

Ordinary Council Meeting

14 September 2022

Agenda

Notice is hereby given of Ordinary Meeting of Council to be held in the Council Chambers, City of Kwinana Administration Centre commencing at 5:30pm.



Members of the public who attend Council meetings should not act immediately on anything they hear at the meetings, without first seeking clarification of Council's position. Persons are advised to wait for written advice from the Council prior to taking action on any matter that they may have before Council.

Agendas and Minutes are available on the City's website www.kwinana.wa.gov.au

Order Of Business

1	Opening and Announcement of Visitors4				
2	Welcon	ne to Country and Acknowledgement of Country	4		
3	Dedicat	tion	5		
4	Attenda	ance, Apologies, Leave(s) of Absence (Previously Approved)	5		
5	Public (Question Time	5		
6	Receivi	ng of Petitions, Presentations and Deputations	5		
	6.1	Petitions	5		
	6.2	Presentations	6		
	6.3	Deputations	6		
7	Confirn	nation of Minutes	7		
	7.1	Minutes of the Ordinary Council Meeting held on 24 August 2022	7		
8		itions of Interest (Financial, Proximity, Impartiality – both Real and red) by Members and City Officers	7		
9	Reques	ts for Leave of Absence	7		
10	ltems b	rought Forward for the Convenience of those in the Public Gallery	7		
11	Any Bu	siness Left Over from Previous Meeting	7		
12	Recom	mendations of Committees	7		
13	Enbloc	Reports	8		
14	Reports	s – Community	8		
15	Reports	s – Economic	9		
	15.1	Rate Exempton Applications - Multiple Properties - Foundation Housing	9		
	15.2	Application for Rate Exemption - The Salvation Army (WA) Property Trust - 129 Bellingham Parade, Wellard	. 12		
	15.3	Application for Rate Exemption - The Lucy Saw Centre	. 14		
16	Reports	s – Natural Environment	. 17		
	16.1	City of Kwinana Draft Local Biodiversity Strategy	. 17		
17	Reports	s – Built Infrastructure	114		
	17.1	Development Application - Telecommunications Tower - Lot 2 (9) Woolcoot Road, Wellard	114		
	17.2	Proposed Scheme Amendment No. 163 to Local Planning Scheme No.2 - Removal of 2% Developer Contribution Plan Administration fee and introduction of an estimated Administration Cost as per State Planning Policy 3.6 - Infrastructure Contributions	148		
18	Reports	s – Civic Leadership	164		
	18.1	Appointment of voting delegates and proxy voting delegates on behalf of the City of Kwinana at the Annual General Meeting of the Western Australian Government Association	164		
19	Notices	of Motions of which Previous Notice has been Given	170		
20		of Motions for Consideration at the Following Meeting if Given during the	170		

21	Late a	nd Urgent Business	170		
22	Reports of Elected Members				
23	Answers to Questions which were taken on Notice				
24	4 Mayoral Announcements				
25	Config	lential Items	171		
	25.1	Write off of penalty interest - A11091	171		
	25.2	Bright Futures Childrens Services - Service Review	172		
26	Close	of Meeting			

1 OPENING AND ANNOUNCEMENT OF VISITORS

Presiding Member to declare the meeting open and welcome all in attendance.

Presiding Member to announce that the Ordinary Council Meeting is being live streamed and recorded in accordance with the City's Live streaming and Recording Council Meetings policy.

By being present at this meeting, members of the public consent to the City recording and livestreaming their image and/or voice.

2 WELCOME TO COUNTRY AND ACKNOWLEDGEMENT OF COUNTRY

Councillor Barry Winmar to present the Welcome to Country:

"Ngullak nyinniny kooralong koora ngullak noitj nidja noongar boodjar. Noongar moort djoorapiny nyinniny nidja ngulla quopadok noongar boodjar kooralong.

From the beginning of time to the end, this is Noongar Country. Noongar people have been graceful keepers of our nation for many, many years.

Ngalla djoorapiny maambart boodjar ngallak bala maambart quop ngalla koort djoorapiny nidja ngalla mia mia nyinniny noongar boodjar.

We respect the earth our mother and understand that we belong to her - she does not belong to us. In all her beauty, we find comfort, wellbeing, and life that creates a home for everyone that has become a keeper of Noongar Country.

Djinanginy katatjin djoorapiny nidja weern noongar boodjar ngalla mia mia boorda.

Look, listen, understand and embrace all the elements of Noongar Country that is forever our home.

Kaya wandju ngaany Barry Winmar Wadjuk Ballardong maaman ngaany koort djoorpiny noonook nidja Noongar boodjar daadjaling waankganiny noitj Noongar Boodjar.

Hello and welcome my name is Barry Winmar and I am a Whadjuk Ballardong man my heart is happy as we are gathered on Noongar country and speaking here on Noongar Country"

Presiding Member to read the Acknowledgement of country:

"It gives me great pleasure to welcome you all here and before commencing the proceedings, I would like to acknowledge that we come together tonight on the traditional land of the Noongar people and we pay our respects to their Elders past and present."

3 DEDICATION

Councillor Micheal Brown to read the dedication:

"May we, the Elected Members of the City of Kwinana, have the wisdom to consider all matters before us with due consideration, integrity and respect for the Council Chamber.

May the decisions made be in good faith and always in the best interest of the greater *Kwinana community that we serve.*"

4 ATTENDANCE, APOLOGIES, LEAVE(S) OF ABSENCE (PREVIOUSLY APPROVED)

Apologies:

Leave(s) of Absence (previously approved): Nil

5 PUBLIC QUESTION TIME

In accordance with the *Local Government Act 1995* and the *Local Government (Administration) Regulations 1996*, any person may during Public Question Time ask any question.

In accordance with Regulation 6 of the *Local Government (Administration) Regulations 1996*, the minimum time allowed for Public Question Time is 15 minutes. A member of the public who raises a question during Question Time is to state his or her name and address.

Members of the public must provide their questions in writing prior to the commencement of the meeting. A public question time form must contain all questions to be asked and include contact details and the form must be completed in a legible form.

Please note that in accordance with Section 3.4(5) of the *City of Kwinana Standing Orders Local Law 2019* a maximum of two questions are permitted initially. An additional question will be allowed by the Presiding Member if time permits following the conclusion of all questions by members of the public.

6 RECEIVING OF PETITIONS, PRESENTATIONS AND DEPUTATIONS

6.1 PETITIONS

A petition must –

be addressed to the Mayor; be made by electors of the district; state the request on each page of the petition; contain at least five names, addresses and signatures of electors making the request; contain a summary of the reasons for the request; state the name of the person to whom, and an address at which, notice to the petitioners can be given; and be respectful and temperate in its language and not contain language disrespectful to Council.

The only motion which shall be considered by the Council on the presentation of any petition are –

that the petition be received; that the petition be rejected; or that the petition be received and a report prepared for Council.

6.2 **PRESENTATIONS**

In accordance with Clause 3.6 of the *Standing Orders Local Law 2019* a presentation is the acceptance of a gift, grant or an award by the Council on behalf of the local government or the community.

Prior approval must be sought by the Presiding Member prior to a presentation being made at a Council meeting.

Any person or group wishing to make a presentation to the Council shall advise the CEO in writing before 12 noon on the day of the meeting. Where the CEO receives a request in terms of the preceding clause the CEO shall refer it to the presiding member of the Council committee who shall determine whether the presentation should be received.

A presentation to Council is not to exceed a period of fifteen minutes, without the agreement of Council.

6.3 **DEPUTATIONS**

In accordance with Clause 3.7 of the *Standing Orders Local Law 2019*, any person or group of the public may, during the Deputations segment of the Agenda with the consent of the person presiding, speak on any matter before the Council or Committee provided that:

the person has requested the right to do so in writing addressed to the Chief Executive Officer by noon on the day of the meeting.

setting out the agenda item to which the deputation relates;

whether the deputation is supporting or opposing the officer's or committee's recommendation; and

include sufficient detail to enable a general understanding of the purpose of the deputation.

A deputation to Council is not to exceed a period of fifteen minutes, without the agreement of Council.

7 CONFIRMATION OF MINUTES

7.1 MINUTES OF THE ORDINARY COUNCIL MEETING HELD ON 24 AUGUST 2022

RECOMMENDATION

That the Minutes of the Ordinary Council Meeting held on 24 August 2022 be confirmed as a true and correct record of the meeting.

8 DECLARATIONS OF INTEREST (FINANCIAL, PROXIMITY, IMPARTIALITY – BOTH REAL AND PERCEIVED) BY MEMBERS AND CITY OFFICERS

Section 5.65(1) of the Local Government Act 1995 states:

A member who has an interest in any matter to be discussed at a council or committee meeting that will be attended by the member must disclose the nature of the interest —

in a written notice given to the CEO before the meeting; or at the meeting immediately before the matter is discussed.

Section 5.66 of the Local Government Act 1995 states:

If a member has disclosed an interest in a written notice given to the CEO before a meeting then —

before the meeting the CEO is to cause the notice to be given to the person who is to preside at the meeting; and

at the meeting the person presiding is to bring the notice and its contents to the attention of the persons present immediately before the matters to which the disclosure relates are discussed.

9 REQUESTS FOR LEAVE OF ABSENCE

10 ITEMS BROUGHT FORWARD FOR THE CONVENIENCE OF THOSE IN THE PUBLIC GALLERY

11 ANY BUSINESS LEFT OVER FROM PREVIOUS MEETING

Nil

12 **RECOMMENDATIONS OF COMMITTEES**

Nil

13 ENBLOC REPORTS

14 REPORTS – COMMUNITY

Nil

15 REPORTS – ECONOMIC

15.1 RATE EXEMPTON APPLICATIONS - MULTIPLE PROPERTIES - FOUNDATION HOUSING

SUMMARY

Application for Rate Exemption – Multiple Properties – Foundation Housing.

OFFICER RECOMMENDATION

That Council resolves to approve the application for rate exemption for Foundation Housing Ltd properties listed in Attachment B.

VOTING REQUIREMENT

Simple majority.

DISCUSSION

Foundation Housing Ltd have submitted a request for rate exemption for their (8) properties recently acquired within the City of Kwinana. The request attests that their properties are used for a 'Charitable Purpose' (i.e. the relief of poverty) in accordance with Section 6.26(2)(g) of the *Local Government Act 1995*.

Foundation Housing Ltd, a Community Housing Organisation (CHO) have supplied the City with a copy of their ATO endorsement as an income tax exempt Public Benevolent Institution and registration as a not-for-profit Charitable Organisation under the Australian Charities and Not-for-profits Commission.

The organisation's purpose is to acquire, construct and provide low cost and affordable housing stock for people in poverty, with low income, who are homeless, socially marginalised, inadequately housed or otherwise disadvantaged.

As a registered CHO, Foundation Housing Ltd manages its housing program in accordance with the national standards that apply to registered non-for-profit community housing organisations. The Organisation is also a preferred community housing provider with the Department of Communities WA (Department of Housing).

Foundation Housing Ltd assists local individuals in acquiring and maintaining economic ease and relief from poverty through the provision of low-cost housing to the community. Foundation Housing Ltd have provided all necessary documentation for proof of charitable status and the provision of economic services to individuals within the City of Kwinana.

Foundation Housing Ltd meets the criteria for rate exemption, with this assessment based on the WALGA "Rates and Charitable Land use Exemption Applications – Best Practice Guideline" developed in consultation with the WA Rates Officers' Association. The date of effect for the rate exemption, if approved would be 01/07/2022.

STRATEGIC IMPLICATIONS

There are no strategic implications as a result of this proposal.

SOCIAL IMPLICATIONS

There are no social implications as a result of this proposal.

LEGAL/POLICY IMPLICATIONS

The *Local Government Act 1995* deems certain land non-rateable under the statutes of Section 6.26 of the *Act*. Foundation Housing Ltd is seeking exemption in accordance with subsection (2)(g) of the section, which states:

6.26. Rateable land

- (1) Except as provided in this section all land within a district is rateable land.
- (2) The following land is not rateable land
 - (g) land used exclusively for charitable purposes.

Section 6.26 of the *Local Government Act 1995* provides for rate exemptions based on exclusive charitable uses:

A 'charitable purpose' has a specified legal meaning, which has developed over the years by the courts and parliament. The courts have recognised many different charitable purposes and as society changes new charitable purposes are accepted.

Section 5 of the Commonwealth Charities Act 2013 states the definition of a charity as:

5. Definition of Charity

In any Act:

Charitable:an entity is charitable if the entity is a charity.

Example: A reference in an Act to a charitable trust is a reference to a trust that is a charity. Charity means an entity:

- a) that is a not-for-profit entity; and
- b) all of the purposes of which are:
 - *i.* charitable purposes (see Part 3) that are for the public benefit (see Division 2 of this Part); or
 - *ii.* purposes that are incidental or ancillary to, and in furtherance or in aid of, purposes of the entity covered by subparagraph (i).

FINANCIAL/BUDGET IMPLICATIONS

If rate exemption were to apply, the properties would remain liable for the payment of ESL and any applicable refuse and service charges. If approved by Council, the City Administration will include the property in the City's Register of Non-Rateable Properties and review their status on a triannual basis for continuation of exemption compliance.

The total exemption of rates would total \$9,751.04 for 2022/2023 financial year and would have similar financial implications for on-going financial years while the rate exemption is in effect.

The breakdown of the financial implications by individual properties is as follows;

Assess	Property Address	Rates Levied
22539	1/10 Pimlico Crescent WELLARD WA 6170	\$1,145.61
22544	6/10 Pimlico Crescent WELLARD WA 6170	\$1,145.61
22547	9/10 Pimlico Crescent WELLARD WA 6170	\$1,145.61
22553	15/10 Pimlico Crescent WELLARD WA 6170	\$1,145.61
23330	2/50 Pimlico Crescent WELLARD WA 6170	\$1,305.47
23362	201/50 Pimlico Crescent WELLARD WA 6170	\$1,305.47
23370	209/50 Pimlico Crescent WELLARD WA 6170	\$1,278.83
23372	211/50 Pimlico Crescent WELLARD WA 6170	\$1,278.83
Total Ra	te Exemption	\$9,751.04

ASSET MANAGEMENT IMPLICATIONS

There are no Asset Management implications as a result of this proposal.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

There are no Environment/Public Health implications as a result of this proposal.

COMMUNITY ENGAGEMENT

There are no Community Engagement implications as a result of this proposal.

ATTACHMENTS

- A. Application for Rate Exemption Foundation Housing Ltd Confidential
- B. Schedule of Properties Rate Exempton Foundation Housing Ltd Confidential
- C. Exemption Request Letter Foundation Housing Ltd Confidential
- D. Statutory Declaration Foundation Housing Ltd Confidential
- E. ATO Endorsement Foundation Housing Ltd Confidential
- F. ACNC Charity Register Summary Foundation Housing Ltd Confidential
- G. Community Housing Agreement Foundation Housing Ltd Confidential
- H. Certificate of Registration Foundation Housing Ltd Confidential
- I. Foundation Housing Ltd Constitution 2017 Confidential

15.2 APPLICATION FOR RATE EXEMPTION - THE SALVATION ARMY (WA) PROPERTY TRUST - 129 BELLINGHAM PARADE, WELLARD

SUMMARY

Application for rate exemption under Section 6.26(2)(d) of the Local Government Act 1995.

OFFICER RECOMMENDATION

That Council resolves to approve the application for rate exemption for The Salvation Army (WA) Property Trust for the property situated at 129 Bellingham Parade, Wellard – Rate Assessment 22117.

VOTING REQUIREMENT

Simple majority.

DISCUSSION

The Salvation Army (WA) Property Trust has applied for a rate exemption for the property situated at 129 Bellingham Parade, Wellard (a residential property) rate assessment 22117.

The Salvation Army (WA) Property Trust is a registered Charity and an international Christian movement that has been operating in Australia since 1880. The Salvation Army provides a broad range of spiritual and social activities, community programs and events for people of all ages, backgrounds and abilities across Australia. The Army has a holistic approach to the care and wellbeing of people and our communities. The Salvation Army is a recognised religion for the purposes of the *Charitable Collections Act 1946* & the *Marriage (Recognised Denominations) Proclamation 2018*.

The Salvation Army has attested that the property is used exclusively as a place of residence of a minister of religion. A land use of this nature is compliant with the statutes of Section 6.26(2)(d) of the *Local Government Act 1995* and is therefore not rateable land under terms of that *Act*.

Given the foregoing, it would seem reasonable that Council resolve to approve the application for rate exemption for The Salvation Army (WA) Property Trust for the property under the aforementioned statutes of the Local Government Act 1995.

STRATEGIC IMPLICATIONS

There are no strategic implications as a result of this proposal.

SOCIAL IMPLICATIONS

There are no social implications as a result of this proposal.

LEGAL/POLICY IMPLICATIONS

A rate exemption is sought by the Salvation Army (WA) Property Trust under the statutes of Section 6.26 (2)(d) of the *Local Government Act 1995*, which states:

6.26 (2) The following land is not rateable land —

(d) land used or held exclusively by a religious body as a place of public
worship or in relation to that worship, a place of residence of a minister of
religion, a convent, nunnery or monastery, or occupied exclusively by a religious
brotherhood or sisterhood

FINANCIAL/BUDGET IMPLICATIONS

If rate exemption were to apply, the property would remain liable for the payment of ESL and any applicable refuse and service charges. If approved by Council, the City Administration will include the property in the City's Register of Non-Rateable Properties and review their status on a tri-annual basis for continuation of exemption compliance.

Approval of this rate exemption will result in a loss of rate revenue for the 2022/2023 financial year of \$1,758.39 with similar financial implications for on-going financial years while the rate exemption is in effect.

ASSET MANAGEMENT IMPLICATIONS

There are no asset management implications as a result of this proposal.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

There are no environmental/public health implications as a result of this proposal.

COMMUNITY ENGAGEMENT

There are no community engagement implications that have been identified as a result of this report or recommendation.

ATTACHMENTS

- A. The Salvation Army (Wa) Property Trust Confidential
- B. Rates exemption application A22117 129 Bellingham Parade WELLARD The Salvation Army (WA) Property Trust Confidential
- C. Salvation Army Mission Statement Confidential

15.3 APPLICATION FOR RATE EXEMPTION - THE LUCY SAW CENTRE

SUMMARY

Application for Rate Exemption – The Lucy Saw Centre.

OFFICER RECOMMENDATION

That Council resolves to approve the application for rate exemption for the Lucy Saw Centre - Assessment No: 18346.

VOTING REQUIREMENT Simple majority

DISCUSSION

The Lucy Saw Centre (The Centre) has made application for exemption from the payment of the City of Kwinana rates for Assessment No: 18346.

The property is used as a Women's refuge housing and assisting Women and Children escaping from domestic and family violence. The Centre has attested that the emergency housing is provided free of charge and The Centre does not receive income generated from the use of the property.

