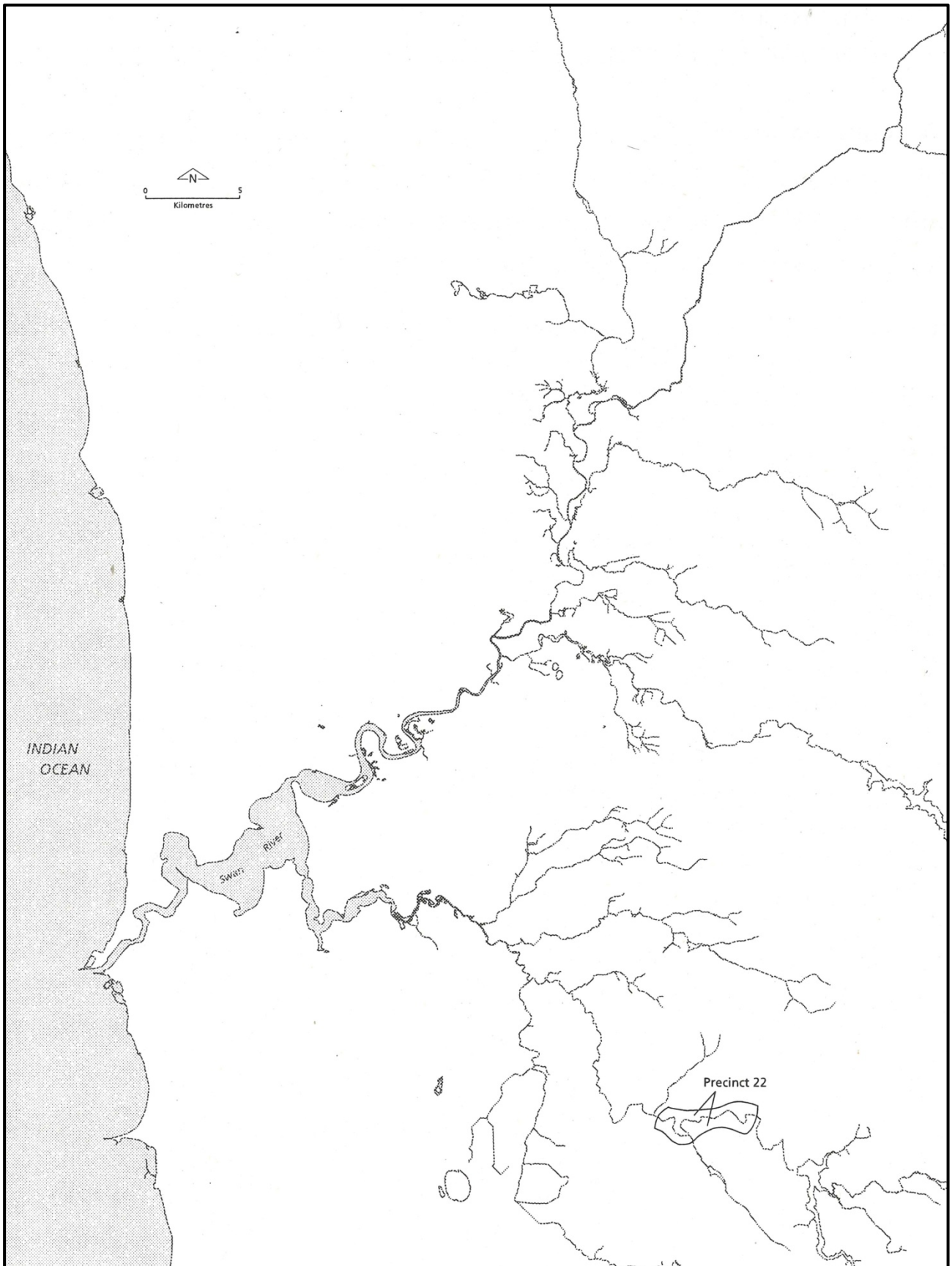


Precinct 22

Canning River – Stony Brook Confluence to
Stinton Creek Confluence



Summary

Canning River – Stony Brook Confluence to Stinton Creek Confluence

The Canning River takes a meandering form through the steeply sloping river Valleys of the Darling Range. The river is quite narrow and shallow and in several places runs over exposed granite rocks. Several tributaries join the Canning River at this point.

They are typically narrow and intermittent. The riparian vegetation is a dense mixture of native and exotic understorey species. The fringing overstorey community consists of the attractive paperbark and flooded gum communities, while on the hillside the complex gives way to the marri and jarrah woodland. Much of the vegetation has been cleared for grazing and the vegetation is now considered as pastured woodland. The Darling Range forms a dramatic backdrop to the Canning River due to its height and steeply sloping hillsides.

There is little immediate riparian land use apart from service infrastructure and several bridges over the river. The precinct is a mixture of residential and rural land uses. There is a low density scattering of residential properties along the river. Many properties are used for rural land uses such as grazing, orchard growing and garden nurseries.

Biophysical Processes

Geological Processes

Archaean migmatites which are mixed rocks made up of gneissic and granite components are prominent geological formations in the precinct. In addition, sections of pure gneisses occur and are believed to have been made from sediments and deformed granite. The gneiss is made up of quartz, feldspar and biotite. Upstream of Churchman Brook the mixture of gneisses gives way to granite which varies in composition and texture. Thin sheets of dolerite occur abundantly in the granite and gneiss sheets.

