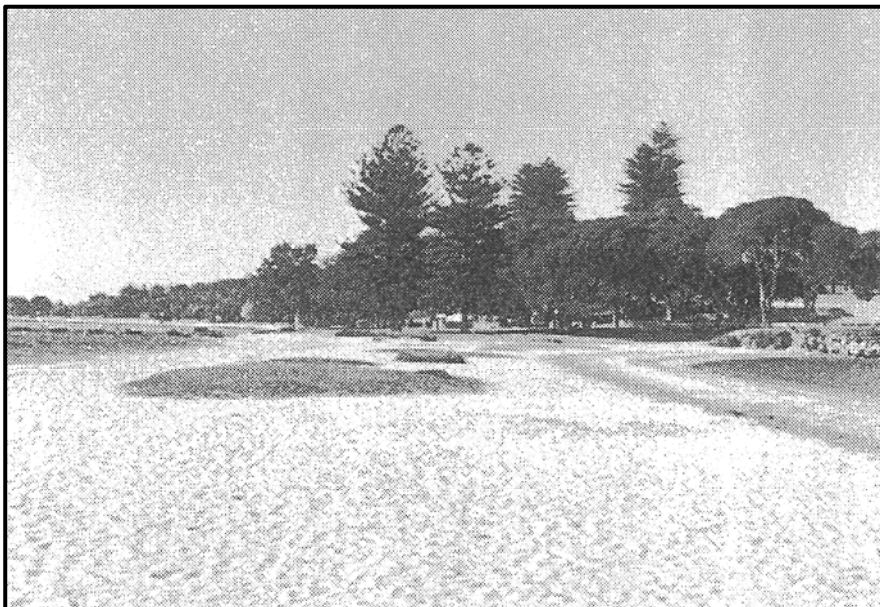
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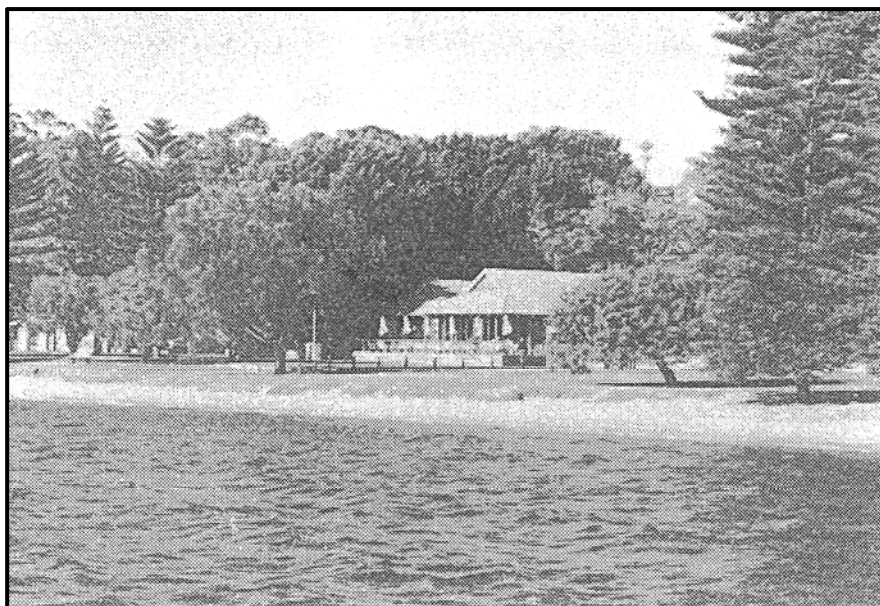
Point Walter Spit, c1900.
WA Newspapers HIST3526.



View from Majestic Hotel, Applecross foreshore, 1961.
Swan River Trust.



Point Walter Spit, 1997.
Swan River Trust.



Point Walter Spit, 1997.
Swan River Trust.