The land, although owned by the Department of Housing, is leased (peppercorn) to The Centre for the purposes of providing of emergency and crisis care housing to victims of domestic violence. The Lucy Saw Centre is a preferred provider for the crisis accommodation program of the Department of Housing in the South East Metropolitan corridor.

The Lucy Saw Centre Assoc Inc, has been a registered Public Benevolent Institution since 1 July 2000 and is endorsed for Goods and Services Tax (GST), Fringe Benefit Tax (FBT) and Income Tax exemption. The Centre also has endorsement as a deductible gift recipient under Subdivision 30-BA of the *Income Tax Assessment Act 1997*. Donations and government grants form the core method of funding for The Centre's operations.

The current use of the property is consistent with the characteristics of land that is used exclusively for charitable purposes and are of benevolent and public nature. Property uses of this genre are legislated as non-rateable land under the statutes of the *Local Government Act 1995*.

Given the foregoing, it would seem reasonable that a rate exemption should apply for the property occupied by the Lucy Saw Centre.

STRATEGIC IMPLICATIONS

There are no strategic implications as a result of this proposal.

SOCIAL IMPLICATIONS

There are no social implications as a result of this proposal.

LEGAL/POLICY IMPLICATIONS

The *Local Government Act 1995* identify those property uses which are deemed to be exempt from the payment of rates (Non-Rateable). In particular, Section 6.26 (2) (g) states:

6.26. Rateable land

- 2) The following land is not rateable land
 - g) land used exclusively for charitable purposes;

Furthermore, Section 6.26 (6) further contends:

6) Land does not cease to be used exclusively for a purpose mentioned in subsection (2) merely because it is used occasionally for another purpose which is of a charitable, benevolent, religious or public nature.

The Centre meets the criteria for rate exemption in accordance with aforementioned Statues with the assessment being evaluated in accordance with the WALGA "Rates and Charitable Land use Exemption Applications – Best Practice Guideline".

FINANCIAL/BUDGET IMPLICATIONS

If rate exemption were to apply, the property would remain liable for the payment of ESL and all applicable refuse/recycling and any other service charges. If the rate exemption is approved for the 2022/2023 financial year the total exemption of rates would be \$7,086.83. Similar financial implications would also bear contemplation for ensuing financial years where an exemption is in effect.

If approved by Council, the date of effect for the rate exemption would be 1 July 2022. The City Administration would also include the property in the City's Register of Non-Rateable Properties and review their status on a bi-annual basis for continuation of exemption compliance.

ASSET MANAGEMENT IMPLICATIONS

There no asset management implications as a result of this proposal.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

There no environmental/public health implications as a result of this proposal.

COMMUNITY ENGAGEMENT

There no community engagement implications as a result of this proposal.

ATTACHMENTS

- Α. Application for Rate Exemption - The Lucy Saw Centre 2022/2023 - Confidential
- Public Benevolent Institute Certification The Lucy Saw Centre Confidential Deductible Gift Recipient Certification The Lucy Saw Centre Confidential В.
- С.
- Constitution The Lucy Saw Centre Confidential D.
- Ε. Lease Agreement - Department of Housing & The Lucy Saw Centre - Confidential
- F. 2020-2021 Audited Financial Statements - The Lucy Saw Centre - Confidential

16 REPORTS – NATURAL ENVIRONMENT

16.1 CITY OF KWINANA DRAFT LOCAL BIODIVERSITY STRATEGY

SUMMARY

In 2002 the Western Australian Local Government Association (WALGA) developed the Perth Biodiversity Project (PBP). The PBP recognised the vital role that Local Governments play in managing ecological biodiversity in the Perth and Peel Region. To assist Local Governments to take a more strategic approach to the retention, protection and management of bushland, wetlands and natural areas the PBP developed the Local Government Biodiversity Planning Guidelines, 2004 (the Guidelines). In accordance with the Guidelines, the City has developed a Draft Local Biodiversity Strategy (LBS). The LBS provides a strategic planning framework to understand the City's ecological assets and plan for biodiversity conservation now and into the future.

The LBS has been developed in response to the continuing decline of the natural environment and loss of endemic biodiversity, with the overall goal to protect and conserve prioritised Local Natural Areas (LNAs). The LBS has identified those areas of ecological value within the City that are not afforded protection under Federal and State Government legislation. These LNAs have been evaluated using a hierarchy of criteria and ranked according to biodiversity value, then further categorised into precincts according to their land-use reservation.

The LBS provides a current snapshot of the City's remaining natural areas and a detailed analysis of their environmental values, whilst acknowledging that in some precincts the opportunity for vegetation retention is not feasible given the existing constraints. A strategic set of goals and targets summarised in a series of actions has been developed to achieve maximum retention of the most biodiverse LNAs.

The LBS vision to; 'Prioritise, protect and enhance the City's natural areas,' has been developed to complement the goals of the City of Kwinana Strategic Community Plan 2021-2031 and the Draft Local Planning Strategy 2021-2036 (LPS). An analysis of LNAs and the strategies to enhance and protect these is outlined in the attached report.

OFFICER RECOMMENDATION

That Council endorse the Draft Local Biodiversity Strategy as per Attachment 1 for the purpose of public consultation.

VOTING REQUIREMENT

Simple majority.

DISCUSSION

Importance of a Local Biodiversity Strategy

A biodiversity strategy is developed in response to the continuing decline of natural environments and native biodiversity, with the overall goal to recover and conserve the existing biodiversity and environment (Ironbark Environmental, 2007). The current extent of the City's remnant vegetation is approximately 34% of its original extent, with only 3.77% under formal protection.

The LBS (Attachment 1) provides a detailed analysis of the City's ecological assets and identifies which of these afford protection under Federal or State Government instruments currently and in the future, and those areas already reserved as natural areas and managed by State or Local Government. The LBS further identifies and ranks ecological assets that have biodiversity value but have no formal means of protection, these areas are known throughout the LBS as Local Natural Areas and are the focus for protection.

Strategy Framework

The LBS is a local planning policy that has been developed in accordance with the Local Government Biodiversity Planning Guidelines (Perth Biodiversity Project, WALGA, 2004)) and meets the requirements of a local bushland protection strategy in accordance with the *State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (Government of Western Australia, 2010).*

The LBS will inform the LPS, and subsequently inform priority environmental assets for inclusion within the Local Planning Scheme. The LBS sets outs potential threats to the City's biodiversity values and provides guidance for their retention, conservation and the mechanisms to achieve this.

City of Kwinana - Local Biodiversity

The City has a rich diversity of ecological assets, the LBS has identified thirty-seven significant flora that are known to occur or have the potential to occur and eighty significant fauna species having the potential to occur within the City, this includes sixty-one bird, five invertebrate, ten mammal and four reptile species. Attachment 2 (confidential attachment) shows the extent of Threatened Flora and Fauna within the City.

An assemblage of flora species growing in a particular geographic location are referred to as Floristic Community Types (FCTs). A number of FCTs have been identified as Threatened or Priority Ecological Communities (TECs & PECs) within the City, and are protected under Federal and State Government legislations, these are described in detail within the LBS and include:

- Threatened and Priority Flora and Fauna
- Threatened Ecological Communities; Banksia Woodlands, Tuart Woodlands, Tumulus Mound Springs & Melaleuca Shrublands
- Conservation Category Wetlands and Resource Enhancement Wetlands

The viability of a natural area is dependent on the size, proximity to other natural areas and linkages between sites. The LBS considers the importance of both regional and local ecological linkages within its prioritisation criteria for LNAs. Additionally, degradation of biodiversity can be caused by several threatening processes that include:

- Invasive species
- Clearing & fragmentation
- Altered hydrology
- Pathogens
- Wildfires & inappropriate fire regimes
- Global warming

The WALGA Guidelines identify guiding principles for conservation and biodiversity planning, one of which states that, at least 30% of the pre-European extent of each ecological community is required to prevent an exponential loss of species and failure of ecosystem processes (Del Marco et al. 2004). This principle is supported within the National Objectives and Targets for Biodiversity Conservation 2001-2005 (Commonwealth of Australia, 2001). In acknowledging this, the LBS seeks to apply this principle whilst cognisant that the 30% target is aspirational and not achievable across the entire suite of vegetation complexes within the City. Nevertheless, it is important that this principle is recognised.

Planning Precincts & Retention Targets

For further definition, the LBS has divided LNAs into precincts. The precincts have been based on zoning within the Metropolitan Region Scheme and serve to clarify the remnant vegetation and its rate of decline in each precinct. Importantly, the opportunity to retain targets within some zones such as Precinct 3 – Industrial Precinct is not possible as this area is already below threshold targets, and, in some areas operates under a State Government Scheme, hence the City has little or no control or influence within this Precinct. The precinct categories include:

- Precinct 1 Urban precinct Includes all areas that have been zoned as Urban or Urban deferred
- Precinct 2 Rural precinct Includes all areas that have been zoned as Rural or Rural – Water Protection
- Precinct 3 Industrial precinct Includes all areas that have been zoned as Industrial, Special industrial and Port installations
- Precinct 4 Public purposes precinct Includes all areas that have been zoned as high school, prison, special uses, Water Authority of WA, primary regional roads, other regional roads, and railways
- Precinct 5 Parks and recreation precinct Includes all areas zoned as parks and recreation

Table 1 represents the current remnant vegetation within each precinct and the relative change since 2015. Precinct 4 – Public Purposes is the only category that has recorded an increase in area, with Precinct 1 - Urban Precinct showing the greatest decline.

Precinct	Remnant Vegetation 2015 (ha)	Current (2020) Remnant Vegetation (ha)	% Change in Vegetation Extent 2015-2020
1 Urban	756.17	480.47	-36.46
2 Rural	1303.30	1216.25	-6.68
3 Industrial	242.24	199.20	-17.77
4 Public Purpose	450.83	432.85	-3.99
5 Parks & Recreation	1,842.14	1,854.73	+0.68
Total	4,494.684	4,183.54	

Table 1 Remnant Vegetation Change within Precincts Since 2015

As stated above, a retention target of at least 30% of the pre-European extent of each ecological community is required to prevent an exponential loss of species and failure of ecosystem processes (Del Marco et. al. 2004). To establish targets for the retention of vegetation in the City, an inventory of the current retention levels, in comparison to pre-European extent, within each of the Precincts of the City has been determined.

Within metropolitan Perth a 10% retention target applies to some vegetation complexes due to extensive clearing. The LBS aims to protect and enhance sustainable natural areas and therefore the higher retention target of 30% has been applied to all precincts, however, in certain precincts such as Precinct 1 – Urban, and Precinct 3 – Industrial, the retention target of 30% is unlikely to be achievable as extensive clearing has already occurred, therefore, the lower retention target of 10% is most likely appropriate.

Local Natural Area Prioritisation

LNAs are defined as natural areas excluding the DBCA Managed Estate, Regional Parks and Bush Forever sites (Del Marco et al. 2004). LNAs are those areas of bushland where the City has the greatest control and influence over. Table 2 below shows the extent of remnant vegetation within each administrative planning category including the total area of LNAs remaining in the City. Table 2 – Summary of Remaining Vegetation in the City of Kwinana

Administrative Planning Category	Area (ha)	% Total areas
Total City area	12,005.68	100
Urban non-vegetated area	7,831.06	65.23
2020 native vegetation extent	4,174.62	34.77
Bush Forever	2,378.90	19.81
DBCA conservation estate	915.30	7.62
Existing City managed reserves	419.45	3.49
Local Natural Areas	2,140.70	17.83
Local Natural Areas (Excluding City managed reserves & current residential development areas)	1,941.04	16.17

The prioritisation of LNAs involved a two-stage methodology. The initial stage methodology was consistent with the PBP Guidelines, and prioritisation considered two categories of criteria:

- 1. Regional conservation significance criteria, supported by legislation and policy (EP Act, BC Act and EPA Guidance Statement No 33), in the following categories:
 - Rarity
 - Diversity
 - Wetland, streamline, estuarine, coastal vegetation
 - Maintenance of ecological functions (patch size and connectivity).
 - Representation
- 2. Locally significant vegetation and local ecological linkages as outlined in the Local Government Biodiversity Planning Guidelines.

•

Due to the large number of LNAs within the City, a second stage of prioritisation methodology was applied to ensure those LNAs identified were of high conservation value, or that they did not occur within areas already receiving management and protection.

•

In order to determine the LNAs of high conservation value, an initial screening was conducted. Each LNA was analysed with the aid of current available spatial data and was determined to be of high conservation value if it:

- supports known areas of TECs or occurs within a TEC buffer
- supports known populations of Threatened Flora
- contains vegetation complexes with <10% remaining within the Swan Coastal Plain IBRA Region
- is within 5 km of a confirmed black-cockatoo breeding site or its buffer

It was further identified that areas of current and future development are facing imminent threat from extensive clearing and therefore were nominated to be a focus for prioritisation. Additionally, LNAs that occur on the Jandakot Water Mound are afforded some protection from clearing due to land-use restrictions and the requirement for submission of a Development Application for assessment and approval by the City.

Areas currently managed as Bush Forever, DBCA Managed Lands and Regional Parks were removed from the dataset in order to limit prioritisation to only those LNAs without protection. Reserves and parks that are currently managed by the City were also removed.

All LNAs that do not meet the criteria or occur on the Jandakot Water Mound are proposed to be prioritised later as part of future LNA revisions, as noted within the strategic actions of the LBS. The methodologies used to determine LNAs of high conservation value and facing imminent threat identified 1,110 LNAs comprising 1,031.82 ha for initial prioritisation as part of the LBS.

Out of the 1,110 areas considered as high conservation LNAs, 26 were identified as areas of high priority, with a prioritisation score of 24 or greater.

Strategic Directions & Actions

The LBS has been developed to achieve the City's vision through the following strategic directions:

- 1. Increase the protection status of significant biodiversity in the City, including on local government managed or owned lands, and on private land.
- 2. Appropriately manage LNAs to reduce identified threats.
- 3. Increase the viability and resilience of LNAs by establishing or enhancing buffers and regional and local ecological linkages.
- 4. Achieve long-term community engagement in local biodiversity management.
- 5. Embed the consideration of biodiversity as standard in all decisions and activities of the City.

To achieve the Strategic Directions a total of thirty-nine actions have been developed. An example of each is provided below:

- 1. Increase the protection status of significant biodiversity in the City, including on local government managed or owned lands, and on private land.
 - Illegal Clearing; Prosecute instances of illegal clearing under the Planning and Development Act 2005, with funds from infringements contributing to the LBS fund.
- 2. Appropriately manage LNAs.
 - For all LNAs that have been identified to be areas of high conservation value, undertake a rapid assessment to ground-truth the status of remnant vegetation, general condition, threats, and apparent opportunities for management and prioritise accordingly.
- 3. Increase buffers and ecological linkages.
 - Find opportunities for linkages to be rehabilitated, with a focus on the limited east-west links.

- 4. Achieve long term community engagement in local biodiversity management.
 - Formalise an environmental stewardships initiative for private properties that support significant LNAs.
- 5. Embed biodiversity in all decisions and activities of the City.
 - Develop procedures associated with this LBS to ensure that the consideration of biodiversity is standard in all decisions and activities of the City, hand-in-hand with the consideration of sustainability principles.

Conclusion

As a peri-urban local government the City is developing at a rapid rate and the opportunities for securing a sustainable conservation estate are diminishing. The LBS provides a succinct snapshot of the remaining biodiversity within the City, its ecological value, geographical location and the opportunities and mechanisms to facilitate its retention and protection. The adoption and implementation of the Draft Local Biodiversity Strategy will provide significant support in achieving the City of Kwinana Strategic Community Plan strategic objective (to): 'Maintain and enhance our beautiful, natural environment through sustainable protection and conservation.' The development of the Draft Local Biodiversity Strategy coincides with the development of the Draft Local Planning Strategy and subsequently a new Local Planning Scheme. This represents a unique opportunity to align all three planning policies so that they provide an integrated and informed strategic planning approach that supports and sustains the City's ecological biodiversity into the future.

STRATEGIC IMPLICATIONS

This proposal will support the achievement of the following outcome/s and objective/s detailed in the Strategic Community Plan and Corporate Business Plan.

	Strategic Community Plan					
Outcome	Strategic Objective	Action in CBP (if applicable)	How does this proposal achieve the outcomes and strategic objectives?			
1 – A naturally beautiful environment that is enhanced and protected	1.2 – Maintain and enhance our beautiful, natural environment through sustainable protection and conservation	1.2.1 – Develop a Local Biodiversity Strategy	Development of a Local Biodiversity Strategy			
3 – Infrastructure and services that are affordable and contribute to health and wellbeing	3.3 – Maintain infrastructure, playgrounds, parks and reserves to a high standard through sustainable asset maintenance and renewal	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes and strategic objectives	Increased protection & management will assist in increasing the standard condition of natural area reserves			

The Draft LBS will also inform and influence the Draft Local Planning Strategy and the new Local Planning Scheme.

SOCIAL IMPLICATIONS

There are a number of social implications for the Draft LBS, community consultation will include a public comment period and a number of the LBS actions seek to engage the community in the management of LNAs.

LEGAL/POLICY IMPLICATIONS

The LBS will influence the following policies:

- Draft Local Planning Strategy
- A new Local Planning Scheme

The following policy was considered in the development of the Draft LBS:

- State Planning Policy 2.8 Bushland policy for the Perth Metropolitan Region.

Attachment 2 contains maps of Threatened and Priority Flora and Fauna. These geographical locations are provided under licence by the Department of Biodiversity Conservation & Attractions. Licencing requires that these records are not made public, Attachment 2 is therefore a confidential attachment to this report.

FINANCIAL/BUDGET IMPLICATIONS

The Draft LBS will require officer time to implement, and some actions may be undertaken by consultants. Whilst there are actions that can be integrated into City business operations, many may require additional resources and/or budget to implement. This can be considered as part of the minor Community Strategic Plan review.

ASSET MANAGEMENT IMPLICATIONS

There are no asset management implications as a result of this proposal.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

The Draft LBS will ensure the City manages its remaining LNAs in a strategic manner, with a focus on enhancing and protecting those areas of the highest quality ecological values.

COMMUNITY ENGAGEMENT

The Draft Local Biodiversity Strategy will be advertised for public comment for a period of four weeks following Council adoption. It is anticipated that both the Draft Local Biodiversity Strategy and the Draft Local Planning Strategy will be advertised together.

ATTACHMENTS

- Α.
- Attachment 1 Draft City of Kwinana Local Biodiversity Strategy (Public Version) Attachment 2 Draft City of Kwinana Local Biodiversity Strategy Threatened Species Figures Confidential Confidential Β.