The soil along the Canning River channel is identified as being part of the Swan Soil Association and consists of red podsolic and undifferentiated alluvial soils. On either side of the strip of Swan Soil, the soil changes to Forrestfield Association which is gravelly and sandy.

Topography

The area is part of the Helena Valley landform which is deeply incised Valleys with steep rocky slopes. The scarp ridge is evident adjacent to the river valley. The gradient of the river valley is quite steep and in many sections, such as east of Heritage Road, there is no significant decrease of gradient before the river channel. In contrast, at Wymond Road, the river valley takes a gentler gradient after the scarp ridge to the river channel and embankment.

Hydrological Processes

Water features

The Canning River channel takes a relatively sinuous meander form as it cuts through the river valley between the topographically high land. The river flows through a palaeo-terrace which is made of several shallow palaeo Channels and some shallow contemporary overbank sections which are not regularly flooded. Between Butcher and Stocker Roads there are a few small pools and associated riffles caused by granite boulders outcropping in the stream. Upstream to Araluen, the river becomes narrow with wide pools. There are a number of small waterfalls as the river passes over exposed granite downstream of Thompson Road Bridge. In places, the granite/ dolerite bedrock obviously restricts the channel width and is the dominant reason for the series of pools and riffles in the area.

A number of steep freshwater seepage or creek lines entering the river become obvious on the southern side of the river between Thompson and Bristol Roads. These drainage lines arise from springs at the base of the scarp ridge adjacent to the river. The larger tributaries are Stinton Creek, Slab Gully, Churchman Brook and Stony Brook all of which are intermittent. At the mouths of these tributaries sediment bars have formed on which riparian vegetation has established itself. Older bars are more heavily vegetated.

Bathymetry

The river channel is mainly shallow and less than a metre in most places; however the river embankment is usually several metres deep and form a river valley. There are a few channel pools which are also very shallow mainly due to the additional sedimentary deposition since the construction of the Canning Weir. The pools are typically much broader than the main river channel.

Flooding

There is no area which has significant inundation due to the relatively steep topography and river embankment. Evidence of palaeo flood plains suggests that since the Canning Dam was constructed that the flood plain level has been reduced. New lower flood plains are evident in this precinct.

Erosion and accretion

There are no notable areas of erosion along this section of the river channel; however the surrounding steep topography is susceptible to erosion once the vegetation is disturbed or removed.

Vegetation Communities

Native

Helena Complex

Along the river valley for the most part of this precinct the Helena Complex dominates. The vegetation ranges from open forest of jarrah (*Eucalyptus marginata*), marri (*Eucalyptus calophylla*) and Swan River blackbutt (*Eucalyptus patens*) through to heath and herbland to lichens on granite rock.

Other species may include pincushions (*Borya nitida*), fuchsia grevillea (*Grevillea bipinnatifida*), oval leafed hakea (*Hakea elliptica*), wavy leafed hakea (*Hakea undulata*), Swan River blackbutt (*Eucalyptus patens*) and rock sheoak (*Allocasuarina huegeliana*).

Murray Complex

The Murray Complex is found at Roleystone and also upstream of the Canning Weir. The vegetation ranges from open forest of jarrah (*Eucalyptus marginata*), marri (*Eucalyptus calophylla*) with Swan River blackbutt (*Eucalyptus patens*) on the slopes, to fringing woodland of low open forest of flooded gum (*Eucalyptus rudis*) and swamp paperbark (*Melaleuca raphiophylla*) on the valley floors. Other species found include winged wattle (*Acacia alata*), swamp peppermint (*Agonis linearifolia*), swamp banksia (*Banksia littoralis*), winged stem damperia (*Damperia alata*), variable leafed grevillea (*Grevillea diversifolia*) and semaphore sedge (*Mesomelaena tetragonia*).

Dwellingup Complex

The Dwellingup Complex occurs on the higher land behind the Helena Complex, in areas such as the land between Churchman Brook and the Canning River confluence. It consists of open forest of jarrah (*Eucalyptus marginata*) and marri (*Eucalyptus calophylla*). Other vegetation which occurs in this complex includes hairy gland flower (*Adenanthos barbigerus*), bull banksia (*Banksia grandis*), sheoak (*Casuarina fraseriana*), prickly bitter pea (*Daviesia horrida*), York Road poison (*Gastrolobium calycinum*), sword sedge (*Leptosperma angustatum*), and snottygobble (*Persoonia longifolia*).

Yarragil Complex

The Yarragil Complex occurs near Slab Gully in this precinct. It consists of open forest of jarrah (*Eucalyptus marginata*) and marri (*Eucalyptus calophylla*). There is some marri and banksias scattered throughout the jarrah. In moist areas, moonah (*Melaleuca preissiana*) and swamp banksia (*Banksia littoralis*) are found. Other species include camphor myrtle (*Baekea camphorosmae*), dwarf casuarina (*Allocasuarina humilis*), winged stem damperia (*Damperia alata*), native fuchsia (*Grevillea bipinnatifida*), and semaphore sedge (*Mesomelaena tetragona*).