Local Biodiversity Strategy **2022**

PUBLIC VERSION



This document and the information contained herein has been prepared by Focused Vision Consulting Pty Ltd under the terms and conditions of its contract with the client identified on the cover page and to the requirements of that client, and no representation is made to any third party. This report may not be distributed to any third party without the specific written permission of Focused Vision Consulting Pty Ltd. The information presented in this report is relevant at the time of production and its applicability is limited to the context of the scope of work to which it pertains. This report and its information may be cited for the purposes of scientific research or other fair use but except as permitted under the Copyright Act 1968 (Cth), no part of or the whole of this document is permitted to be used, exploited, duplicated, reproduced, or copied by any process, electronic or otherwise, without the specific written permission of Focused Vision Consulting Pty Ltd.

Focused Vision Consulting Pty Ltd

ABN 25 605 804 500

Please direct all enquiries to:

Focused Vision Consulting Pty Ltd 8/83 Mell Road, SPEARWOOD WA 6163

- P: 08 6179 4111
- E: admin@focusedvision.com.au



Table of Contents

Execu	tive Summary		3.4.4
1	Introduction	1	3.4.5
1.1	Biodiversity	1	
1.1.1	Why Conserve and Protect Biodiversity?	1	
1.2	Local Biodiversity Strategy	3	3.4.6
1.2.1	Context	3	
1.2.2	Importance of a Local Biodiversity Strategy	3	3.4.7
1.2.3	Strategy Framework	3	3.4.8
1.2.4	Local Natural Areas	5	
2	Legislation, Policies and Plans	7	3.4.9
2.1	Legislation	7	
2.2	City of Kwinana	9	3.5
2.2.1	City of Kwinana Draft Local Planning Strategy 2021-2036	9	3.6 3.7
2.2.2	City of Kwinana Strategic Community Plan 2021-2031	9	3.7.1
2.2.3	Town of Kwinana Local Planning Scheme No. 2 and No. 3	10	3.7.2 3.7.3
2.2.4	City of Kwinana Policy – Development within Special Rural Zones	10	3.7.4
2.3	Retention of Vegetation	11	3.7.5
3	Biodiversity Assets	13	3.7.6
3.1	Vegetation	13	3.7.7
3.2	Regional Parks, DBCA Reserves, City Reserves	20	4 5
3.2.1	Regional Parks	20	
3.2.2	DBCA Managed Reserves	21	6
3.2.3	Bush Forever Sites	25	6.1
3.2.4	City Reserves and Parks	28	6.2
3.3	Threatened and Priority Flora and Fauna Species	47	7
3.4	Threatened and Priority Ecological Communities	47	7.1
3.4.1	Tuart Woodlands and Forests TEC	48	7.2
3.4.2	Mound Springs SCP (TEC)	49	7.3
3.4.3	SCP 19b – Woodlands over sedgelands in Holocene dune swales of the southern Swan Coastal Plain	49	8

4	Banksia Woodlands TEC	50
5	SCP 21c - Banksia attenuata and/or Eucalyptus marginata woodlands of the eastern side of the Swan Coastal Plain (part of Banksia woodlands TEC)	51
6	SCP 22 - Shrublands and woodlands of th eastern side of the Swan Coastal Plain (part of Banksia woodlands TEC)	ne 51
7	SCP 26a – Melaleuca huegelii - Melaleuca systena Shrublands	51
8	SCP 24 – Northern Spearwood Shrublands and Woodlands	58
9	SCP 25 - Southern Eucalyptus gomphocephala - Agonis flexuosa Woodlands	52
	Waterways and Wetlands	54
	Regional and Local Ecological Linkages	56
	Threats to Biodiversity	58
1	Invasive Species	58
2	Fragmentation from Clearing	58
3	Land Use and Development	58
4	Altered Hydrology and Erosion	58
5	Pathogens	58
6	Degradation of Natural Areas	59
7	Global and Regional Threats	59
	Biodiversity Planning Precincts	60
	Vegetation Inventory and Retention Targets	63
	Local Natural Area Values and Prioritisation	64
	Prioritisation of Local Natural Areas	83
	Summary of Key Values for LNAs within the City of Kwinana	83
	Biodiversity Vision, Directions and Actions	85
	Vision	85
	Strategic Directions	85
	Strategic Actions	85
	References	91

			ar	

Appendix A - Geomorphic Wetlands within the City of Kwinana

Appendix	B – Prioritisation	n of High	
	tion Value LNAs		

Figures

Figure 1 – Methodology for Development of the LBS	4
Figure 2 – LNAs in the City of Kwinana	6
Figure 3 – Biodiversity Loss in Relation to Native Vegetation Loss (Smith and Siversten 2001)	_12
Figure 4 – Original and Current Extent of Pre-European Vegetation in the City of Kwinana	1
Figure 5 – Original Extent of Vegetation Complexes in the City of Kwinana	19
Figure 6 – Regional Parks and DBCA Managed Lands	24
Figure 7 – Bush Forever Sites in the City of Kwinana	27
Figure 8 - City of Kwinana Managed Reserves	30
Figure 9 – Known Locations of Threatened and Priority Flora	38
Figure 10 – Documented Locations of Threatened and Priority Fauna	43
Figure 11 – Threatened and Priority Ecological Communities	53
Figure 12 – Geomorphic Wetlands of the Swan Coastal Plain	5
Figure 13 – Regional and Local Ecological Linkages	57
Figure 14 - Biodiversity Planning Precincts	6'
Figure 15 – Biodiversity Planning Precincts Vegetation Retention Targets	69
Figure 16 – LNA Prioritisation Methodology	77
Figure 17 – High Conservation Value Local Natural Areas	78
Figure 18 – Local Natural Areas Prioritisation	_79
Figure 19 – LNAs of Highest Priority	82

Tables

A1

B1

Table 1 - Values and Ethical Positions in Relation	
to Biodiversity Conservation (Lindenmayer and Burgman 2005)	1
Table 2 – Summary of Remaining Vegetation in the City	5
Table 3 – Summary of Legislative, Policy, and Planning Frameworks	7
Table 4 – City of Kwinana Key Policies, Strategies and Planning Documents	10
Table 5 - Pre-European Vegetation within the City of Kwinana (Beard 1990, DBCA 2019)	14
Table 6 - Vegetation Complexes within the City of Kwinana (Heddle et al. 1980)	16
Table 7 – DBCA Managed Reserves within the City	22
Table 8 – Summary of Bush Forever Sites within the City	25
Table 9 – Current City of Kwinana Managed Reserves	28
Table 10 - Threatened and Priority Flora Species List	32
Table 11 - Threatened and Priority Fauna Species List	39
Table 12 - Threatened and Priority Ecological Communities Occurring within the City	47
Table 13 - Floristic Community Types Corresponding to the Tuart Woodlands and Forests TEC (Gibson et al. 1994)	49
Table 14 – Floristic Community Types Corresponding to the Banksia Woodlands TEC	50
Table 15 – Remnant Vegetation within the City of Kwinana	60
Table 16 – Retained Vegetation Associations within each Precinct in the City of Kwinana	64
Table 17 – Retained Vegetation Complexes within each Precinct in the City of Kwinana	66
Table 18 – Summary of Vegetation Associations and Complexes with Less Than 30% Remaining within the City	68
Table 19 – Prioritisation Criteria (Adapted from PBP 2013)	80
Table 20 – High Priority LNAs (with a Score of Greater than 24)	84

Executive Summary

The City of Kwinana (the City) is a thriving and expanding local government area located approximately 25 km south of the Perth Central Business District and contains diverse land uses including heavy industry, urban residential, rural and commercial areas. The City has grown rapidly from a population of 23,986 in 2006 to an estimated residential population of 41,866 in 2017 (City of Kwinana 2018) and has the second fastest growing population within any local government area within Western Australia (City of Kwinana 2021c). Kwinana's population is anticipated to grow by approximately 45,000 additional people and 15,000 new dwellings over the next 15 years (City of Kwinana 2021a). By 2036, the population of Kwinana is expected to be approximately 85,000 people. Due to the anticipated population growth and residential land and housing requirements, the conservation and protection of biodiversity must be a priority, so that current and future generations can appreciate existing natural environments and biodiversity.

The south-west of Western Australia is one of 36 global biodiversity hotspots, with high levels of species endemism. Biodiversity underpins the ecological processes necessary for maintaining marine and estuarine quality, soil fertility and clean fresh water and air (City of Kwinana 2019) and is a fundamental quality and character of the landscape, provides recreational opportunities, aesthetic value and cultural identity (City of Kwinana 2019).

The City of Kwinana contains a variety of landforms including dune systems from Kwinana Beach, wetlands including "The Spectacles" and extends out into the Bassendean Dune system east of the Kwinana Freeway containing the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC) (City of Kwinana 2018). A total of seven Commonwealth or State-listed TECs occur within the City, as well as two Priority Ecological Communities (PECs). Numerous Department of Biodiversity Conservation and Attractions (DBCA) Managed Reserves and Regional Parks (Beeliar and Jandakot Regional Parks), as well as 11 Bush Forever sites occur within the City.

Numerous factors threaten biodiversity within the City, including:

- weed invasion
- fragmentation of remnant vegetation and habitat loss through land clearing
- poor land-use planning and development
- altered hydrology and erosion
- pathogens
- feral animals preying on native animals and reducing habitat (loss of nesting hollows to more aggressive introduced birds and feral bees)
- degradation of natural areas through illegal dumping, vandalism of native flora during wood collection, off road motor bikes and 4WD vehicles
- global and regional threats such as climate change.

The City of Kwinana's Draft Local Planning Strategy (2021a) recommended the preparation of this Local Biodiversity Strategy (LBS) to provide a framework for the protection and management of significant local natural areas (LNAs) within the City, in addition to those already set aside for protection by the State Government. The LBS was developed in response to the continuing decline of natural environments and native biodiversity (Ironbark Environmental 2017).



The City's LBS outlines strategic directions and actions, with the vision to 'Prioritise, protect and enhance the City's natural areas'. The LBS has been developed to achieve the City's vision through the following strategic directions:

- 1. Increase the protection status of significant biodiversity in the City, including on local government managed or owned lands, and on private land.
- 2. Appropriately manage LNAs to reduce identified threats.
- 3. Increase the viability and resilience of LNAs by establishing or enhancing buffers and regional and local ecological linkages.
- 4. Achieve long-term community engagement in local biodiversity management.
- 5. Embed the consideration of biodiversity as standard in all decisions and activities of the City.



1 Introduction

1.1 **BIODIVERSITY**

Biodiversity can be described as the variety of all living things such as plants, animals, microorganisms, the genetic information they contain and the ecosystems they form, which exists at three main levels (Australian Museum 2021):

Genetic diversity - the variety of genetic information contained in all living things which varies within and between populations of organisms comprising single species or wider groups.

Species diversity - the variety of species on Earth.

Ecosystem diversity - the variety of the Earth's habitats, ecosystems and ecological processes (National Biodiversity Strategy Review Task Group 2009).

The southwest of Western Australia is one of 36 global biodiversity hotspots with high levels of species endemism and loss of habitat. To qualify as a biodiversity hotspot, at least 1,500 vascular flora species must be endemic and 30% or less of its original native vegetation remains (Conservation International 2021). There are 812 genera from 232 flora plant families (Gioia 2010) which are endemic to southwest Western Australia, where many species have restricted distributions and species and subspecies are still to be described (Hopper and Gioia 2004).

Approximately 34.77% of the original extent of native vegetation remains within the City of Kwinana, with only 3.77% under formal protection.

Why Conserve and Protect Biodiversity?

Conservation has been defined by the World Conservation Strategy (IUCN 1980) as:

"The management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations."

Biodiversity conservation and protection can be influenced by underlying human influences and philosophies or ethical positions that can differ between individuals, communities and organisations (Lindenmayer and Burgman 2005). These values and ethical positions are summarised in Table 1.

Table 1 - Values and Ethical Positions in Relation to Biodiversity Conservation (Lindenmayer and Burgman 2005)

City of Kwimana
Utilitarian Value
Consumptive value
Consumptive value
Productive use value
Service value
Scientific and educational value
Cultural, spiritual, experiential and existence value
Aesthetic, recreational and tourist use
Intrinsic Value
Ecocentric ethic
Biocentric ethic
Futuristic Option Value
recautionary Principle

Ecosystem services are processes by which natural ecosystems sustain human life and include, but are not limited to, producing goods and services (DEWHA 2009). These services and processes can be further broadly categorised as:

- Production of goods: e.g., food, pharmaceuticals, durable materials, energy, industrial products and genetic resources
- Regenerative process: e.g., cycling and filtration processes
- · Stabilisation processes: e.g., coastal and riverbank stability and the control of pest species
- · Life-fulfilling processes: e.g., aesthetic beauty and serenity
- Preservation of future options: e.g., new goods and services awaiting discovery (Lovett et al., 2004).

As well as providing these services, natural environments that are relatively undisturbed can add to scientific and educational value. For example, students understanding a wetland as a natural ecosystem in a practical sense. There may also be areas or sites of spiritual and cultural significance for indigenous people. Even the existence of natural areas and high level of biodiversity in these areas may provide aesthetic, recreational and tourist appeal that both provides conservation and protection of biodiversity as well as contributes to the economy through tourism (Lindenmayer and Burgman 2005).

Conservation and protection of biodiversity at any scale, including Global, National, State, and Local should be a priority. At a local level the importance is more relevant as it is happening in our own backyard, and we can see we are making a difference (Ironbark Environmental 2007). Due to this, the City prepared a Local Biodiversity Strategy (LBS) and revised it so that current and future generations can appreciate the existing natural environment and biodiversity.

1.2 LOCAL BIODIVERSITY STRATEGY

1.2.1 Context

The City of Kwinana developed the first stage of their LBS which was prepared by Ironbark Environmental in 2007. The LBS followed the biodiversity planning guidelines prepared by the Western Australian Local Government Association (WALGA) supported by the State Government (Del Marco *et. al.* 2004). Ironbark Environmental was commissioned to prepare a paper, 'Natural Area Conservation in the City of Kwinana Paper' (NACKP) in 2013, which reviewed and updated key components of the City's LBS and was incorporated into the City's Draft Local Planning Strategy (LPS) (City of Kwinana 2021a; 2021b).

1.2.2 Importance of a Local Biodiversity Strategy

A biodiversity strategy is developed in response to the continuing decline of natural environments and native biodiversity, with the overall goal to recover and conserve the existing biodiversity and environment. An LBS allows for a more detailed focus on the natural environment that exists within the City's municipality (Ironbark Environmental 2007). The previous strategy provided an overarching set of goals and targets summarised in an action plan at a local level to benefit both the environment and local community and allowed for community contribution in the decision-making process and identification of LNAs they consider important for current and future conservation and preservation (Ironbark Environmental 2007).

1.2.3 Strategy Framework

A LBS is a local planning policy that has been developed in accordance with the Local Government Biodiversity Planning Guidelines (Del Marco et. al. 2004) designed to identify and prioritise local natural areas (LNAs) for conservation. It also meets the requirements of a local bushland protection strategy, as referred to in State Planning Policy 2.8 (Government of Western Australia 2010).

A LBS will inform the LPS, and the LPS will in-turn inform the LBS, in relation to the potential issues associated with the City's biodiversity values and LNAs and provide guidance to the future conservation, preservation, and environmental management (City of Kwinana 2019). These documents in current existence, and all other relevant statutory requirements related to biodiversity conservation within the City are discussed in detail in Section 2.

This LBS forms part of the City's vision, where from a community's perspective it's "a unique and liveable City, celebrated for, and connected by, its diverse community, natural beauty and economic opportunities" and from a planning view, "effective planning today, helps to shape the Kwinana of tomorrow". Both visions will ensure any future planning and directions for the City incorporate biodiversity conservation, with an increase in community awareness of their surroundings and environment.

A vision for biodiversity protection and conservation has been developed as the basis of this LBS, and in support of this vision, strategic directions have been derived, with strategic actions determined in order to achieve each of the strategic directions.

The framework for this LBS is designed to update and complement past strategies and relevant City documents relating to the protection of its natural environment and biodiversity. The LBS methodology utilised to develop this framework is broadly summarised in **Figure 1**.



1.2.4 Local Natural Areas

LNAs are defined as natural areas excluding the DBCA Managed Estate, Regional Parks and Bush Forever sites (Del Marco et al. 2004). They are areas the City has greatest control of and influence over (Ironbark Environmental 2007). The City's LNAs include bushland, wetlands, foreshores, coastal areas and any areas in a near-natural state with native species, excluding Bush Forever sites, DBCA managed lands, and Regional Parks. The LNAs within the City are presented in **Figure 2**. As these areas are the responsibility of the City, and where there are opportunities to protect and enhance biodiversity, the LBS will help identify them and achieve the vision of the LBS. Achievement of the vision will be via the implementation of strategic actions, which have been formulated based on prioritised LNAs. The LNAs have been prioritised in reference to categories developed by Del Marco et al. (2004). The prioritisation process is discussed in more detail in **Section 5**.

The City of Kwinana comprises a total area of 12,005.68 ha. Of this, 4,174.62 ha (34.77%) of the pre-European extent of vegetation currently remains. A summary of the remaining vegetation extent by administrative planning categories is presented in **Table 2**.

Table 2 - Summary of Remaining Vegetation in the City

Administrative Planning Category	Area (ha)	% of Total
Total City Area	12,005.68	100
Urban/Non-vegetated area	7,831.06	65.23
2020 Native vegetation extent	4,174.62	34.77
Bush Forever	2,378.90	19.81
DBCA Conservation Estate	915.30	7.62
Existing City Managed Reserves	419.45	3.49
Local Natural Areas	2,140.70	17.83
Local Natural Areas (excluding existing City Managed Reserves and current residential development areas)	1,941.04	16.17



Figure 2 – LNAs in the City of Kwinana



2 Legislation, Policies and Plans

2.1 LEGISLATION

In Western Australia, biodiversity conservation and protection of the natural environment is achieved through a hierarchy of legislation, policy, and planning frameworks. Both statutory and non-statutory planning processes and tools address matters in relation to the retention of remnant vegetation, protection of flora and fauna species, and management of their habitats. This LBS draws upon existing legislative and government policies across National, State and Local levels that are summarised below (Table 3).