Exotic

The significant weed species include giant reed (**Arundo donax*), blackberry (**Rubus* sp), bulrush (**Typha orientalis*), watsonia (**Watsonia bulbilifera*) dock (**Rumex crispus*) wild oats (**Avena fatua*), beared oats (**Avena barbata*) and couch grass (**Cynodon dactylon*). There are several examples of exotic trees being planted adjacent to the river channel on residential properties. Araluen Country Club has recently planted many exotic trees along the roads.

Historical Land Use and Resulting Environmental Changes

In 1924, a pipehead dam was built near Araluen, approximately 6 km downstream from the present Canning Dam (Department of Geography UWA, 1989). The present day Canning Dam occurs upstream from this precinct and was built between 1933-1940 due to growing demand for a major water reservoir. The dam has significantly reduced the maximum discharge of the Canning River below the weir. There are several indications of the previous much higher flow with wide palaeo channels and several highly polished boulders indicating that they had once been subject to continuous water flow. The dam has resulting in infilling of many of the original pools and riffles and the deposition of fine sands and silts in the channel.

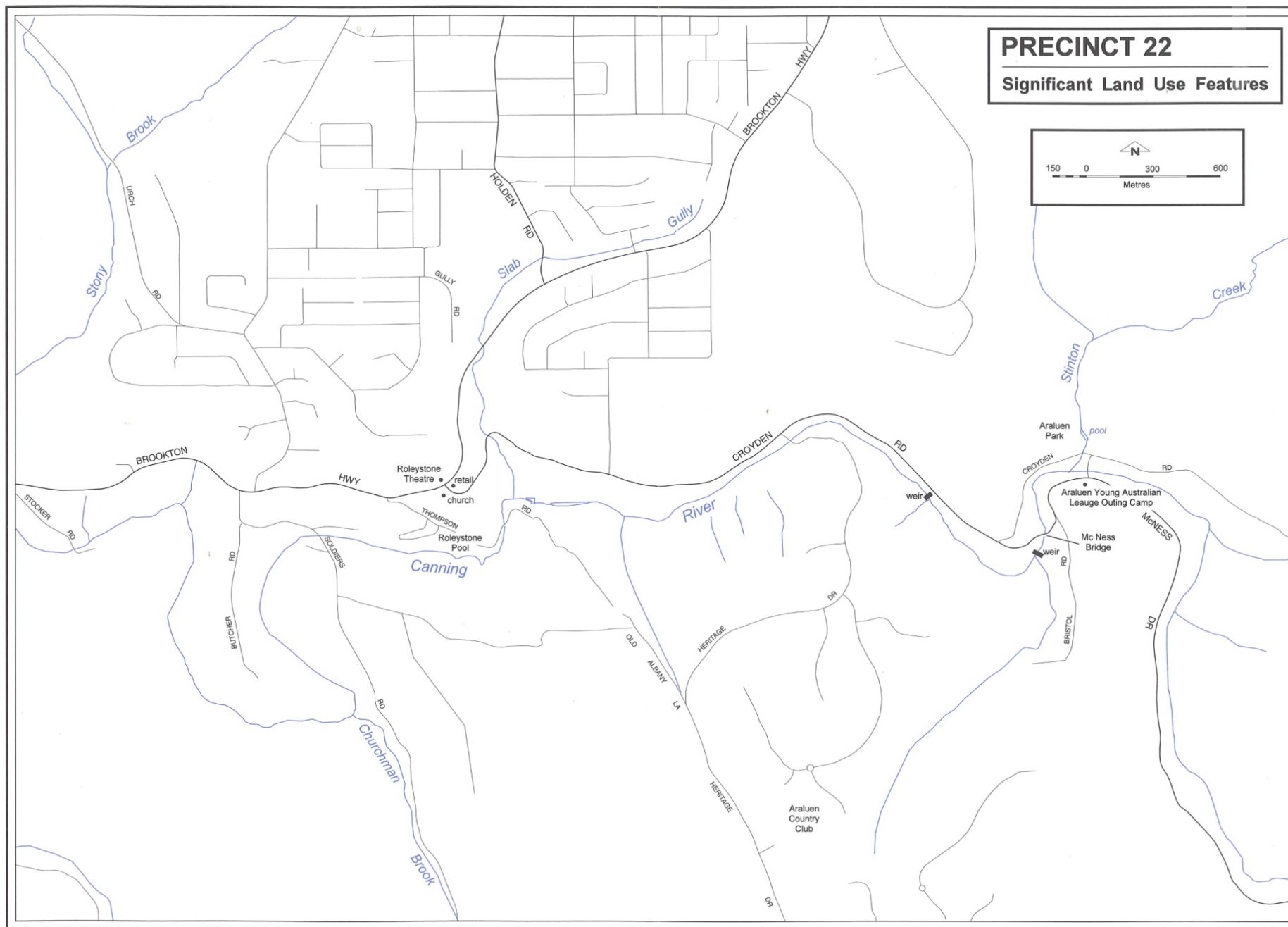
A substantial town site was established at the Canning Dam construction site between 1933 and 1940 (Fletcher, 1994). The town consisted of small wooden cottages and a school for over a hundred children, of which there is little evidence today.