Table 3 - Summary of Legislative, Policy, and Planning Frameworks

Government Jurisdiction	Statutory Mechanisms/ Legislation	Key Strate
National		National Lo (Berwick ar
	 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) 	 National O Conservati Australia 2
		Australia's (Commony
		National W



LOCAL BIODIVERSITY STRATEGY



tegic, Policy, and Planning Documents

- ocal Government Biodiversity Strategy and Thorman 1999)
- Objectives and Targets for Biodiversity tion 2001-2005 (Commonwealth of 2001)
- s Strategy for Nature 2019-2030 wealth of Australia 2019)
- Vildlife Corridors Plan 2012 (DESWPC 2012)

Government Jurisdiction	Statutory Mechanisms/ Legislation	Key Strategic, Policy, and Planning Documents
		A 100-year Biodiversity Conservation Strategy for Western Australia DRAFT Phase One: Blueprint to the Bicentenary in 2029 (DEC 2006)
		Perth and Peel @ 3.5 Million: Environmental Impacts, Risk and Remedies (EPA 2015)
		South Metropolitan Peel Sub-Regional Planning Framework (DPLH 2018)
		Bush Forever – Volume 1: Policies, Principles and Processes and Bush Forever – Volume 2: Directory of Bush Forever sites (Government of Western Australia 2000a & 2000b)
	5	WA Environmental Offsets Policy and Guidelines (Government of Western Australia 2011 & 2014)
	Environmental Protection Act 1986 (EP Act)	Wetlands Conservation Policy for Western Australia (Department of Conservation and Land Management
	Conservation and Land Management Act 1984 (CALM	1997)
	Act) Wildlife Conservation Act 1950 (WC Act) Planning and Development Act 2005 (PD Act) Biodiversity Conservation Act 2016 (BC Act) Soil and Land Conservation Act 1945 (SLC Act)	Metropolitan Region Scheme (WAPC 1984/2014)
State		Towards Establishing a Green Network (South West Group 2014)
		State Planning Policy 2.0 – Environment and Natural Resources Policy
		State Planning Policy 2.1 – The Peel-Harvey Coastal Plain Catchment
		State Planning Policy 2.3 – Jandakot Groundwater Protection
		State Planning Policy 2.4 – Basic Raw Materials
		State Planning Policy 2.5 – Rural Planning
		State Planning Policy 2.6 – State Coastal Planning
		State Planning Policy 2.7 – Public Drinking Water Source
		State Planning Policy 2.8 – Bushland Policy for the Perth Metropolitan Region
		State Planning Policy 2.9 - Water Resources
		State Planning Policy 3.0 – Urban Growth and Settlement
		State Planning Policy 4.1 – State Industrial Buffer
Local		Local Government Biodiversity Planning Guidelines for Perth Metropolitan Region (Del Marco <i>et al.</i> 2004)
		City of Kwinana Local Planning Scheme No. 2 (1992)

2.2 CITY OF KWINANA

The City has prepared policies, and strategic and planning documents that identify and address biodiversity, planning and operational aspects, as well as how to implement and monitor the progress and changes across the municipality (listed in Table 3). In addition to the LBS, other relevant documents address the protection and conservation of biodiversity and the management of LNAs and native vegetation within the local area.

2.2.1 City of Kwinana Draft Local Planning Strategy 2021-2036

The City's Local Planning Strategy (LPS) (2021a) indicates that the key element in relation to liveability, character, resilience and sustainable development is the environment. The key environmental directions are to:

Enhance tree canopy cover to cool residential streets and open spaces during extreme heat, provide shade to encourage walking and cycling, create leafy neighbourhoods, and enhance local biodiversity

Identify ecological linkages which link locally and regionally significant LNAs and provide stepping-stones for flora and fauna. These linkages would support the ongoing management of regional sites and provide opportunities for integrated walking trails with interpretive signage

To identify, permanently protect and enhance Kwinana's natural environment which is critical to the maintenance of ecological processes and biodiversity

Promote planning measures that encourage climate change adaptation and mitigation to ensure our communities are both resilient and liveable.

From these directions, 16 strategic actions have been proposed over the course of the Planning Strategy and shall be ongoing for future generations. One of these actions is the preparation of a Local Biodiversity Strategy (this document) which prioritises LNAs requiring conservation and protects significant landscape features and ecological linkages. In addition, as indicated above, Western Australia is vulnerable to climate change impacts and the City has recognised its responsibility to act through the adoption of the Climate Change Plan 2021 – 2026.

2.2.2 City of Kwinana Strategic Community Plan 2021-2031

The City's Strategic Community Plan through community engagement has assisted in the development of new strategic directions with the central vision of:

"A unique and liveable City, celebrated for and connected by, its diverse community, natural beauty and economic opportunities".

In relation to the environment, the community outcome identified is to have 'a naturally beautiful environment that is enhanced and protected'. Strategic objectives to implement this outcome are to:

- Retain and improve our streetscapes and open spaces, preserving the trees and greenery that makes Kwinana unique
- Maintain and enhance our beautiful, natural environment through sustainable protection and conservation.

Activities such as coastal planting and implementing measures which includes community engagement to improve satisfaction with conservation, land and environmental management will assist with driving the strategies and plans summarised in **Table 4**, helping to achieve both the environmental outcomes and related strategic objectives.





Table 4 - City of Kwinana Key Policies, Strategies and Planning Documents

Town of Kwinana Local Planning Scheme No. 2Town of Kwinana Local Planning Scheme No. 3City of Kwinana Local Planning Policy No. 1 - Landscape Feature and Tree RetentionCity of Kwinana Local Planning Policy No. 2 - StreetscapesCity of Kwinana Local Planning Policy No. 3 - Bollard Bulrush Landscape MasterplanA Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007Town of Kwinana Bushland Masterplan 2006-2011Natural Area Conservation in the City of Kwinana 2013City of Kwinana Local Biodiversity Study 2019City of Kwinana Sustainable Water Management Plan 2014-2024City of Kwinana Sustainable Water Management Plan 2018City of Kwinana Draft Local Planning Strategy 2021-2036Waste Education PlanClimate Change PlanLandscape StrategySustainable Water Management PlanClimate Change PlanKwinana Local Planning Strategy 2021-2036Waste Education PlanClimate Change PlanLandscape StrategySustainable Water Management PlanClimate Change PlanLandscape StrategySustainable Water Management PlanCola Danagement PlanCola Danagement PlanCola Oval Management Plan <th></th>	
Town of Kwinana Local Planning Scheme No. 3 City of Kwinana Policy - Development within Special Rural Zones 2001 City of Kwinana Local Planning Policy No. 1 – Landscape Feature and Tree Retention City of Kwinana Local Planning Policy No. 2 – Streetscapes City of Kwinana Local Planning Policy No. 3 – Bollard Bulrush Landscape Masterplan A Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007 Town of Kwinana Bushland Masterplan 2006-2011 Natural Area Conservation in the City of Kwinana 2013 City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Ciaista Oval Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Key Policies, Strategies and Planning Document
City of Kwinana Policy - Development within Special Rural Zones 2001 City of Kwinana Local Planning Policy No. 1 – Landscape Feature and Tree Retention City of Kwinana Local Planning Policy No. 2 – Streetscapes City of Kwinana Local Planning Policy No. 3 – Bollard Bulrush Landscape Masterplan A Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007 Town of Kwinana Bushland Masterplan 2006-2011 Natural Area Conservation in the City of Kwinana 2013 City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Town of Kwinana Local Planning Scheme No. 2
City of Kwinana Local Planning Policy No. 1 - Landscape Feature and Tree RetentionCity of Kwinana Local Planning Policy No. 2 - StreetscapesCity of Kwinana Local Planning Policy No. 3 - Bollard Bulrush Landscape MasterplanA Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007Town of Kwinana Bushland Masterplan 2006-2011Natural Area Conservation in the City of Kwinana 2013City of Kwinana Local Biodiversity Study 2019City of Kwinana Natural Areas Management Plan 2014-2024City of Kwinana Sustainable Water Management Plan 2018City of Kwinana Sustainable Water Management Plan 2018City of Kwinana Draft Local Planning Strategy 2021-2036Waste PlanWaste Education PlanClimate Change PlanLandscape StrategySustainable Water Management PlanClimate Change PlanCalista Oval Management PlanClista Oval Management PlanMosquito and Midge Management Plan	Town of Kwinana Local Planning Scheme No. 3
City of Kwinana Local Planning Policy No. 2 – Streetscapes City of Kwinana Local Planning Policy No. 3 – Bollard Bulrush Landscape Masterplan A Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007 Town of Kwinana Bushland Masterplan 2006-2011 Natural Area Conservation in the City of Kwinana 2013 City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan	City of Kwinana PolicyDevelopment within Special Rural Zones 2001
City of Kwinana Local Planning Policy No. 3 – Bollard Bulrush Landscape Masterplan A Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007 Town of Kwinana Bushland Masterplan 2006-2011 Natural Area Conservation in the City of Kwinana 2013 City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Local Planning Policy No. 1 – Landscape Feature and Tree Retention
A Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007 Town of Kwinana Bushland Masterplan 2006-2011 Natural Area Conservation in the City of Kwinana 2013 City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Local Planning Policy No. 2 – Streetscapes
Town of Kwinana Bushland Masterplan 2006-2011 Natural Area Conservation in the City of Kwinana 2013 City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan	City of Kwinana Local Planning Policy No. 3 – Bollard Bulrush Landscape Masterplan
Natural Area Conservation in the City of Kwinana 2013City of Kwinana Local Biodiversity Study 2019City of Kwinana Natural Areas Management Plan 2014-2024City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020City of Kwinana Sustainable Water Management Plan 2018City of Kwinana Sustainable Water Management Plan 2018City of Kwinana Strategic Community Plan 2021-2031City of Kwinana Draft Local Planning Strategy 2021-2036Waste PlanWaste Education PlanEnvironmental Education PlanClimate Change PlanLandscape StrategySustainable Water Management PlanKwinana Local Emergency Management PlanCalista Oval Management PlanMosquito and Midge Management Plan	A Future for Kwinana's Natural Areas, Draft Report: Technical Version 2007
City of Kwinana Local Biodiversity Study 2019 City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Town of Kwinana Bushland Masterplan 2006-2011
City of Kwinana Natural Areas Management Plan 2014-2024 City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Natural Area Conservation in the City of Kwinana 2013
City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020 City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Local Biodiversity Study 2019
City of Kwinana Sustainable Water Management Plan 2018 City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Natural Areas Management Plan 2014-2024
City of Kwinana Strategic Community Plan 2021-2031 City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Climate Change Mitigation and Adaptation Plan 2015-2020
City of Kwinana Draft Local Planning Strategy 2021-2036 Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Sustainable Water Management Plan 2018
Waste Plan Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan	City of Kwinana Strategic Community Plan 2021-2031
Waste Education Plan Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	City of Kwinana Draft Local Planning Strategy 2021-2036
Environmental Education Plan Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Waste Plan
Climate Change Plan Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Waste Education Plan
Landscape Strategy Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Environmental Education Plan
Sustainable Water Management Plan Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Climate Change Plan
Kwinana Local Emergency Management Plan Calista Oval Management Plan Mosquito and Midge Management Plan	Landscape Strategy
Calista Oval Management Plan Mosquito and Midge Management Plan	Sustainable Water Management Plan
Mosquito and Midge Management Plan	Kwinana Local Emergency Management Plan
	Calista Oval Management Plan
2.2. Town of Kwingson Local Diapping Scheme Mar 2 and Mar 2	Mosquito and Midge Management Plan
2.2.5 TOWN OF KWINANA LOCAL Planning Scheme NO. 2 and NO. 5	2.2.3 Town of Kwinana Local Planning Scheme No. 2 and No. 3

2.2.3 Town of Kwinana Local Planning Scheme No. 2 and No. 3

Throughout this document, the Town of Kwinana Local Planning Scheme No. 2 and No. 3 will be referred to as the Scheme to prevent confusion with the LPS. Of the five objectives for the Scheme, one is related to the environment, which is; 'introducing measures by which places of natural beauty and places of historic or scientific interest may be conserved'.

Land reserved under the Scheme for local government purposes is known as a Local Reserve', and any potential development may require planning approval from the local government under the Scheme. The Scheme area is covered by Policy and Development Areas and Zones, where each Policy Area is the subject of a Policy Statement that establishes broad land use objectives as a guide to future decisions concerning subdivision, development and zoning. Twenty-two Policy Areas exist within the municipality and each makes reference, where applicable, to the protection and conservation of LNAs and reducing any potential impacts on the natural environment e.g. for Area 5 – The Spectacles, the Policy Area states that "the landscape amenity of the Spectacles Wetlands shall be conserved".

2.2.4 City of Kwinana Policy - Development within Special Rural Zones

The City of Kwinana Policy – Development within Special Rural Zones (2001) provides guidance to ensure that the use and development within Special Rural Zones is in a manner appropriate to the intentions of the zoning, has minimal impact on neighbouring properties and the environment, and provides guidelines for the protection and rehabilitation of remnant vegetation.

2.3 RETENTION OF VEGETATION

The Local Government Biodiversity Planning Guidelines for the Perth Metropolitan Region (Del Marco et al. 2004) identified nine guiding principles for conservation and biodiversity planning that are supported by legislation, policy, and research. One of the guiding principles is: the retention of at least 30% of the pre-European extent of each ecological community is required to prevent an exponential loss of species and failure of ecosystem processes (Del Marco et al. 2004) (**Figure 3**).

The National Objectives and Targets for Biodiversity Conservation 2001-2005 (Commonwealth of Australia 2001) also recognise that the retention of 30% or more of the pre-European extent of each ecological community is necessary if Australia's biodiversity is to be protected.

The retention of original vegetation requires adequate representation of the ecological communities across different landscapes, ecosystems, and among various groups of organisms to maintain sustainable levels of biodiversity. It has been identified that the acceleration of biodiversity decline appears to be caused by habitat fragmentation and becomes significantly greater once the vegetation community drops below the 30% threshold (Miles 2001).



LOCAL BIODIVERSITY STRATEGY

1





Figure 3 - Biodiversity Loss in Relation to Native Vegetation Loss (Smith and Siversten 2001)

3 BIODIVERSITY ASSETS

3.1 VEGETATION

The City of Kwinana vegetation has been broadly characterised by Beard (1990). The Beard (1990) vegetation associations supported by the City of Kwinana and the remaining extent across a range of contexts are presented in **Table 5** and spatially in **Figure 4**.





Table 5 - Pre-European Vegetation within the City of Kwinana (Beard 1990, DBCA 2019)

Extent	Veg. Associa- tion No.	Broad Vegetation Description	Pre– European Extent (ha)	Current Extent (ha)	% Pre- European Extent Remaining	% Current Extent in DBCA Managed Lands*
Swan Coastal Plain	6	Medium woodland; tuart & jarrah	56,343.01	13,362.25	23.72	9.45
	51	Sedgeland; reed swamps, occasionally with heath	1,838.70	965.37	52.50	2.75
	968	Medium woodland; jarrah, marri & wandoo	136,188.20	9,017.32	6.62	1.43
	998	Medium woodland; tuart	50,867.50	18,492.32	36.35	17.70
	1001	Medium very sparse wood- land; jarrah, with low wood- land; banksia & casuarina	57,410.23	12,660.76	22.05	3.13
	3048	Shrublands; scrub-heath on the Swan Coastal Plain	10,418.06	3,043.13	29.21	8.22
	6	Medium woodland; tuart & jarrah	1,477.48	547.36	37.05	0
	51	Sedgeland; reed swamps, occasionally with heath	151.17	139.53	92.30	0
City of Kwinana	968	Medium woodland; jarrah, marri & wandoo	52.80	13.08	24.77	0
	998	Medium woodland; tuart	4,307.81	1,479.46	34.34	9.34
	1001	Medium very sparse wood- land; jarrah, with low wood- land; banksia & casuarina	4,694.17	1,745.29	37.18	0.73
	3048	Shrublands; scrub-heath on the Swan Coastal Plain	1,328.25	176.51	13.29	1.20

*Proportion of pre-European extent

Adequate levels of protection are based on widely accepted thresholds relating to original pre-European extent of vegetation remaining. A number of vegetation associations represented in the City of Kwinana are not currently adequately protected. All of the vegetation associations occurring within the City of Kwinana, currently have less than 10% of the original extent occurring within DBCA Managed Lands within the City. Figure 4 - Original and Current Extent of Pre-European Vegetation in the City of Kwinana



LOCAL BIODIVERSITY STRATEGY

1

Further to vegetation associations (Beard 1990) as discussed above, vegetation complexes have also been defined by Heddle et al. (1980) and are based on vegetation in association with landforms and underlying geology. The seven vegetation complexes within the City of Kwinana are described in **Table 6** and presented in **Figure 5**.

Table 6 - Vegetation Complexes within the City of Kwinana (Heddle et al. 1980)

Extent	Vegetation Complex	Description	Pre– European Extent (ha)	Current Extent (ha)	% Remaining*
Swan Coastal Plain	Bassendean Complex – central and south	Vegetation ranges from woodland of Eucalyptus marginata (Jarrah) - Allocasuarina fraseriana (Sheoak) - Banksia species to low woodland of Melaleuca species, and sedgelands on the moister sites.	87,476.26	23,508.66	26.87
	Cottesloe complex – central and south	Mosaic of woodland of Eucalyptus gomphocephala (Tuart) and open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri); closed heath on the Limestone outcrops.	45,299.61	14,567.87	32.16
	Guildford complex	A mixture of open forest to tall open forest of Corymbia calophylla (Marri) - Eucalyptus wandoo (Wandoo) - Eucalyptus marginata (Jarrah) and woodland of Eucalyptus wandoo (Wandoo) (with rare occurrences of Eucalyptus lane-poolei (Salmon White Gum)).	9,665.15	3,103.70	32.11
	Herdsman Complex	Sedgelands and fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca species.	53,080.99	12,467.20	23.49
	Karrakatta complex – central and south	Predominantly open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri) and woodland of Eucalyptus marginata (Jarrah) - Banksia species.	54,573.87	33,011.64	60.49
	Quindalup complex	Coastal dune complex Local variations include the low closed forest of Melaleuca lanceolata - Callitris preissii the closed scrub of Acacia rostellifera and the low closed Agonis flexuosa forest of Geographe Bay.	90,513.13	4,607.91	5.09
	Serpentine River Complex	Closed scrub of Melaleuca species and fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca rhaphiophylla (Swamp Paperbark) along streams.	19,855.41	1,940.18	9.77

Extent	Vegetation Complex	Description	Pre– European Extent (ha)	Current Extent (ha)	% Remaining*
City of Kwinana	Bassendean Complex – central and south	Vegetation ranges from woodland of Eucalyptus marginata (Jarrah) - Allocasuarina fraseriana (Sheoak) - Banksia species to low woodland of Melaleuca species, and sedgelands on the moister sites.	4,678.84	1,741.09	37.21
	Cottesloe complex – central and south	Mosaic of woodland of Eucalyptus gomphocephala (Tuart) and open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri); closed heath on the Limestone outcrops.	3,789.77	1,269.91	33.51
	Guildford complex	A mixture of open forest to tall open forest of Corymbia calophylla (Marri) - Eucalyptus wandoo (Wandoo) - Eucalyptus marginata (Jarrah) and woodland of Eucalyptus wandoo (Wandoo) (with rare occurrences of Eucalyptus lane-poolei (Salmon White Gum)). Minor components include Eucalyptus rudis (Flooded Gum) - Melaleuca rhaphiophylla (Swamp Paperbark).	579.45	279.81	48.29
	Herdsman Complex	Sedgelands and fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca species.	1,633.94	492.55	30.14

LOCAL BIODIVERSITY STRATEGY

1
Extent	Vegetation Complex	Description	Pre– European Extent (ha)	Current Extent (ha)	% Remain- ing*
City of Kwinana (continued)	Karrakatta complex – central and south	Predominantly open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri) and woodland of Eucalyptus marginata (Jarrah) - Banksia species.	1,289.37	309.22	23.98
	Quindalup complex	Coastal dune complex Local variations include the low closed forest of Melaleuca lanceolata - Callitris preissii the closed scrub of Acacia rostellifera and the low closed Agonis flexuosa forest of Geographe Bay.	19.47	2.77	14.22
City o	Serpentine River Complex	Closed scrub of Melaleuca species and fringing woodland of Eucalyptus rudis (Flooded Gum) - Melaleuca rhaphiophylla (Swamp Paperbark) along streams.	3.56	2.97	83.43

*Proportion of pre-European extent

Of the seven vegetation complexes listed in Table 6, two, the Karrakatta complex - central and south and the Quindalup complex have less than 30% of their pre-European extent remaining within the City of Kwinana. A level of 30% of pre-clearing extent is the level below which species loss appears to accelerate exponentially at the ecosystem level (EPA 2008). From purely a biodiversity perspective, a level of 10% of the original extent of a vegetation association is regarded as being a level representing Endangered (EPA 2008) and any clearing which would increase the threat level to a vegetation association should be avoided.