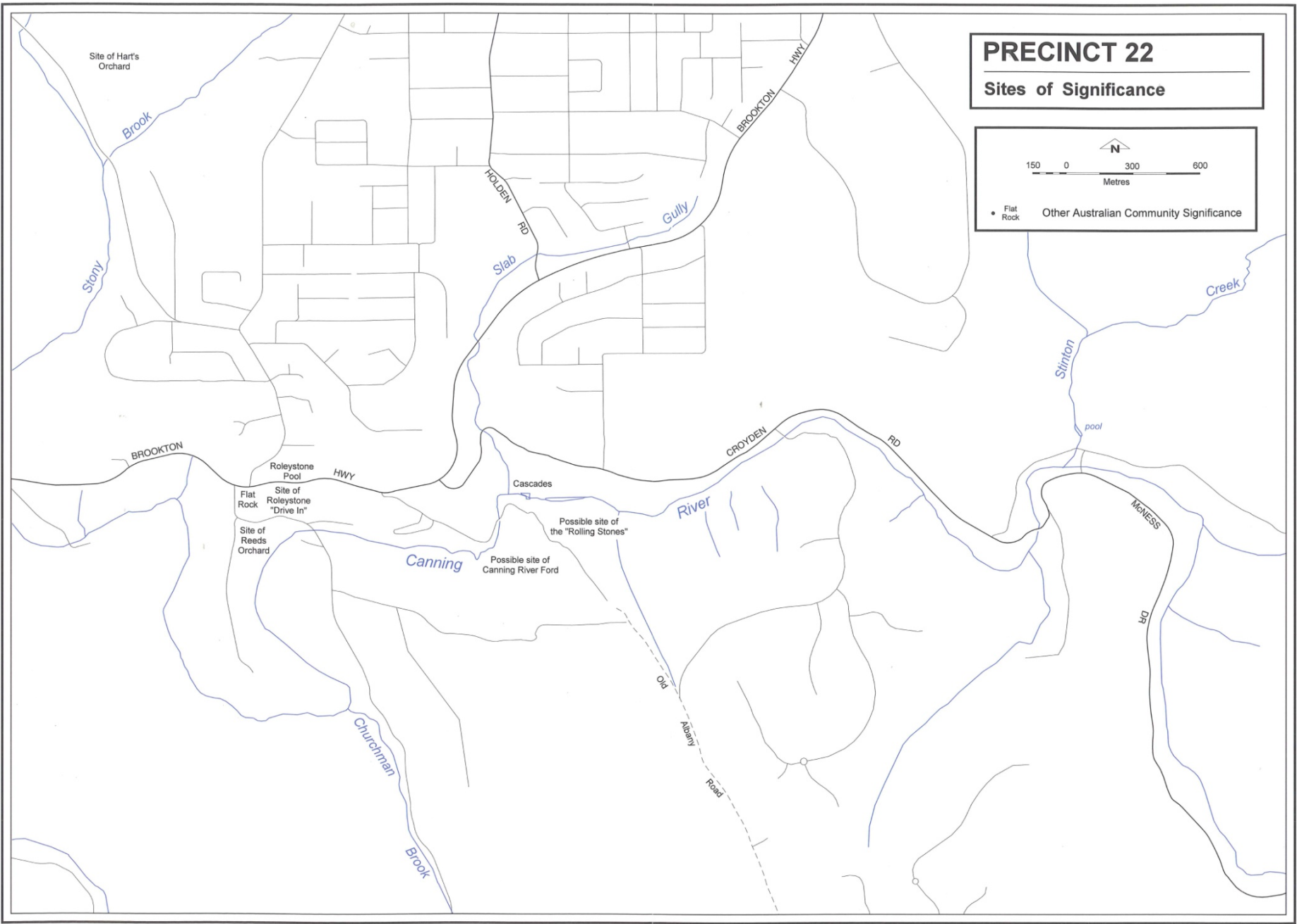
Orcharding began in 1893 in the Roleystone and Araluen areas (Fletcher, 1994). These included the Hart's orchard at Urch Road, Roleystone, Reed's orchard at Soldiers Road, Brookton Highway, and Thomas Price's property south of the Canning River. The Derry na Suray (valley of the vine) vineyard was located at the East Armadale and was a major wine producer for the State at the turn of the Century.

Present Land Use and Social Patterns

There is a mixture of rural and residential properties along this section of the Canning River. The residential properties tend to be on large bushland blocks and the houses display quite a range of architecture including modern organic, reminiscent Federation, post modern, as well as the typical single storey bungalow. Several small retail outlets occur at the junction of Croyden Road and Brookton Highway. Opposite is the Roleystone Theatre and a local church is also at this intersection. Many properties are used for rural purposes such as cattle grazing near Butcher Road. There are several orchards and other horticultural properties within the area, such as Brenton Rose farm on Croydon Road. One of the most notable developments is the residential section of the Araluen Country Club. A substantial section of the hillside has been cleared of trees and planted and the new roads lined with exotic species. Although several blocks have been purchased, at present there has been no residential construction.

There are two weirs downstream of Stinton Creek. They have been constructed on bedrock features and restrict the flow downstream in the summer months.





Recreation nodes

In the 1920s at the corner of Soldiers Road and Brookton Road (Highway) there was a popular picnic spot called Flat Rock. This is close to the present day Roleystone Pool and picnic area at the corner of Thompson and Colins Road. The pool was used by the Roleystone Swimming Club since, however the construction of the Canning Dam it has silted up greatly.

Araluen Park was developed by the Young Australia League as a holiday camp. It is noted for its splendid display of tulips in spring which began as a tradition in the 1930s, however was discontinued after World War II. The tradition of tulips being planted was re- established in 1991. The streams are a feature within the area. There are walkways, kiosk, and restaurant and barbecue areas. A feature of the park is the 'Grove of the Unforgotten' which was planted with 88 cypress pines so as to make the outline of a lyre. The rose pergola was constructed using local stone in 1939 by a local Italian stonemason. The Young Australia League's Camp Simons is on the southern bank of the Canning River and has several sports areas.

Araluen Country Club is a 18-hole golf course open to the public. It has function centres as well as a highly maintained green.

Public access

Public access to the river is difficult due to private ownership of much of the land adjacent to the river reserve. The private properties have mainly been fenced and access to the reserve is difficult without crossing private land. The river is predominantly reserved for local recreation as Crown Reserve. Public access to the river is possible at Araluen Park and Roleystone Pool.

Sites of Nyungar & Wider Australian Community Significance

Nyungar significance

The Canning River is recognised as being of significance to Nyungars. There are no specific sites of significance identified in the area. However south of the Canning Dam there are several significant sites. Turtle Pool is associated with the Waugal. In addition, there are two pools fed by springs adjacent to Canning Dam which are also associated with the Waugal (WAWA, 1987).

Other significance

The Old Albany Road is the site of the original track to Albany. It passes several large granite boulders and it is probable that these were the 'rolling stones' after which Roleystone was named (Fletcher, 1994).

Flat Rock at the junction of Croyden Road was a popular picnic site and later was the site of the first 'drive in' in Western Australia (1956).

Canning River ford was built in the 1830s to divert water to surrounding orchards and farm lands and is located off Albany Road (Department of Geography UWA, 1989).

Wall Rock, Roleystone, is reputed to be one of the hideaways of Western Australia's infamous bushranger, Moondyne Joe (Fletcher, 1994).

Conservation Areas

System 6

M75 Upper Canning and Southern Rivers

The recommended area comprises the Canning River and its fringes from Nicholson Road to the boundary of the State Forest, together with those parts of the Southern and Wungong Rivers within the City of Gosnells. Much of the area is reserved for Parks and Recreation under the Metropolitan Region Scheme. The river is well fringed with flooded gums and paperbark although the ground flora has been almost eliminated by grazing and Clearing. The area is significant for its open space of regional significance and its proximity to Perth's residential areas. The recommendations include encouraging the growth and regeneration of flora and fauna and preventing vehicular access while allowing low impact access to the river.

Landscape Description

Precinct Description

Waterform and natural riparian zone

The Canning River takes a meandering path through the steeply sloping river valley. The river is at most points quite narrow only being one or two metres wide. In several places, the river runs over exposed granite rocks. The bedrock in places obviously restricts the channel width and depth and the result is pool and riffle formations. The granite rocks in these formations are smooth and polished by the water. Several form attractive waterfalls in high flow periods. At the bases of these waterfalls the channel is typically deeper having been gouged by the flowing water. Roleystone Pool is a shallow basin which is filled by the winter rains and becomes very shallow in the summer months. The pool is surrounded by a mixture of indigenous and exotic vegetation, and by the nature of the steeply sloping surrounding valley is a sheltered and enclosed water body.

There are several tributaries entering the Canning River as well as the seepage lines created as the water from the surrounding areas is drained into the river. The major tributaries are Stinton Creek, Stony Brook, Slab Gully and Churchman Brook. Most of the tributaries are intermittent and for the most part of the year remain as a dry gully. As a result, the riparian vegetation of these tributaries are the jarrah- marri woodland species rather than more dampland species.

The riparian vegetation of the Canning River is a mixture of native and exotic understorey species. There are several emergent reeds within the river channel and small shrubs and paperbark trees often spread their branches right over the river channel. However at the broader pool areas there are rarely overhanging tree branches, rather the melaleuca and other riparian shrubs surround the water bodies. The marri and jarrah trees edge the river and are rather stunted and narrow trunked compared with other similar communities along the Swan and Canning Rivers.

Landform

The Canning River channel passes through the valleys of the Darling Range. The surrounding topography is a relatively steep gradient and it is only at the river valley base that the gradient becomes gentler. Along Croydon Road, the hillside is particularly steep and due to the removal of much of the vegetation the morphology of the hillside can clearly be seen as dramatic and undulating slopes. It is one of the few areas of the Canning River where the flat Swan Coastal Plain cannot be viewed due to the relatively high hillsides surrounding the river.

Downstream of Butcher Road the landform is comparatively gentle as the Canning River valley broadens and flattens between two topographically lower hillsides.

Vegetation

The hillside vegetation consists of a marri and jarrah open woodland. The woodland is an attractive complex with the dull rough barks of the jarrah and marri trees contrasting against the native understorey species which are often light and feathery. The understorey of this woodland consists of a mixture of indigenous and exotic species. Bushes, such as variable leave grevillea, are typical on the shallow soils and granite rock areas and give a bushy spreading appearance. Unfortunately, many sections of this precinct have been significantly disturbed by weed invasions and fires. The privately owned land is most often pastured woodland areas where the understorey has been replaced with grasses for grazing. South of Brenton Rose Farm, the fringing bushland has been recently burnt and weed communities are flourishing in the understorey. Residential properties often have several exotic plants in the gardens; however most have retained the native bushland.