Figure 5 - Original Extent of Vegetation Complexes in the City of Kwinana



3.2 REGIONAL PARKS, DBCA RESERVES, CITY RESERVES

Of the 4,174 ha of pre-European vegetation remaining within the City, over 78% (3,294 ha) is under State Government protection and management, which includes National Parks, State Forests, Nature Reserves, and Conservation Parks managed by DBCA, and Parks and Recreation Reserves of the Metropolitan Region Scheme (MRS). Land categorised as a 5(1)(h) Reserve is land administered under the Land Administration Act (1997) (LA Act) which is vested in the Conservation and Parks Commission of WA that is not a National Park, Conservation Park, Nature Reserve, Marine Park or Marine Nature Reserve. Bush Forever sites are also protected by State processes, and these are discussed in further detail in **Section 3.2.3**.

3.2.1 Regional Parks

3.2.1.1 Beeliar Regional Park

Beeliar Regional Park wetland chain is considered one of the most important lake and wetland systems remaining within the Perth metropolitan region (Figure 6). These wetland chains occupy an area of approximately 3,400 ha across the Cities of Melville, Cockburn, and Kwinana, with the southern-most portion (438.81 ha) residing in the City of Kwinana. The Regional Park supports conservation significant flora and fauna species, vegetation communities that were once widespread on the Swan Coastal Plain, holds cultural and spiritually significant Aboriginal values, and aesthetic values (BRPCAC 2006). A management plan was prepared by the Beeliar Regional Park Community Advisory Committee (BRPCAC) in 2006 with the following long-term vision:

"Beeliar Regional Park will encompass two quality chains of wetlands and an adjoining coastal foreshore which will support a diversity of wetland and upland habitats and ecosystems. The Park will be managed as a single entity for conservation purposes as well as for a range of sustainable community uses that recognise Aboriginal and non-Aboriginal heritage in a harmonious way."

The management plan establishes the principal management directions and identifies key values, objectives, and performance indicators on how to best conserve the natural environment, and how to manage cultural heritage, recreation, sustainable resources and community involvement (BRPCAC 2006).



3.2.1.2 Jandakot Regional Park

Jandakot Regional Park consists of a collection of fragmented small to large reserves, together forming an area of 2,362 ha. It is located approximately 20 km south of Perth Central Business District within the Cities of Armadale, Canning, Cockburn, Gosnells, Kwinana, and the Shire of Serpentine-Jarrahdale (Figure 6). Approximately 317.90 ha of the Jandakot Regional Park lies within the City. The Regional Park comprises a network of conservation significant ecosystems including wetlands and bushlands, also forming an important link between multiple other reserves throughout the south-east metropolitan Perth region. It contains rare (Threatened) and Priority flora in addition to significant fauna species including reptiles, amphibians, birds and mammals. Furthermore, the park is of heritage value, holding significance to Aboriginal people (DPaW 2010).

A management plan was prepared on behalf of the Conservation Commission of Western Australia, with the Department of Environment and Conservation, City of Armadale, City of Cockburn and Town of Kwinana in 2010, with the following long-term vision:

"Jandakot Regional Park will be a well-managed park supporting species and habitat diversity in a sustainable manner. The Park will provide for the conservation and preservation of ecological and cultural heritage values, research and education, as well as providing for the recreational needs of the community in a visually harmonious way."

The management plan identifies key values and guiding principles, and lists objectives, strategies and performance indicators to track conservation progress (DPaW 2010).

3.2.2 DBCA Managed Reserves

Land managed by DBCA covers more than 28 million hectares (10%) of land and waters in WA. These lands include national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forest, timber reserves and other land areas reserved under sections 5(1)(g) and 5(1)(h) of the CALM Act for conservation purposes. The DBCA managed conservation estate is vested with the Conservation Commission of WA.

A total of 41 DBCA managed reserves occur within the City. This includes one area (Leda Nature Reserve R33581) classified as a Class A Nature Reserve for the conservation of flora and fauna, one reserve (Wandi Nature Reserve R35110) reserved for the conservation of flora, fauna and water, one unnamed reserve (R51658) reserved under Section 5(1)(h) under the CALM Act for conservation and recreation and 37 reserves classified as Crown Freehold managed by DBCA (**Table 7**). Class A Reserves are afforded protection under the LA Act and have the greatest degree of protection used solely for the purpose of protecting areas of high conservation or community values. Section 5(1)(h) reserves are land administered under the LA Act which is vested in the Conservation and Parks Commission of WA, that is not a National Park, Conservation Park, Nature Reserve, Marine Park or Marine Nature Reserve. DBCA are the agency acknowledged by the Department of Lands as responsible for Crown Freehold Reserves.



2

Table 7 – DBCA Managed Reserves within the City

Reserve Identifier (according to LA Act)	Purpose	Name and Location	Category
R 33581	Conservation of Flora and Fauna (Class A)	Leda Nature Reserve	Nature Reserve
R 36110	Conservation of Flora, Fauna and Water	Wandi Nature Reserve	Nature Reserve
R 51658	Conservation and Recreation	Unnamed Reserve	Section 5(1)(h) Reserve
1091/251	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1271/837	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1274/564	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1315/700	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1315/701	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1315/702	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1319/482	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
150/150A	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
150/151A	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1561/840	Crown Freehold	Unnamed – south of De Haer Road	Crown Freehold - Dept Managed
1649/599	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1651/552	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1758/697	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1957/307	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1957/309	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
1997/19	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2025/572	Crown Freehold	Unnamed – south of De Haer Road	Crown Freehold - Dept Managed

Reserve Identifier (according to LA Act)	Purpose	Name and Location	Category
2048/35	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2048/36	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2048/37	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2048/38	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2048/39	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2079/718	Crown Freehold	Unnamed – south of De Haer Road	Crown Freehold - Dept Managed
2129/490	Crown Freehold	Unnamed – south of De Haer Road	Crown Freehold - Dept Managed
2146/125	Crown Freehold	Unnamed – south of De Haer Road	Crown Freehold - Dept Managed
2781/395	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/538	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/539	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/540	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/541	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/543	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/544	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/545	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2781/546	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
2972/116	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
41/149A	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed
567/119A	Crown Freehold	Unnamed – adjacent to Spectacles Wetland	Crown Freehold - Dept Managed





Figure 6 - Regional Parks and DBCA Managed Lands



3.2.3 Bush Forever Sites

Under the Bush Forever Plan, 51,200 ha of regionally significant bushland areas are protected in 287 Bush Forever sites in Western Australia (Government of Western Australia 2000a). Bush Forever sites are also classified as Environmentally Sensitive Areas (ESAs).

The City of Kwinana supports 11 Bush Forever sites covering a total area of 953 ha. Seven Bush Forever sites occur entirely within the City and four are bisected by the City boundary as summarised in **Table 8.** Seven of the Bush Forever sites (or part of them) within the City are managed by the City of Kwinana.

Table 8 – Summary of Bush Forever Sites within the City

Bush Forever Site	Site Name	Location	Category
67	Parmelia Avenue Bushland, Parmelia	Within the City of Kwinana in its entirety	Crown reserve vested in Local Govern-ment (City of Kwinana), managed by the City
267	Mandogalup Road Bushland, Hope Valley	Within the City of Kwinana in its entirety	WAPC
268	Mandogalup Road Bushland, Mandogalup	Within the City of Kwinana in its entirety	Part managed by the City, part no man-agement authority (private ownership), part Crown reserve vested in Local Gov-ernment (City of Kwinana)
269	The Spectacles	Within the City of Kwinana in its entirety	Part WAPC, part DBCA, part no man- agement agency (private ownership)
270	Sandy Lake and Adjacent Bush-land, Anketell	Within the City of Kwinana in its entirety	Part WAPC, part DBCA, part no man- agement agency (private ownership)
272	Sicklemore Road Bushland, Par-melia/ Casuarina	Within the City of Kwinana in its entirety	Part managed by the City, part WAPC, part unallocated Crown land, part drain reserve, part Crown reserve vested in Local Government (City of Kwinana), part no management agency (private owner-ship)
273	Casuarina Prison Bushland	Within the City of Kwinana in its entirety	Crown reserve vested in Department of Justice
346	Brownman Swamp, Mt Brown Lake and Adjacent Bushland, Henderson/ Naval Base	Within the City of Kwinana and the City of Cockburn	Part managed by the City, part DBCA conservation park (Beeliar Regional Park), part Crown reserve vested in Local Gov-ernment, part unallocated crown land, part no management agency (private ownership)
347	Wandi Nature Reserve and An-ketell Road Bushland, Wandi/ Oakford	Within the City of Kwinana and the Shire of Serpentine - Jarrahdale	Part managed by the City, part DBCA nature reserve, part WAPC (Jandakot Regional Park)



Bush Forever Site	Site Name	Location	Category
349	Leda and Adjacent Bushland, Leda	Within the City of Kwinana and the City of Rockingham	Part managed by the City, part DBCA nature reserve, part vacant Crown Land, part WAPC, part Crown reserve vested in Local Government (City of Kwinana), part no management agency (private owner-ship)
393	Wattleup Lake and Adjacent Bush-land, Wattleup/Mandogalup	Within the City of Kwinana and the City of Cockburn	No management agency (private owner-ship)



Figure 7 – Bush Forever Sites in the City of Kwinana





8

City of Kwinana

3.2.4 City Reserves and Parks

The City currently manages 340.18 ha of bushland within its reserves, as summarised in Table 9.

Table 9 – Current City of Kwinana Managed Reserves

Number	Reserve Name	Reserve Number	Total Reserve Area (ha)	Total Bushland Area Managed by City (ha)
1	Armstrong Rd (Lat 32) x2		18.15	18.15
2	Belgravia Dampland	R49702	8.37	8.37
3	Bertram Sanctuary	R49067	7.08	7.08
4	Chalk Hill Reserve	R31256	0.87	0.87
5	Challenger Beach	R24901	7.53	3.30^
6	Chisham Oval Bushland	R36562	7.13	3.40^
7	Clementi Rd Reserve	R41746	35.32	35.32
8	Cordata Reserve		3.06	3.06
9	Darling Chase Reserve	R52765	11.41	11.41
10	Depot Swamp Reserve		6.77	6.30^
11	Gentle Rd/Golf Course Reserve	R25309	36.48	36.48
12	Henley Reserve	R43072 , R50531	33.50	25.00^
13	Homestead Ridge Reserves x3	R40218, R40451, R40453	11.92	10.78
14	Honeywood Central (REW 9)	R51952	1.56	1.56
15	Honeywood North (Lyon Rd Reserve)	R51580	11.10	11.10
16	Honeywood South (Lizard Park)	R51852 R51421	7.68	7.68
17	Lake Magenup	R36759	28.54	23.20^
18	Living Edge Reserve	R53383	1.48	1.20^
19	Wandi Reserve ('Fred's Re-serve')	R52202	0.72	0.48
20	McLaughlan Rd	R39964	14.90	10.70^
21	Millar-Wellard Rd Reserve	R25684	21.96	21.96
22	Postans Reserve	R29626	11.17	6.00^
23	Rifle Range Reserve	R32621 R24784	26.07	26.07
24	Seagulls Reserve	R46281	4.96	4.96
25	Sloans Reserve	R25132	21.83	12.00^
26	Squires Ave	R48343	0.80	0.80

Number	Reserve Name	Reserve Number	Total Reserve Area (ha)	Total Bushland Area Managed by City (ha)
27	Sunrise Wetlands	R52361	14.68	10.60^
28	Sutherland Reserves	R46708	8.15	8.15
29	Thomas Oval	R24302	21.70	8.10^
30	Wells Park Reserve	R24575	8.91	0.90^
31	Wildflower Reserve	R38747	25.65	15.50^
		Total	419.45	340.18

^ Area provided by the City of Kwinana







Figure 8 - City of Kwinana Managed Reserves



3.3 THREATENED AND PRIORITY FLORA AND FAUNA SPECIES

Any natural area that supports Threatened and Priority flora and fauna species is considered to have conservation value and is considered a Locally Significant Natural Area. The Threatened flora and fauna species are listed for protection under the State BC Act, the Commonwealth EPBC Act or both, whilst Priority flora and fauna species are afforded some protection by DBCA.

The DBCA database (DCBA 2021a, 2021b), NatureMap (DBCA 2021c) and Department of Agriculture, Water and the Environment Protected Matters Search Tool (PMST) (DAWE 2021) identified 37 significant flora that are known to occur or have the potential to occur within the City (Table 10, Figure 9). This includes fifteen flora species pursuant to the Commonwealth EPBC Act and State Biodiversity Conservation Act 2016 (BC Act), four Priority 1, two Priority 2, seven Priority 3 and nine Priority 4 flora species.

Eighty significant fauna species were identified as having the potential to occur within the City, which includes 61 birds, five invertebrates, ten mammals and four reptile species (Table 11, Figure 10 series). This comprises 60 fauna species pursuant to the Commonwealth EPBC Act, 59 species pursuant to the BC Act, six Priority 3, and 11 Priority 4 fauna species.





2

Table 10 - Threatened and Priority Flora Species List

						Status
Species	EPBC Conservation Status	WA Conservation Status	Description	Habitat Preference	Lepidosperma rostratum	Endanger
Synaphea sp. Fairbridge Farm (D. Papenfus 696)	Critically Endan-gered	Critically Endan-gered	Dense, clumped shrub growing to 0.3-0.6 m high and 0.4- 0.8 m wide. Produces yellow	Grey clayey sand soil with lateritic pebbles. Near		
			flowers on erect spikes 0.07- 0.24 m long from September to October.	winter-wet flats, low woodlands with weedy grasses.	Synaphea sp. Pinjarra Plain (A.S. George 17182)	Endanger
Synaphea sp. Serpentine (G.R. Brand 103)	Critically Endan-gered	Critically Endan-gered	Erect, compact shrub growing to 0.3 m high. Produces yellow flow-ers from September to	Grey, yellow or brown sandy clay- loam soils. Edge of	Andersonia	Endanger
			October.	wetlands, slopes and flats.	gracilis	Ū
Caladenia huegelii	Endangered	Critically Endan-gered	Tuberous, perennial herb growing to 0.25-0.6 m high, with a single pale green, hairy leaf. Produces 1-2 (rarely 3)	Grey, white or brown sand, clay loam soils. Margins of		
			distinctive flowers with red and green-cream parts from September to October.	swamps, low depressions and flats. Mixed jarrah and Banksia woodlands.	Drakaea micrantha	Vulnerable
Drakaea elastica	Endangered	Critically Endan-gered	Tuberous, perennial herb growing to 0.1-0.3 m high with	Bare patches of white or grey		
			a single bright green, glossy, prostrate heart-shaped leaf. Produces distinc-tive flower with red and green-yellow parts from October to No- vember.	sandy soils. Low- lying situations adjoining winter- wet swamps.	Diuris drummondii	Vulnerable
Eucalyptus × balanites	Endangered	Critically Endan-gered	Mallee with rough flaky grey bark growing to 5-8 m high and 15 m wide. Produces white flowers from October to December or from January to February.	White-grey sand, brown sandy loam soils with lateritic gravel. Slopes.	Diuris micrantha	Vulnerab
Grevillea curviloba	Endangered	Critically Endan-gered	Variable, prostrate shrub with broad dark green leaves or tall erect shrub growing to 2 m high with greyish green leaves. Produces creamy-white flowers on short stalks in leaf axils from September to October.	Sand and sandy loam soils. Winter- wet areas, heath.	Eleocharis keigheryi	Vulnerab
Diuris purdiei	Endangered	Endangered	Tuberous, perennial orchid growing to 0.15-0.45 m high. Produces distinct flattened yellow flowers with brown blotches on their underside from September to October.	Grey-black sand, sandy clay moist soils. Winter-wet swamps		

Species	EPBC Conservation Status	WA Conservation Status	Description	Habitat Preference
Lepidosperma rostratum	Endangered	Endangered	Rhizomatous, tufted perennial grass-like sedge growing to 0.5 m high. Produces brown flowers in narrow, spike-like inflorescence and fruits in June to August.	Peaty sand, sand, clayey soils. Winter wet swamps.
Synaphea sp. Pinjarra Plain (A.S. George 17182)	Endangered	Endangered	Erect, clumping shrub growing to 0.8 m high. Produces yellow flowers from September to November.	Sand, loam and clay soils sometimes with laterite. Winter wet depressions and flats.
Andersonia gracilis	Endangered	Vulnerable	Slender, erect or open straggly shrub growing to 0.1-0.5 m high. Produces pink to pale mauve flowers in ovoid oblong groups of 4-14 on terminal heads from September to November.	White-grey sand, sandy clay, gravelly loam soils. Winter wet areas, near swamps.
Drakaea micrantha	Vulnerable	Endangered	Tuberous, perennial herb growing to 0.15-0.3 m high with a single silvery-grey, prostrate heart-shaped leaf. Produces distinct flower with red and yellow parts from September to October.	Bare patches of white-grey sandy soils. Winter wet swamps, disturbed areas.
Diuris drummondii	Vulnerable	Vulnerable	Tuberous, perennial tall orchid growing to 0.5-1 m high. Produces 3-8 pale yellow flowers from November to January.	Brown sandy clay, moist peat soils. Low lying depressions, swamps
Diuris micrantha	Vulnerable	Vulnerable	Tuberous, perennial orchid growing to 0.3-0.6 m high with a basal tuft of narrow, linear leaves. Produces up to 7 yellow flowers with red-brown markings from August to October.	Brown/black sandy clay-loam and clayey soils. Winter-wet depressions and swamps, in shallow water.
Eleocharis keigheryi	Vulnerable	Vulnerable	Tufted, clumping grass like sedge growing to 0.2-0.4 m high and 0.4 m wide with smooth, erect stems and leaves reduced to straw- coloured sheaths. Produces pale green flowers in a narrow, cylindrical flower spike from August to November (December in favourable conditions).	Clay, sandy loam soils. Emergent in freshwater creeks, claypans and wetlands.