Riparian land use

Most of the precinct has uncleared riparian vegetation and therefore the pipelines are hidden within the vegetation such as adjacent to Camp Simons and also between Croydon Road and Bristol Roads. The pipelines are silver and have minimal intrusion on the river landscape due to the often dense nature of the understorey and the undulating landform. In addition, there are two weirs constructed across the bedrock just downstream of Stinton Creek. These create small pools upstream of the weirs and in the summer months the river channel is almost dry at these points.

There are several bridges which cross the Canning River in this section. The bridge at Araluen is made from pine balustrades and rock and cements piles and due to its low form and building materials is an attractive landscape element. The McNess bridge has an unpainted metal balustrade with wooden abutment. Although the bridge is the only man-made feature in the area apart from a well hidden private residential property, it does not appear as an intrusive feature on the riparian landscape; rather it adds a visual feature to the riverscape and allows the public to view the river channel. Other low form road bridges occur at Thompson Road, Soldiers Road and Stocker Road.

The Roleystone Pool is an attractive enclave which can be accessed by rock steps to a grassy picnic area.

Unfortunately, much of the riparian vegetation has been invaded by weeds which detract from the picnic area. The nature of the surrounding topography is all enclosing giving the pool a secluded and private character.

Land use

The precinct has a mixture of residential and rural land uses. The centre of Roleystone town occurs to the north of Brookton Highway and is away from the riparian landscape. At the junction of Croydon Road and Brookton Highway, there are several small shops and the Roleystone Theatre. Part of this service node has been built into land quarried out for the construction of the road and therefore has reduced impact on the landscape. Remnant vegetation also helps to link this node to the surrounding landscape. The precinct is characterised by very low density housing with most homes near the river on large bushland blocks. The houses are attractive as many have retained some indigenous flora which helps reduce the impact of the houses and gives the residential areas a link with the natural landscape. The wide variety of architecture makes for an interesting landscape, in particular the houses which have been constructed to complement the steeply sloping topography and surrounding bushland are attractive landscape elements.

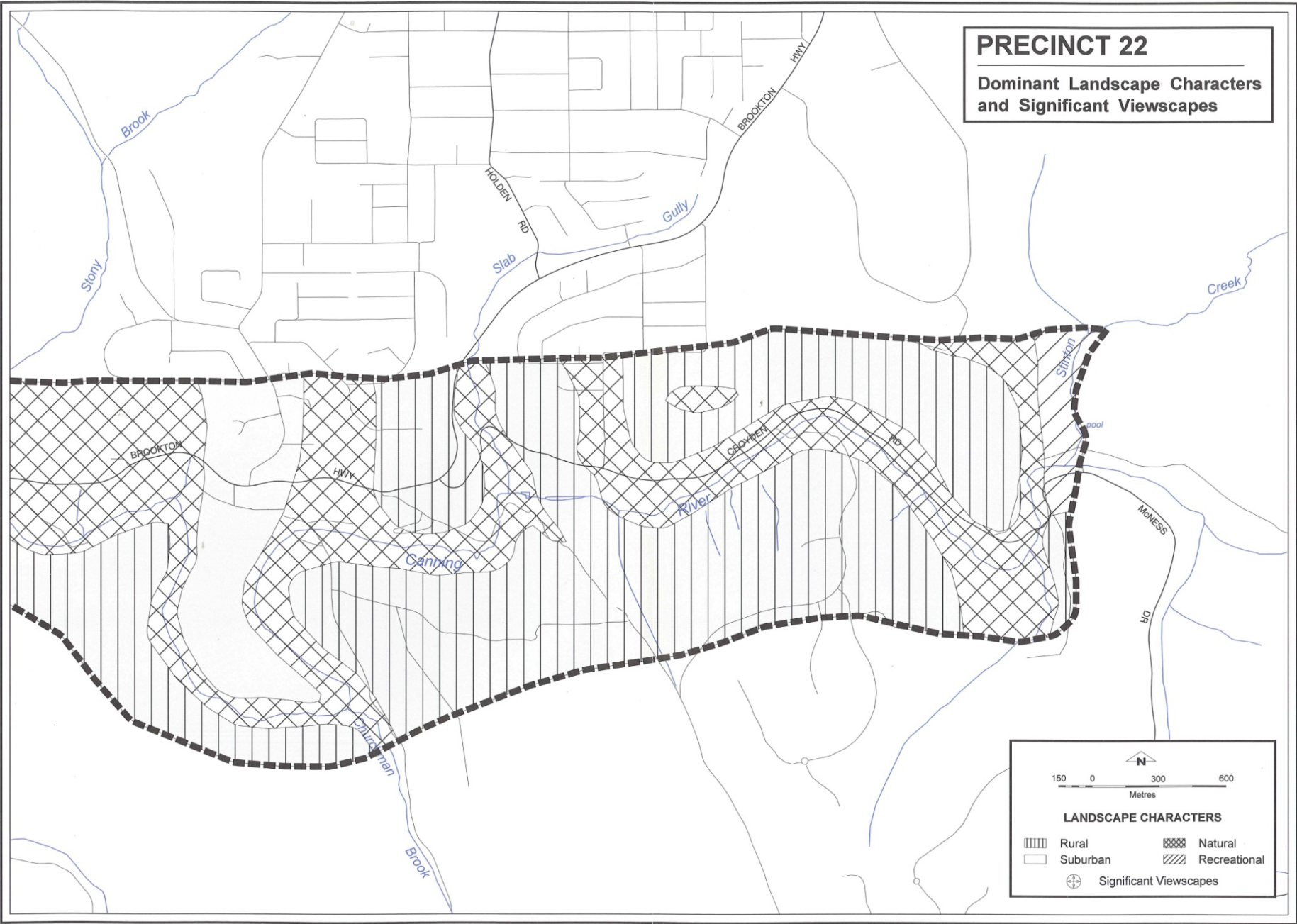
The rural properties are used for a variety of land uses including orchards, grazing and horse agistments. Many of these properties have remnant bushland which is attractive and helps give these rural activities some link with the natural landscape features. The orchards appear green and lush compared with the native flora and their presence is an important local landscape element.