4

Species	EPBC Conservation Status	WA Conservation Status	Description	Habitat Preference
Tetraria australiensis	Vulnerable	Vulnerable	Tufted perennial grass- like sedge growing to 1 m high with cylindrical stems. Produces brown flowers following fire.	Grey sand over clay soil. Winter wet depressions, swamps, drainage lines and swamp margins.
Acacia lasiocarpa var. bracteolata long peduncle		Priority 1	Spinescent shrub growing between 0.4-1.5 m high. Produces yellow flowers in globular heads from May or	Grey or black sand over clay soils. Swampy areas, winter wet
variant (G.J. Keighery 5026) Acacia sp.		Priority 1	August. No information.	lowlands. No information.
Binningup (G. Cockerton et al. WB 37784)				
Boronia juncea subsp. juncea		Priority 1	Slender, erect or straggly shrub growing to 0.6-1 m high. Produces pink or purple flowers in April and December.	Dark grey peaty sandy soil. Winter wet depressions, swamps.
Lachnagrostis nesomytica subsp. paralia		Priority 1	Loosely tufted, annual or short-lived perennial grass growing to 0.3-0.5 m high. Produces purple-green flowers, flowering period unknown.	Grey-brown sandy soil. Coastal areas, dunes and swales on Garden Island.
Poranthera moorokatta		Priority 2	Small, annual herb growing to 0.05 m high. Produces white flowers from October to November.	Clay, sandy soils. Winter wet depressions, dunes and flats.
Tetraria sp. Chandala (G.J. Keighery 17055)		Priority 2	Erect sedge growing to 0.7- 1.5 m high. Produces brown flowers most of the year.	Peaty sandy soil. Swamps, edges of wetlands and damplands.
Austrostipa mundula		Priority 3	Erect, fine perennial grass growing to 0.6 m high with mostly basal leaves. Produces brown flowers in a linear or elliptic panicle 5-12 cm long from September to November.	Grey sandy soil with limestone. Dune slopes, coastal cliffs, plains.

LOCAL BIODIVERSITY STRATEGY



Description	Habitat Preference
Rhizomatous, clumped, perennial sedge growing to 2 m high and 1.0 m wide. Produces brown-straw flowers from September to January.	Grey sand, sandy clay soil. Lowlands, swamps, creek edges and drainage lines.
Low shrub 30 cm high and 40 cm wide. Produces yellow flowers from August to September.	Dunes, calcareous sand, Tamala limestone
Prostrate, spreading or scrambling spindly shrub growing to 0.5-1 m high and 1 m wide. Produces flowers with yellow, red and orange parts from October and November.	Sand and loam soils. Wetlands, winter wet flats, slopes and flats.
Erect to spreading shrub growing to 0.2 to 1 m high. Produces white flowers with some pink from September to November.	Brown sandy loam, white- grey sandy soil associated with limestone. Coastal limestone ridges.
Erect to scrambling, perennial herb growing between 0.5-1 m high. Produces white flowers from January to April.	Sandy loam, loamy clay soils with lateritic gravel. Granite outcrops, ridges and slopes.
Reed-like perennial herb growing to 0.35-1 m high. Produces pink flowers from October to December.	Peaty sand over clay soils. Winter wet habitats. Marri and Melaleuca woodland, Melaleuca shrubland.
Rhizomatous or cormous, aquatic perennial herb with floating leaves. Produces green-white flowers from May to November.	Clay. Freshwater ponds, rivers, claypans and wetlands.

6

Species	EPBC Conservation Status	WA Conservation Status	Description	Habitat Preference
Dodonaea hackettiana		Priority 4	Erect shrub or tree growing to 1-5 m high. Produces yellow flowers with green and red parts mainly between July to October.	Sandy soils, associated with limestone outcropping. Limestone ridges, slopes and dunes.
Jacksonia sericea		Priority 4	Low spreading shrub growing to 0.6 m high. Produces flowers with yellow and red and orange parts usually from December to February.	grey/white, yellow/brown sandy loam soils, often associated with limestone. Limestone ridges, slopes and flats.
Kennedia beckxiana		Priority 4	Prostrate or twining shrub or climber. Produces red flowers from September to December.	Sand, loam. Granite hills & outcrops.
Stylidium ireneae		Priority 4	Lax perennial herb growing up to 0.28 m high. Leaves oblanceolate, 0.4 to 2 cm long and 1 to 3 mm wide with an apex subacute to acuminate and entire margin. Leaves and scape are glandular with a racemose inflorescence. Produces pink flowers between October and December.	Sandy loam. Valleys near creek lines, woodland, often with Agonis.
Stylidium longitubum		Priority 4	Erect annual (ephemeral) herb growing to 0.05-0.12 m high. Produces pink flowers with white markings from October to December.	Sandy clay, clay soils. Seasonal wetlands.

Species	EPBC Conservation Status	WA Conservation Status	Description	Habitat Preference	
Stylidium striatum		Priority 4	Erect perennial herb growing to 0.5 m high with basal rosette of leaves. Produces yellow/pale yellow flowers with red/maroon throat markings from September to November.	Yellow/brown sand, sandy clayey loam soils sometimes with gravel. Slopes and flats, laterite.	
Tripterococcus sp. Brachylobus (A.S. George 14234)		Priority 4	Slender, erect, multi- stemmed perennial herb growing to 0.6 m high. Produces orange-yellow flowers from October to February.	Grey-white sand, peaty sand over clay soils. Winter wet flats, shallow depressions, dry flats and slopes.	
Verticordia lindleyi subsp. lindleyi		Priority 4	Erect shrub growing to 0.2 to 0.75 m high. Produces pink flowers with white fringes from November to January (also known from May).	Sand, sandy clay soils. Winter-wet depressions.	
X					





Ordinary Council Meeting

8 City of Kwinana

Figure 9 – Known Locations of Threatened and Priority Flora

Confidential

Table 11 - Threatened and Priority Fauna Species List	
---	--

Lifeform	Common Name	Species
MAMMAL	Western Ringtail Possum	Pseudocheirus occidentalis
INVERTEBRATE	A Short-tongued Bee	Leioproctus douglasiellus
INVERTEBRATE	A Native bee	Neopasiphae simplicior
BIRD	Curlew Sandpiper	Calidris ferruginea
BIRD	Great Knot	Calidris tenuirostris
BIRD	Eastern Curlew	Numenius madagascariensis
BIRD	Northern Siberian Bar-tailed Godwit	Limosa lapponica menzbieri
MAMMAL	Woylie	Bettongia penicillata ogilbyi
BIRD	Australasian Bittern	Botaurus poiciloptilus
BIRD	Baudin's Cockatoo	Calyptorhynchus baudinii
BIRD	Carnaby's Cockatoo	Calyptorhynchus latirostris
BIRD	Australian Painted Snipe	Rostratula australis
BIRD	Tristan Albatross	Diomedea dabbenena
BIRD	Red Knot	Calidris canutus
BIRD	Lesser Sand Plover	Charadrius mongolus
BIRD	Northern Royal Albatross	Diomedea sanfordi
BIRD	Southern Giant-Petrel	Macronectes giganteus



EPBC Act Conservation Status	WA Conservation Status
Critically Endangered	Critically Endangered
Critically Endangered	Endangered
Critically Endangered	Endangered
Critically Endangered	Critically Endangered
Migratory Species	Critically Endangered
Critically Endangered	Critically Endangered
Migratory Species	Critically Endangered Migratory Species
Critically Endangered	Critically Endangered
Migratory Species	Endangered
Critically Endangered	Endangered
Migratory Species	Endangered
Endangered	Endangered
Endangered	Critically Endangered
Endangered	Endangered
Endangered	Endangered
Endangered Migratory Species	Endangered
Endangered Migratory Species	Migratory Species

-0

Lifeform	Common Name	Species	EPBC Act Conservation Status	WA Conservation Status
BIRD	Australian Lesser Noddy	Anous tenuirostris melanops	Vulnerable	Endangered
BIRD	Forest Red-tailed Black Cockatoo	Calyptorhynchus banksii subsp. naso	Vulnerable	Vulnerable
MAMMAL	Chuditch	Dasyurus geoffroii	Vulnerable	Vulnerable
BIRD	Malleefowl	Leipoa ocellata	Vulnerable	Vulnerable
MAMMAL	Australian Sea- lion	Neophoca cinerea	Vulnerable	Vulnerable
MAMMAL	Quokka	Setonix brachyurus	Vulnerable	Vulnerable
BIRD	Australian Fairy Tern	Sternula nereis nereis	Vulnerable	Vulnerable
INVERTEBRATE	Carter's Freshwater Mussel	Westralunio carteri	Vulnerable	Vulnerable
BIRD	Blue Petrel	Halobaena caerulea	Vulnerable	
BIRD	Fairy Prion (Southern)	Pachyptila turtur subantarctica	Vulnerable	
BIRD	Soft-plumaged Petrel	Pterodroma mollis	Vulnerable	
BIRD	White-capped Albatross	Thalassarche steadi	Vulnerable	
BIRD	Indian Yellow- nosed Albatross	Thalassarche carteri	Vulnerable Migratory Species	Endangered
BIRD	Black-browed Albatross	Thalassarche melanophris	Vulnerable Migratory Species	Endangered
BIRD	Greater Sand Plover	Charadrius leschenaultii	Vulnerable Migratory Species	Vulnerable
BIRD	Southern Royal Albatross	Diomedea epomophora	Vulnerable Migratory Species	Vulnerable
BIRD	Wandering Albatross	Diomedea exulans	Vulnerable Migratory Species	Vulnerable
BIRD	Shy Albatross	Thalassarche cauta	Vulnerable Migratory Species	Vulnerable
BIRD	Campbell Albatross	Thalassarche impavida	Vulnerable Migratory Species	Vulnerable
BIRD	Common Sandpiper	Actitis hypoleucos	Migratory Species	Migratory Species
BIRD	Fork-tailed Swift	Apus pacificus	Migratory Species	Migratory Species

Lifeform	Common Name	Species
BIRD	Ruddy Turnstone	Arenaria interpres
BIRD	Sharp-tailed Sandpiper	Calidris acuminata
BIRD	Pectoral Sandpiper	Calidris melanotos
BIRD	Red-necked Stint	Calidris ruficollis
BIRD	Long-toed Stint	Calidris subminuta
BIRD	White-winged Black Tern, White-winged Tern	Chlidonias leucopteru
BIRD	Gull-billed Tern	Gelochelidon nilotica
BIRD	Caspian Tern	Hydroprogne caspia
BIRD	Black-tailed Godwit	Limosa limosa
BIRD	Bridled Tern	Onychoprion anaethetus
BIRD	Osprey, Eastern Osprey	Pandion cristatus
BIRD	Glossy Ibis	Plegadis falcinellus
BIRD	Grey Plover	Pluvialis squatarola
BIRD	Long-tailed Jaeger, Long- tailed Skua	Stercorarius longicaudus
BIRD	Roseate Tern	Sterna dougallii
BIRD	Crested Tern	Thalasseus bergii
BIRD	Wood Sandpiper	Tringa glareola
BIRD	Common Greenshank	Tringa nebularia
BIRD	Marsh Sandpiper, Little Greenshank	Tringa stagnatilis
BIRD	Terek Sandpiper	Xenus cinereus
BIRD	Grey-headed albatross	Thalassarche chrysostoma
BIRD	Amsterdam Albatross	Diomedea amsterdamensis
BIRD	Peregrine falcon	Falco peregrinus
MAMMAL	South-western Brush-tailed Phascogale	Phascogale tapoatafa wambenger

4



Lifeform	Common Name	Species	EPBC Act Conservation Status	WA Conservation Status
INVERTEBRATE	Swan Coastal Plain Shield- backed Trapdoor Spider	Idiosoma sigillatum		Priority 3
BIRD	A Short-tongued Bee	Leioproctus contrarius		Priority 3
REPTILE	Perth Slider	Lerista lineata		Priority 3
REPTILE	Black-striped Snake	Neelaps calonotos		Priority 3
REPTILE	Keeled Legless Lizard (Shark Bay)	Pletholax gracilis subsp. Edelensis		Priority 3
BIRD	Masked Owl (Southwest)	Tyto novaehollandiae novaehollandiae		Priority 3
BIRD	Western False Pipistrelle	Falsistrellus mackenziei		Priority 4
MAMMAL	Rakali	Hydromys chrysogaster		Priority 4
MAMMAL	Quenda	Isoodon fusciventer		Priority 4
BIRD	Australian Little Bittern	Ixobrychus dubius		Priority 4
MAMMAL	Tammar Wallaby	Notamacropus eugenii derbianus		Priority 4
MAMMAL	Western Brush Wallaby	Notamacropus irma		Priority 4
REPTILE	Lined Soil-crevice Skink (Dampier)	Notoscincus butleri		Priority 4
BIRD	Blue-billed Duck	Oxyura australis		Priority 4
BIRD	Red-tailed Tropicbird	Phaethon rubricauda		Priority 4
INVERTEBRATE	Graceful Sunmoth	Synemon gratiosa		Priority 4
BIRD	Hooded Plover	Thinornis rubricollis		Priority 4

Figure 10 – Documented Locations of Threatened and Priority Fauna

Confidential



Ordinary Council Meeting

City of Kwimana	
.4 City of Kwinana	
Figure 10b	Figure 10c
Confidential	Confident

LOCAL BIODIVERSITY STRATEGY



ial

Figure 10d

Confidential

3.4 THREATENED AND PRIORITY ECOLOGICAL COMMUNITIES

Any natural area that is considered to be a Threatened or Priority Ecological Community (TEC or PEC) is considered to have conservation value as a Locally Significant Natural Area. TECs are listed for protection under either the BC Act, the Commonwealth EPBC Act or both. PECs are afforded some protection by DBCA.

A review of DBCA TEC and PEC database (DBCA 2021d) and the EPBC PMST (DAWE 2021) identified four Commonwealth listed TECs and/or its buffer and two State listed TECs as occurring in the City (Table 12). The TECs and PECs known to occur in the City and surrounding region (in accordance with the current DBCA database) are presented spatially in Figure 11.

Table 12 - Threatened and Priority Ecological Communities Occurring within the City

Abbreviated Identifier	Community Name	Commonwealth Category	State Category	Presence within the City
Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Critically Endangered	Priority 3	Yes
Mound Springs SCP	Communities of Tumulus Springs (Organic Mound Springs, Swan Coastal Plain)	Endangered	Critically Endangered	Yes
SCP19b	Woodlands over sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Endangered	Critically Endangered	Buffer within the City
Banksia WL SCP	Banksia dominated woodlands of the Swan Coastal Plain IBRA Region	Endangered	Priority 3	Yes
SCP21c	Low lying Banksia attenuata woodlands or shrublands (as a component of Banksia WL SCP)	Endangered (part)	Priority 3	Yes
SCP22	Banksia ilicifolia woodlands (as a component of Banksia WL SCP)	Endangered (part)	Priority 3	Yes
SCP26a	Melaleuca huegelii - Melaleuca systena shrublands on limestone ridges		Endangered	Yes
SCP24	Northern Spearwood shrublands and woodlands	-	Priority 3	Yes
SCP25	Southern Eucalyptus gomphocephala - Agonis flexuosa woodlands		Priority 3	Yes



3.4.1 Tuart Woodlands and Forests TEC

The Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain Ecological Community (Tuart Woodlands and Forests TEC) was approved for inclusion as an Endangered TEC under the EPBC Act on 4 July 2019. This ecological community occurs as woodland, forest or other structural forms associated with soils of the Swan Coastal Plain with a prominent tree layer of Eucalyptus gomphocephala as the defining feature (DEE 2019b).

The Tuart Woodlands and Forests TEC occurs within the Swan Coastal Plain IBRA region within the Perth subregion, from Jurien, 200 km north of Perth, to Sabina River near Busselton, 225 km south of Perth (DEE 2019c). The distribution of the ecological community is limited by the distribution of Tuart, although Tuart trees do also occur as a component of other vegetation communities, including the nationally listed Banksia woodlands TEC (DEE 2016).

Twelve Floristic Community Types (FCTs) from three supergroups described by Gibson et al. (1994) contain Tuart trees as a component of the TEC and these are summarised in **Table 13**.



Table 13 - Floristic Community Types Corresponding to the Tuart Woodlands and Forests TEC (Gibson et al. 1994)

FCT	FCT Name	WA TEC/ PEC	EPBC TEC
Super	group 2 – Seasonal Wetlands		
16	Highly saline seasonal wetlands		
17	Melaleuca rhaphiophylla - Gahnia trifida seasonal wetlands		
19b	Woodlands over sedgelands in Holocene dune swales		
Super	group 3– Uplands centered on Bassendean Dunes		
21a	Central Banksia attenuata - Eucalyptus marginata woodlands		
Super	group 4 - Uplands centered on Spearwood and Quindalup Dunes		
24	Northern Spearwood shrublands and woodlands	P3	
25	Southern Eucalyptus gomphocephala – Agonis flexuosa woodlands	P3	
26b	Woodlands and mallees on Limestone		
28	Spearwood Banksia attenuata or Banksia attenuata - Eucalyptus woodlands		
29a	Coastal shrublands on shallow sands	P3	
30b	Quindalup Eucalyptus gomphocephala and/or Agonis flexuosa woodlands	P3	
30c2	Woodlands and shrublands on Holocene dunes (re-allocated from 30c and 30a as per Gibson et al. 1994)		
S11	Northern Acacia rostellifera - Melaleuca systena shrublands		

3.4.2 Mound Springs SCP (TEC)

The Mound Springs SCP TEC is characterised by a continuous discharge of groundwater in raised areas of peat. Flora species recorded in this community include Banksia littoralis, Melaleuca preissiana and Eucalyptus rudis with Agonis linearifolia, Pteridium esculetum, Astartea fascicularis and Cyclosorus interruptus. Several non-vascular plants are also associated with this community (CALM 2006).

3.4.3 SCP 19b – Woodlands over sedgelands in Holocene dune swales of the southern Swan Coastal Plain

The Woodlands over sedgelands in Holocene dune swales (SCP 19b) ecological community occurs in linear damplands and occasionally sumplands between Holocene dunes (DEC 2011). This community typically occurs within close proximity of the coast and is characterised by species such as Acacia rostellifera, Acacia saligna, Xanthorrhoea preissii, Baumea juncea, Ficinia nodosa and Lepidopserma gladiatum (DEC 2011).



0

3.4.4 Banksia Woodlands TEC

The Banksia Woodlands of the Swan Coastal Plain Ecological Community (Banksia woodlands TEC) was approved for inclusion as an Endangered TEC under the EPBC Act on 16 September 2016. This ecological community is woodland associated with some soils of the Swan Coastal Plain with a prominent tree layer of Banksia with scattered Eucalypts and other tree species among or emerging above the canopy. The understorey is comprised of a species rich mix of sclerophyllous shrubs, graminoids and forbs (TSSC 2016).

The Banksia woodlands TEC is largely restricted to the Swan Coastal Plain IBRA bioregion, within the Perth (SWA02) and Dandaragan (SWA01) sub-regions. It extends into the adjacent Jarrah Forrest IBRA region (JA01 and JA02 sub-regions) and areas of the Whicher and Darling escarpments where pockets of Banksia woodland may occur. This TEC mainly occurs on deep Bassendean and Spearwood sands or occasionally on Quindalup sands at the eastern edge (Threatened Species Scientific Committee (TSSC) 2016).

Twenty-one FCTs from three supergroups described by Gibson et al. (1994) in Bush Forever (Government of Western Australia 2000), Keighery et al. (2012), and Urban Bushland Council (2011) best correspond to the Banksia woodlands TEC (TSSC 2016) which are summarised in **Table 14**.

Table 14 – Floristic Community Types Corresponding to the Banksia Woodlands TEC

FCT	FCT Name	WA TEC/PEC	EPBC TEC
Superg	group 3 – Uplands centered on Bassendean Dunes and Dandaragan P	lateau	
20a	Banksia attenuata woodlands over species rich dense shrublands	Endangered	
20b	Eastern Banksia attenuata and/or Eucalyptus marginata woodlands	Endangered	
20c	Eastern shrublands and woodlands	Critically Endangered	Endangered
21a	Central Banksia attenuata - Eucalyptus marginata woodlands		
21b	Southern Banksia attenuata woodlands	P3	
21c	Low lying Banksia attenuata woodlands or shrublands	P3	
22	Banksia ilicifolia woodlands	P3	
23a	Central Banksia attenuata - Banksia menziesii woodlands		
23b	Northern Banksia attenuata - Banksia menziesii woodlands	P3	
23c	North-eastern Banksia attenuata - Banksia menziesii woodlands		
S09	Banksia attenuata woodlands over dense low shrublands		

FCT FCT Name Supergroup 4 - Uplands centered on Spearwood and Quindalu 24 Northern Spearwood shrublands and woodlands 25 Southern Eucalyptus gomphocephala - Agonis flexuos woodlands 28 Spearwood Banksia attenuata or Banksia attenuata woodlands Whicher Scarp FCTs (Keighery et al. 2012) Central Whicher Scarp Mountain Marri Woodland WHS A1 A2 North Whicher Scarp Jarrah and Woody Pear woodland A2 A3 North Whicher Scarp Banksia and Woody Pear woodla WHSFCT_A3 A4 Whicher Scarp Banksia grandis, Jarrah and Marri wood WHSFCT_A4 B1 Swan Coastal Plain / North Whicher Scarp Banksia atte woodland WHSFCT_B1 B2 West Whicher Scarp Banksia attenuata woodland WHS C2 Whicher Scarp Jarrah woodland on deep coloured sand C2

3.4.5 SCP 21c - Banksia attenuata and/or Eucalyptus marginata woodlands of the eastern side of the Swan Coastal Plain (part of Banksia woodlands TEC)

This community occurs on the Bassendean soil system between low dunes and interwoven wetlands extending from Gingin to Bunbury. It is significantly less species rich than the other sub-groups with an average of 40 species per site. The community may be dominated by Melaleuca preissiana, Banksia attenuata, Banksia menziesii, Regelia ciliata, Eucalyptus marginata or Corymbia calophylla (DEE 2016).

3.4.6 SCP 22 - Shrublands and woodlands of the eastern side of the Swan Coastal Plain (part of Banksia woodlands TEC)

This community occupies low lying sites and supports Banksia ilicifolia and Banksia attenuata woodlands with Melaleuca preissiana also recorded. The community typically has an open understorey and may be seasonally waterlogged (DEE 2016).

3.4.7 SCP 26a - Melaleuca huegelii - Melaleuca systena Shrublands

The Melaleuca huegelii – Melaleuca systena shrublands of limestone ridges (SCP 26a) is defined as comprising of species rich thickets, heaths or scrubs dominated by Melaleuca huegelii, M. systena (previously M. acerosa), Dryandra sessilis over Grevillea preissii, Acacia lasiocarpa and Spyridium globulosum, occurring on skeletal soil on ridge slopes and ridge tops (Gibson et al. 1994).



	WA TEC/PEC	EPBC TEC
up Dunes		
	P3	
a	Р3	
Eucalyptus		
SFCT_A1	P1	
d WHSFCT_		
ind		
lland		
enuata		
SFCT_B2		
ds WHSFCT_		



3.4.8 SCP 24 – Northern Spearwood Shrublands and Woodlands

The Northern Spearwood shrublands and woodlands (SCP 24) is defined as heaths with scattered Eucalyptus gomphocephala occurring on deeper soils north from Woodman Point. Most sites occur on the Cottesloe unit of the Spearwood system. The heathlands in this group typically include Dryandra (Banksia) sessilis, Calothamnus quadrifidus and Schoenus grandiflorus (TSSC 2016). Other species typical for this community are Lepidosperma angustatum, Desmocladus flexuosus, Melaleuca systena, Xanthorrhoea preissii, Phyllanthus calycinus, Dianella revoluta, Conostylis aculeata and Lomandra maritima (Gibson et al. 1994).

3.4.9 SCP 25 - Southern Eucalyptus gomphocephala - Agonis flexuosa Woodlands

The Southern Eucalyptus gomphocephala - Agonis flexuosa Woodlands is a community type centred on the Spearwood and Quindalup system. SCP 25 occurs south of Woodman Point on the Cottesloe unit of the Spearwood system and is significantly richer in species than the northern group of Eucalyptus gomphocephala communities. Typical shrub species to occur are Hibbertia hypericoides, Macrozamia riedlei and Phyllanthus calycinus (Gibson et al. 1994).



Figure 11 - Threatened and Priority Ecological Communities





WATERWAYS AND WETLANDS 3.5

The Geomorphic Wetlands of the Swan Coastal Plain dataset displays the location, boundary, geomorphic classification (wetland type) and management category of wetlands within the City of Kwinana. Wetland management categories are based on their ecological, hydrological and geomorphological significance, and the degree of disturbance that has occurred. The three Wetland Management Categories on the Swan Coastal Plain can be summarised as follows:

- Conservation Category (CC) wetlands that support a high level of ecological attributes and functions (generally having intact vegetation and natural hydrological processes), or that have a reasonable level of functionality and are representative of wetland types that are rare or poorly protected.
- Resource Enhancement (RE) wetlands that have been modified (degraded) but still support substantial ecological attributes (wetland dependant vegetation covering more than 10%) and functions (hydrological properties that support wetland dependent vegetation and associated fauna) and have some potential to be restored to CC quality. Typically, such wetlands still support some elements of the original native vegetation, and hydrological function.
- Multiple Use (MU) wetlands that are assessed as possessing few remaining ecological attributes and functions. While such wetlands can still play an important role in regional or landscape ecosystem management, including water management, they are considered to have low intrinsic ecological value. Typically, they have very little or no native vegetation remaining (less than 10%).

Conservation Category and Resource Enhancement wetlands are of ecological value and afforded protection through the planning process.

A total of 167 Geomorphic Wetlands of the Swan Coastal Plain are located within the City, including 50 Conservation Category wetlands (Appendix A), 61 Resource Enhancement, 49 Multiple Use and seven 'Not Applicable' wetlands. The Conservation Category and Resource Enhancement wetlands of the Swan Coastal Plain occurring within the City are spatially presented in Figure 12.



Figure 12 - Geomorphic Wetlands of the Swan Coastal Plain







3.6 REGIONAL AND LOCAL ECOLOGICAL LINKAGES

Land clearing is a fundamental pressure on the environment and causes the loss, fragmentation and degradation of native vegetation (Jackson et. al. 2016). The viability of any natural area depends on its size, proximity to other LNAs, and the quality of linkages or barriers in the landscape between them (Del Marco et al 2004, Davis and Brooker 2008, Molloy et al 2009). Ecological linkages facilitate the movement of wildlife and connect significant vegetation, habitat and landscape features (City of Wanneroo 2018).

Local and regional linkages identified within the City generally run north to south or, to a lesser extent, east to west. Proposed local ecological linkages as presented in the City's draft Local Planning Strategy (2021a) connect Perth Biodiversity Project (PBP) regional linkages (Figure 13).



Figure 13 - Regional and Local Ecological Linkages





3.7 THREATS TO BIODIVERSITY

Land clearing is a fundamental pressure on the environment and causes the loss, fragmentation and degradation of native vegetation (Jackson et. al. 2016). The viability of any natural area depends on its size, proximity to other LNAs, and the quality of linkages or barriers in the landscape between them (Del Marco et al 2004, Davis and Brooker 2008, Molloy et al 2009). Ecological linkages facilitate the movement of wildlife and connect significant vegetation, habitat and landscape features (City of Wanneroo 2018).

Local and regional linkages identified within the City generally run north to south or, to a lesser extent, east to west. Proposed local ecological linkages as presented in the City's draft Local Planning Strategy (2021a) connect Perth Biodiversity Project (PBP) regional linkages (Figure 13).

3.7.1 Invasive Species

Invasive species pose a threat to local biodiversity as they displace native species and limit recruitment of endemic flora by outcompeting them for resources such as food, water, light and shelter, and often don't have natural predators to keep them under control. Weeds are also a fire hazard, increasing fuel load and the likelihood of initiating a bushland fire. Feral/introduced animals are another example of invasive species, where they displace and outcompete local fauna for resources, reducing native population numbers through limiting reproduction opportunities and predation (City of Swan 2015).

3.7.2 Fragmentation from Clearing

Agricultural practices have led to a decline in natural areas over time, resulting in a fragmented landscape. Genetic dispersal in the form of seeds and pollen for flora becomes restricted while smaller fragmented habitats are more susceptible to degradation. Movement across the landscape for local fauna is also made more difficult. Further clearing and increased habitat fragmentation poses an ongoing threat to native species (City of Swan 2015).

3.7.3 Land Use and Development

Poor land use planning and development practices with lack of consideration for biodiversity values pose a threat to local species (City of Swan 2015). Subdivision and development of the landscape can result in reduced functional natural areas and ecological linkages, decreased remnant vegetation communities, and altered wetlands and watercourses (Shire of Kalamunda 2008).

3.7.4 Altered Hydrology and Erosion

Clearing and development can alter natural wetlands and watercourses. Changes in water availability influence species assemblages and habitat suitability. Increased nutrient run-off and pollutants from developments can cause eutrophication (algal blooms), increase in weeds, and death of aquatic life in wetlands. Greater stormwater discharge into creek lines causes erosion in natural areas, causing sedimentation and further contribution to eutrophication downstream (Shire of Kalamunda 2008).

3.7.5 Pathogens

Pathogens such as Phytophthora Dieback and Marri Canker (Quambalaria coyrecup) pose a threat to biodiversity by causing death to endemic flora and altering vegetation structure. Ongoing spread of pathogens occurs through soil or plant material movement from infested to non-infested areas (City of Swan 2015).

3.7.6 Degradation of Natural Areas

Natural areas can be impacted by off-road driving activities and rubbish dumping. Offroad driving often results in damage to vegetation and ongoing erosion, as well as the introduction of weeds and potentially contaminants from hydrocarbon spills. Illegal dumping can include various waste, stolen or abandoned vehicles and garden waste. Dumped garden waste can pose a threat to biodiversity through the introduction of weeds which will compete with native species for nutrients, water and space. Other rubbish dumped illegally could potentially also contain other environmental contaminants harmful to biodiversity, such as hydrocarbons.

3.7.7 Global and Regional Threats

Climate change predictions pose an ongoing threat to local biodiversity. Rises in sea level will affect coastal biodiversity while a warmer and drier climate can result in an increase in droughts, storms and bushfires leading to loss of habitat and species extinctions over time (City of Canning 2018).







4 BIODIVERSITY PLANNING PRECINCTS

LNAs within the City were divided into five planning precincts that are primarily based on zoning within the MRS to determine the proportion of remnant vegetation and rate of decline within each precinct. The Biodiversity Planning precincts are categorised as follows:

- Precinct1 Urban precinct Includes all areas that have been zoned as Urban or Urban deferred
- Precinct 2 Rural precinct Includes all areas that have been zoned as Rural or Rural – Water Protection
- Precinct 3 Industrial precinct Includes all areas that have been zoned as Industrial, Special industrial and Port installations
- Precinct 4 Public purposes precinct Includes all areas that have been zoned as high school, prison, special uses, Water Authority of WA, primary regional roads, other regional roads and railways
- Precinct 5 Parks and recreation precinct Includes all areas zoned as parks and recreation.

A summary of remnant vegetation occurring within each of these precincts **(Table 15, Figure 14** series) indicates that remnant vegetation has declined in all precincts over a five-year period, since 2015, except for Category 5 – Parks and recreation. The largest decline in vegetation occurred within the Urban precinct, exhibiting a decline of 36.46% over five years. These results highlight the need to place greater emphasis on the urban precinct when prioritising LNAs for protection.

Table 15 - Remnant Vegetation within the City of Kwinana

Precinct	Remnant Vegetation in 2015 (ha)	Current (2020)* Remnant Vegetation (ha)	% Change in Vegetation Extent 2015-2020
Category 1 – Urban	756.17	480.47	-36.46
Category 2 – Rural	1,303.30	1216.28	-6.68
Category 3 – Industrial	242.24	199.20	-17.77
Category 4 – Public purposes	450.83	432.85	-3.99
Category 5 – Parks and recreation	1,842.14	1,854.73	+0.68
TOTAL	4,594.68	4,183.54	

*Latest available data from DPIRD 2020

Figure 14 - Biodiversity Planning Precincts





Figure 14b



5 VEGETATION INVENTORY AND RETENTION TARGETS

Retention of at least 30% of the pre-European extent of each ecological community is required to prevent an exponential loss of species and failure of ecosystem processes (Del Marco et. al. 2004).

In order to establish targets for the retention of vegetation in the City, an inventory of the current retention levels, in comparison to pre-European extent, within each of the Precincts of the City have been determined, as outlined in **Table 16** and **Table 17**. The City of Kwinana lies within the Perth metropolitan area and as such, generally, the 10% retention target applies. This LBS aims to protect and enhance the City's natural areas and therefore the higher retention target of 30% has been applied to all precincts.

All vegetation associations and complexes were allocated a retention category; the percentage of the current remaining extent of vegetation within the City of Kwinana. The retention categories are defined as follows:

- Well Retained (>50% pre-European vegetation extent remaining)
- Adequately Retained (50 35% pre-European vegetation extent remaining)
- Close to Retention Target (35% 30% pre-European vegetation extent remaining)
- Under Retention Target No Further clearing (<30% pre-European vegetation extent remaining).

It is important to note that whilst the 30% retention target may be considered 'best practice', in certain precincts such as Precinct 1 – Urban, and Precinct 3 – Industrial, due to the extensive clearing already occurring within these precincts, the retention target of 30% is unlikely to be achievable, and therefore, the lower retention target of 10% may apply.







-21

City of Kwinana

			Vegetatio	n Association	ns (Beard 1990)
Precinct	Association	Pre- European Extent across the City (ha)	2020 Extent (ha)*	% of Pre- European Extent Remaining in 2020	Retention Category
	6	66.51	9.60	14.43	Under Retention Target - No Further clearing
	968	12.60	0.52	4.13	Under Retention Target - No Further clearing
Precinct 1 – Urban	998	1,371.52	135.88	9.91	Under Retention Target – No Further clearing
	1001	1,432.20	325.35	22.72	Under Retention Target - No Further clearing
	TOTAL	2,882.83	471.35	16.35	-
	6	888.91	124.93	14.05	Under Retention Target - No Further clearing
	51	1.06	1.62 x 10-3	0.15	Under Retention Target - No Further clearing
Precinct 2 – Rural	968	26.87	5.72	21.29	Under Retention Target - No Further clearing
	998	882.55	174.96	19.82	Under Retention Target - No Further clearing
	1001	2,418.34	912.29	37.72	Adequately Retained
	TOTAL	4,217.73	1,217.90	28.87	
	998	315.45	107.53	34.09	Close to Retention Target
Precinct 3 – Industrial	3048	1074.01	90.68	8.44	Under Retention Target - No Further clearing
	TOTAL	1,389.46	198.21	14.26	

Table 16 - Retained Vegetation Associations within each Precinct in the City of Kwinana

			Vegetatio	n Associatio
Precinct	Association	Pre- European Extent across the City (ha)	2020 Extent (ha)*	% of Pre- European Extent Remaining in 2020
	6	108.95	42.86	39.34
	51	3.82	0.57	14.92
Precinct	968	5.88	0.34	5.78
4 – Public purposes	998	656.91	272.28	41.45
purposes	1001	314.11	94.69	30.15
	3048	141.10	22.36	15.85
	TOTAL	1,230.77	433.10	35.19
	6	412.71	374.54	90.75
	51	146.21	140.77	96.28
Precinct 5 –	968	6.78	6.35	93.66
Parks and recreation	998	1,078.81	808.58	74.95
	1001	528.69	456.71	86.38
	3048	104.18	67.11	64.42
	TOTAL	2,277.39	1,854.06	81.41
GRAND TOT	AL	11,998.19	4,174.62	34.80

*Latest available data from DPIRD 2020

6

LOCAL BIODIVERSITY STRATEGY

ns (Beard 1990)

Retention Category

Adequately Retained Under Retention Target - No Further clearing

Under Retention Target - No Further clearing

- Adequately Retained Close to Retention Target
- Under Retention Target No Further clearing

-Well Retained

Well Retained

Well Retained

Well Retained

Well Retained

Well Retained

6

Table 17 - Retained Vegetation Complexes within each Precinct in the City of Kwinana