The Araluen Country Club entrance is at the base of a steep hill. The entrance has two neatly maintained residential properties adjacent to the Canning River. At this point the river embankment has been walled using granite rocks, which has turned the river into a garden water feature. The residential gardens are entirely transformist and consist of brightly coloured exotic flowers and trees. The Canning River has been walled at these properties and several small walls have been built across the river to create waterfall features. These properties stand out from the other riparian features as the indigenous landscape elements have been removed and altered to form a European landscape.

Camp Simons is a neat dormitory site for the Young Australia League. The camp consists of several buildings built over a period of time and the majority are constructed from cream brick with tile roofs.

Within the grounds are several grassed areas and bituminised basketball courts. The location of the camp is within the river valley and as a consequence can only be viewed from the immediate area.

Araluen Park is an attractive recreational site and provides an ideal picnic spot for families. The park has a restaurant and more informal picnic areas as well as several large parking bays. The main parking bay is in a prominent position being in a valley floor and adjacent to Stinton Creek. The park has formal gardens consisting of many exotic trees and flowering plants. The style is quite formal which provides a sharp contrast to the surrounding bushland which away from the main recreational area has some attractive native understorey species. A waterfall and man-made pool are some of the features which attract tourists to the area. Several old cottages built by the Young Australia League have not been maintained and provide opportunities for renovation by the group. An attractive rock cottage adjacent to Stinton Creek has recently been renovated and is now a tourist shop.



Landscape Interpretation

Dominant Landscape Character

The dominant landscape character for this precinct is rural. The land has been cleared for grazing pasture, nurseries and orchards. These activities are on the decline, and the rural landscape is being converted into suburban developments. The best example of this is the Araluen Country Club, where pasture land was redeveloped as an exclusive residential area and golf course. The rural lots are often hobby farms and have a mixture of land uses on the single property.

There are narrow ribbons and blocks of uncleared eucalyptus woodland. In general, where natural vegetation is retained, the landform and soil structure have not been suitable for rural development due to gravelly outcrops and steep slopes. The woodland has a relatively thick overstorey, however along the river streams, leafy weeds have encroached on the understorey. Weeds have also encroached on the woodlands in areas which are adjacent to pasturelands, and on Araluen Park.

The Araluen Park is a large landscape feature which has an eclectic collection of plants, and has had numerous paths and water features created on the property. The landscaping style is European.

Significant Viewscapes

There are several significant viewscapes at this precinct. From many locations on the hills, there are attractive views of the valleys, surrounding undulating landscape and mixed land uses. This precinct has some significant landscape viewscapes, as the river flows through the deeply incised Darling Ranges, and compared to the other precincts further downstream, the landform is complex and interesting to the viewer.

Conforming and Non Conforming Elements in the Landscape

The Canning River has several attractive pools and riffles, in this precinct. Unfortunately, many of the pools have filled with sediment over time, providing a less diverse river landscape as the river form becomes uniformly shallow.

The dramatic topography and remnant woodlands are important landscape elements for local identity.

There is the opportunity to encourage land use which will enhance rather than detract from the landform and remnant vegetation.

The Araluen Country Club is at present a rather barren feature on the landscape. Most of the residential blocks have not been developed and the unconsolidated soils have been subject to erosion by the winter rains.

There are several sections of the Canning River in this precinct which have been walled or have had small weirs constructed. These detract from the natural form of the river and instead create a drain like impression.

The orchards and other rural land uses are important landscape elements which are important in creating local identity.

Many of the residential buildings in this area have been designed to complement the site and use timber and earthy coloured materials.

Recommendations for maintenance and enhancement of the present landscape character

- Encourage the continuation of designing houses to complement the steeply sloping landform.
- Encourage the restoration of riparian areas with native vegetation and weed removal.
- Ensure that exotic species from local gardens and Araluen do not spread into the natural areas.
- Consider the importance of the rural landscape elements to the Canning River landscape and how this landscape can be retained with increasing development pressure.

Precinct Specific References

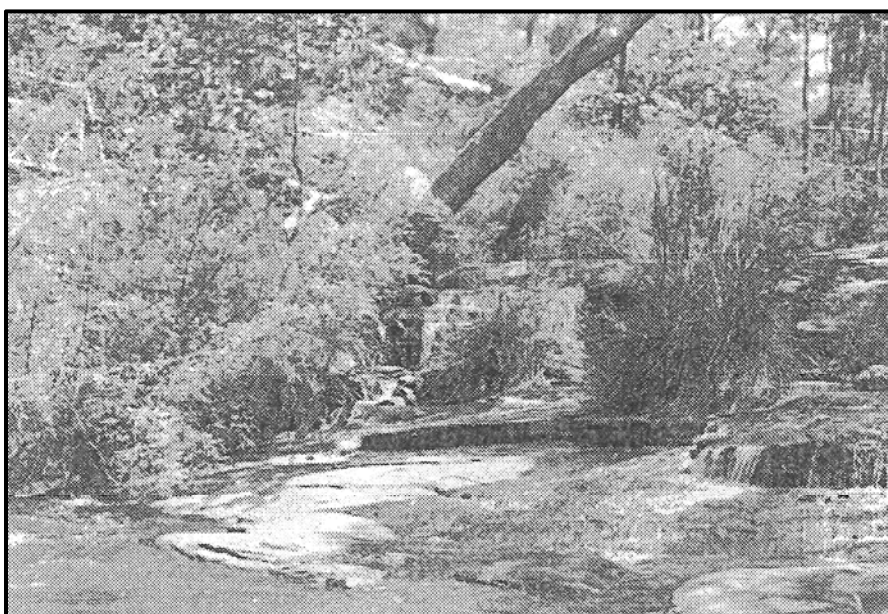
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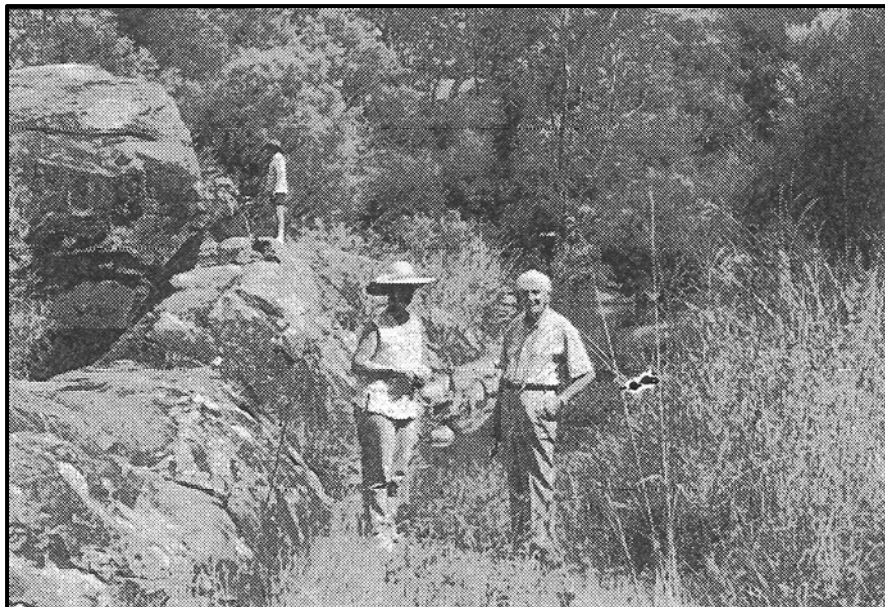
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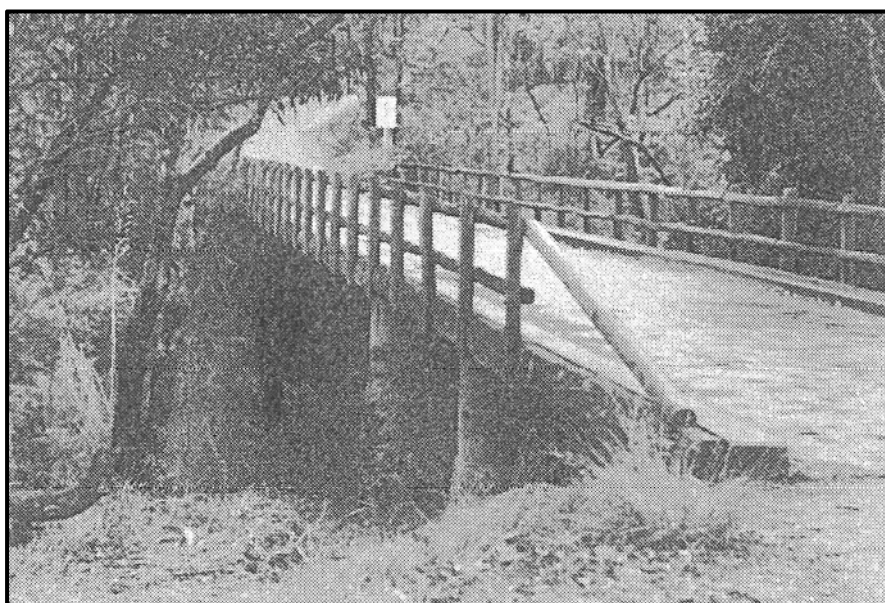
Creek near James' Farm, Albany Road, Armadale, 1905.
Battye Library 9203P.



Stinton Creek, Araleun, 1935.
Battye Library 38395P.



Canning River, Roleystone, 1995.
Swan River Trust.



Stinton Creek near confluence with Canning River, 1995.
Swan River Trust.