		Veg	etation Ass	ociations (Be	ard 1990)
Precinct	Association	Pre- European Extent across the City (ha)	2020 Extent (ha)*	% of Pre- European Extent Remaining in 2020	Retention Category
	Bassendean complex – c&s	1249.16	300.64	24.07	Under Retention Target - No Further clearing
	Cottesloe complex - c&s	986.28	67.65	6.86	Under Retention Target - No Further clearing
Precinct 1 –	Herdsman Complex	227.36	31.76	13.97	Under Retention Target - No Further clearing
Urban	Karrakatta complex - c&s	420.03	71.30	16.97	Under Retention Target - No Further clearing
	Serpentine River complex	2.0 x 10-6	0	0	NA
	TOTAL	2882.83	471.35	16.35	
	Bassendean complex - c&s	2503.14	849.66	33.94	Close to Retention Target
	Cottesloe complex - c&s	681.65	135.91	19.94	Under Retention Target - No Further clearing
	Guildford complex	19.47	2.77	14.23	Under Retention Target - No Further clearing
Precinct 2 – Rural	Herdsman Complex	138.91	81.27	58.51	Well Retained
	Karrakatta complex - c&s	874.14	148.14	16.95	Under Retention Target - No Further clearing
	Serpentine River complex	0.42	0.15	35.71	Adequately Retained
	TOTAL	4217.73	1217.90	28.88	
	Cottesloe complex - c&s	490.59	123.35	25.14	Under Retention Target - No Further clearing
Precinct 3 – Industrial	Quindalup complex	888.53	74.00	8.33	Under Retention Target - No Further clearing
	TOTAL	1379.12	197.35	14.31	

4 - Public purposesKarrakatta complex - c&s104.8853.5851.09Well RetainedQuindalup complex207.51103.0649.67Adequately RetainedSerpentine River complex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedBassendean complex - c&s615.52536.7487.2Well RetainedCottesloe complex - c&s1046.87778.8674.4Well RetainedPrecinct 5 - Parks and189.77176.8893.21Well Retained				Vegetation	Associations	(Beard 1990)
Complex - c&s311.0091.5129.42Under Retention Target No Further clearingPrecinct 4 - Public purposesCottesloe complex c&s583.90180.2430.87Close to Retention TargetHerdsman Complex c cws23.404.6319.79Under Retention Target - No Further clearingKarrakatta complex c cws104.8853.5851.09Well RetainedQuindalup complex c cws207.51103.0649.67Adequately RetainedSerpentine River complex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedBassendean complex- c c%s615.52536.7487.2Well RetainedPrecint5 Parks and recreation 51046.87778.8674.4Well RetainedVerinduct 5 Parks and River189.77176.8893.21Well RetainedQuindalup complex- c c%s234.90218.2792.92Well RetainedQuindalup complex- c c%s187.27140.5775.06Well Retained	Precinct	Association	European Extent across the	Extent	European Extent Remaining	Retention Category
Precinct 4 - Public purposescomplex- c&s583.90180.2430.87Close to Retention TargetHerdsman complex23.404.6319.79Under Retention Target - No Further clearingKarrakatta complex104.8853.5851.09Well RetainedQuindalup complex207.51103.0649.67Adequately RetainedSerpentine romplex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedForcing complex615.52536.7487.2Well RetainedCottesloe complex- c&s1046.87778.8674.4Well RetainedHerdsman recreation189.77176.8893.21Well RetainedHerdsman 		complex	311.00	91.51	29.42	
Precinct 4 - Public purposesComplex Complex c&s23.404.6319.79No Further clearing4 - Public purposesKarrakatta complex c&s104.8853.5851.09Well RetainedQuindalup complex207.51103.0649.67Adequately RetainedSerpentine River complex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedBassendean complex- c&s615.52536.7487.2Well RetainedCottesloe complex- c&s1046.87778.8674.4Well RetainedHerdsman complex- c&s189.77176.8893.21Well RetainedKarrakatta complex- c&s234.90218.2792.92Well RetainedQuindalup recreation187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained		complex -	583.90	180.24	30.87	Close to Retention Target
4 - Public purposesKarrakatta complex - c&s104.8853.5851.09Well RetainedQuindalup complex207.51103.0649.67Adequately RetainedSerpentine River complex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedTOTAL1230.77433.1035.19Adequately RetainedComplex - complex -140.5775.06Well RetainedVell Retained complex - complex - complex - complex - complex -3.062.7489.54Well Retained	Procinct		23.40	4.63	19.79	
complex207.31103.0649.67Adequately RetainedSerpentine River complex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedBassendean complex- c&s615.52536.7487.2Well RetainedCottesloe complex- c&s1046.87778.8674.4Well RetainedHerdsman recreation189.77176.8893.21Well RetainedKarrakatta complex- c&s234.90218.2792.92Well RetainedQuindalup complex recreation187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained	4 – Public	complex -	104.88	53.58	51.09	Well Retained
River complex0.080.08100Well RetainedTOTAL1230.77433.1035.19Adequately RetainedBassendean complex- c&s615.52536.7487.2Well RetainedCottesloe complex- c&s1046.87778.8674.4Well RetainedPrecinct 5 Parks and recreationHerdsman Complex- c&s189.77176.8893.21Well RetainedPrecinct 5 Parks and recreationQuindalup cws187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained			207.51	103.06	49.67	Adequately Retained
Precint 5 Parks and recreationBassendean complex - c&s615.52536.7487.2Well RetainedCottesloe complex - c&s1046.87778.8674.4Well RetainedHerdsman Complex189.77176.8893.21Well RetainedKarrakatta complex - c&s234.90218.2792.92Well RetainedQuindalup complex187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained		River	0.08	0.08	100	Well Retained
Precinct 5 Parks and recreationcomplex - c&s615.52536.7487.2Well RetainedPrecinct 5 Parks and recreationCottesloe complex1046.87778.8674.4Well RetainedHerdsman Complex189.77176.8893.21Well RetainedKarrakatta complex234.90218.2792.92Well RetainedQuindalup complex187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained		TOTAL	1230.77	433.10	35.19	Adequately Retained
Precinct 5 Parks and recreationComplex - c&s1046.87778.8674.4Well RetainedHerdsman Complex189.77176.8893.21Well RetainedKarrakatta complex - c&s234.90218.2792.92Well RetainedQuindalup complex187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained		complex -	615.52	536.74	87.2	Well Retained
Precinct 5 Parks and recreationComplex189.77176.8893.21Well RetainedMarkatta complex - c&s234.90218.2792.92Well RetainedQuindalup complex187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained		complex -	1046.87	778.86	74.4	Well Retained
Parks and recreationKarrakatta complex - c&s234.90218.2792.92Well RetainedQuindalup complex187.27140.5775.06Well RetainedSerpentine River complex3.062.7489.54Well Retained	Precipct 5 -		189.77	176.88	93.21	Well Retained
complex187.27140.5775.06Well RetainedSerpentine River3.062.7489.54Well Retainedcomplex	Parks and	complex -	234.90	218.27	92.92	Well Retained
River 3.06 2.74 89.54 Well Retained			187.27	140.57	75.06	Well Retained
TOTAL 2277.39 1854.06 81.41 Well Retained		River	3.06	2.74	89.54	Well Retained
		TOTAL	2277.39	1854.06	81.41	Well Retained



Based on the current pre-European vegetation extents remaining within each precinct, a target retention level of 30% was applied. Numerous vegetation associations and vegetation complexes within each precinct fall below the 30% retention target as summarised in **Table 18** and spatially presented in **Figure 15**.

Table 18 – Summary of Vegetation Associations and Complexes with Less Than 30% Remaining within the City

Precinct	Associations	Complexes
Precinct 1 – Urban	6 968 998 1001	Bassendean complex – central and south Cottesloe complex – central and south Herdsman Complex Karrakatta complex – central and south
Precinct 2 – Rural	6 51 968 998	Cottesloe complex – central and south Guildford complex Karrakatta complex – central and south
Precinct 3 – Industrial	3048	Cottesloe complex – central and south Quindalup complex
Precinct 4 – Public purposes	51 968 3048	Bassendean complex - central and south Herdsman Complex
Precinct 5 – Parks and recreation	NA	NA



Figure 15 – Biodiversity Planning Precincts Vegetation Retention Targets





0

Figure 15b



Figure 15c





Figure 15d



Figure 15e



LOCAL NATURAL AREA VALUES AND PRIORITISATION

6.1 **DEGRADATION OF NATURAL AREAS**

Natural area prioritisation provides an effective tool for strategically identifying areas with existing or potential high conservation values and informing future land use decisions (Nam Natura 2021) and identifies priority areas for protection and conservation.

The purpose of the prioritisation process is to identify LNAs where multiple biodiversity values overlap as they can provide a good opportunity to meet conservation needs for multiple species or ecosystems (Nam Natura 2020). LNAs considered to be of high priority should be considered for formal protection to prevent degradation and optimise opportunities for enhancement.

Guidelines on determining prioritisation of LNAs were developed as part of the Perth Biodiversity Project (Del Marco et al. 2004) and have been adapted for prioritisation of LNAs within the City of Kwinana, as part of this LBS.

Prioritisation considers two categories of criteria:

- 1. Regional conservation significance criteria, supported by legislation and policy (EP Act, BC Act, and EPA Guidance Statement No 33), in the following categories:
 - Representation
 - Rarity
 - Diversity
 - Wetland, streamline, estuarine, coastal vegetation
 - Maintenance of ecological functions (patch size and connectivity).
- Locally significant vegetation and local ecological linkages as outlined in the Local Government Biodiversity Planning Guidelines (Del Marco et al. 2004).

Due to the large number of LNAs within the City, prioritisation within this LBS was restricted to those LNAs identified to be of high conservation value, or that do not occur within areas already receiving management and protection.

In order to determine the LNAs of high conservation value, an initial screening was conducted. Each LNA was analysed with the aid of current available spatial data and was determined to be of high conservation value if it:

- supports known areas of TECs or occurs within a TEC buffer
- supports known populations of Threatened Flora
- contains vegetation complexes with <10% remaining within the Swan Coastal Plain IBRA Region
- is within 5 km of a confirmed Black-cockatoo breeding site or its buffer.

Other criteria such as the presence of Threatened or Priority fauna were not addressed, due to the mobile nature of animals and the ability of fauna to move throughout their home range.

Discussions with the City identified that areas of current and future development are facing imminent threats from clearing and therefore, were nominated to be a focus of prioritisation.

Areas of remnant vegetation that occur on the Jandakot Water Mound are afforded some protection from clearing due to the requirement for submission of a Development Application for assessment and approval by the City. All LNAs that do not meet the aforementioned criteria or occur on the Jandakot Water Mound are proposed in this LBS to be prioritised at a later date, as part of future prioritisation efforts as per the strategic actions listed in Section 6.3.

Areas that were not part of LNAs (Bush Forever, DBCA Managed Lands and Regional Parks) were removed from this dataset in order to limit prioritisation to only the LNAs within the City. Additionally, City reserves and parks that are currently managed by the City, and areas within the Jandakot Mound were not assessed against the prioritisation criteria listed in Table 19.

The screening to determine LNAs of high conservation value determined that 1,110 areas comprising 1,031.82 ha were relevant for initial prioritisation as part of this LBS (Figure 17) (Appendix B).

In order to prioritise the City's LNAs considered to be of high conservation value, each was assessed against the criteria listed in Table 19 and scored as per the given weightings. The guidelines defined by Del Marco et. al. (2004) were adapted in order to better suit vegetation and LNAs within the City of Kwinana, particularly pertaining to the current extent of vegetation remaining within the city, and the presence of Threatened Ecological Communities. A number of criteria developed by Del Marco et. al. (2004) were not assessed such as 'Natural areas in good or better condition that contain both upland and wetland structural plant communities', due to the lack of available information, and therefore, such criteria were not used.

In order to prioritise the City's LNAs considered to be of high conservation value, each was assessed against the criteria listed in Table 19 and scored as per the given weightings. The guidelines defined by Del Marco et. al. (2004) were adapted in order to better suit vegetation and LNAs within the City of Kwinana, particularly pertaining to the current extent of vegetation remaining within the city, and the presence of Threatened Ecological Communities. A number of criteria developed by Del Marco et. al. (2004) were not assessed such as 'Natural areas in good or better condition that contain both upland and wetland structural plant communities', due to the lack of available information, and therefore, such criteria were not used.



The criteria were selected from the list provided in the Perth Biodiversity Project (Del Marco et al. 2004), using criteria that were deemed relevant to the City. The extent of vegetation remaining within each LNA was assessed using the 2020 dataset of remaining pre-European native vegetation extent (DPIRD 2020).

Each individual criterion was allocated a score, weighted to reflect the relative importance (ecological value) of each. For example, the presence of Threatened flora receives a higher score than areas that containing Priority flora **(Table 19)**. If a criterion is met within the LNA, the weighted score is applied and if the criterion is not met, no score (0) is applied, with scores totalled, providing a possible score of 46 across the 21 criteria.

The score achieved by each LNA provides an indication of the number and importance of criteria being met, the potential for the area to be of conservation value and therefore its priority for action.

All definitive decisions regarding actions implemented for each LNA should be supported by field assessments to confirm the biodiversity value of each. Specialist advice will be required to determine the presence or absence of features of conservation and biodiversity significance and importance, and in confirming suitable actions for these LNAs, but guided by this LBS and future iterations of the list of strategic actions.

Prioritisation of high conservation value LNAs considered to be under imminent threat are spatially presented in **Figure 17** and summarised in **Appendix B**. All other LNAs not prioritised in this assessment will be prioritised as part of future strategic actions.





Figure-16---LNA-Prioritisation-Methodology1

Figure 16 - LNA Prioritisation Methodology



Figure 17 – High Conservation Value Local Natural Areas



Figure 18 – Local Natural Areas Prioritisation





0

Table 19

City of Kwinana

Criteria Code	Criteria (PBP 2013)	Spatial Data Representation	Weighted Criteria Score
Regional	Representation (Representative of):		
P1_2a	a vegetation complex with 30% or less remaining and <10% protected (formal) in the Swan Coastal Plain IBRA region	Vegetation extent by vegetation complexes	1
P1_2b	a vegetation complex with 30% or less remaining in the Swan Coastal IBRA region	Vegetation extent by vegetation complexes	3
P1_2c	a vegetation complex with 90-100% of its original extent occurring within the City	Pre-European extent of vegetation complexes in the IBRA region	1
P1_2d	a vegetation complex with 60-89% of its original extent occurring within the City	Pre-European extent of vegetation complexes in IBRA region	1
P1_3	large (greater than 20 ha) natural areas	Remnant vegetation in patches greater than 20 ha	2
Rarity			
P3_3a	Contains a Commonwealth listed Threatened Ecological Community (TEC)	TEC boundaries (DBCA 2021d)	4
P3_3b	Contains a State listed Threatened Ecological Community (TEC)	TEC boundaries (DBCA 2021d)	4
P3_4	Contains a Priority Ecological Community (PEC)	PEC boundaries (DBCA 2021d)	1
P3_5	Contains Threatened Flora	Threatened flora locations (DBCA 2021a)	4
P3_6	Contains Priority Flora	Priority flora (DBCA 2021a)	2
P3_7a	Supports Commonwealth Threatened and specially protected fauna	Threatened fauna (CR, EN, VU, OS – Other Specially Protected) (DBCA 2021d)	4
P3_7b	Supports State Threatened and specially protected fauna	Threatened fauna (CR, EN, VU, OS – Other Specially Protected) (DBCA 2021b)	4
P3_8	Supports Priority fauna	Priority fauna (DBCA 2021b)	1
P3_9a		Areas requiring investigation for Carnaby's-cockatoo foraging habitat (Swan Coastal Plain)	2
P3_9b	Provides significant habitat for significant fauna	Carnaby's Cockatoo habitat - breeding sites (confirmed and possible) within 12 km buffer	2
P3_9c		Carnaby's Cockatoo habitat - roosting sites (confirmed and unconfirmed) within 6 km buffer	2

		LOCAL BIODIVERSITY	STRATEGY
Criteria Code	Criteria (PBP 2013)	Spatial Data Representation	Weightee Criteria Score
Maintain	ing ecological processes or natural systems - con	nectivity	
P4_1	Natural areas acting as stepping-stones in a regionally significant ecological link	Connectivity layer - current remnant vegetation that touches the Perth Metropolitan Region Regional Ecological Linkages	1
Protecti	on of wetland, streamline and estuarine fring	ging vegetation and coastal vegeta	ation
P5_1	Remnant vegetation within Conservation Category Wetlands plus 50 m buffer	Geomorphic wetland mapping (DBCA 2019)	3
P5_1b	Remnant vegetation within Resource Enhancement Wetlands plus 50 m buffer	Geomorphic wetland mapping (DBCA 2019)	2
Local Re	presentation (Representative of):		
P6_1	a vegetation complex with 10% or less remaining within the City	Vegetation extent by vegetation complexes within the City	1
P6_2	a vegetation complex with 30% or less remaining within the City	Vegetation extent by vegetation complexes within the City	1



8

Figure 19 - LNAs of Highest Priority



6.2 SUMMARY OF KEY VALUES FOR LNAS WITHIN THE CITY OF KWINANA

The key significant values within the LNAs of the City of Kwinana are:

· Presence of the following Commonwealth or State listed TECs:

- · Tuart Woodlands and Forests of the Swan Coastal Plain (Critically Endangered, EPBC Act; Priority 3, DBCA)
- · Communities of Tumulus Springs (Mound Springs SCP) (Endangered, EPBC Act; Critically Endangered, BC Act)
- Woodlands over sedgelands in Holocene Dune swale of the southern Swan Coastal Plain (SCP19b) (Endangered, EPBC Act; Critically Endangered, BC Act)
- Banksia Woodlands of the Swan Coastal Plain (Endangered, EPBC Act; Priority 3, DBCA)
- Low Lying Banksia attenuata woodlands or shrublands (SCP21c) (Endangered, EPBC Act; Priority 3, DBCA)
- Banksia ilicifolia woodlands (SCP22) (Endangered, EPBC Act; Priority 3, DBCA) Melaleuca huegelii - Melaleuca systena shrublands on limestone ridges (SCP26a)
- (Endangered, BC Act).
- · Presence of the following PECs:
 - Northern Spearwood shrublands and woodlands (Priority 3)
 - Southern Eucalyptus gomphocephala Agonis flexuosa woodlands (Priority 3).
- · Presence of Vegetation Complexes with less than 30% remaining on the Swan Coastal Plain
- · Presence of Vegetation Complexes with less than 30% remaining within the City
- Presence of Threatened Flora
- Presence of Threatened and specially protected Fauna
- · Representing a stepping-stone in a regionally significant ecological linkage
- Remnant vegetation within or within 50 m of a buffer of Conservation Category Wetlands
- Remnant vegetation within or within 50 m of a buffer of Resource Enhancement Category Wetlands.

Out of the 1,110 areas considered to high conservation LNAs, based on the initial prioritisation as part of this LBS (Appendix B), 26 were identified as areas of high priority, with a prioritisation score of 24 or greater (Table 20, Figure 19).



Table 20 - High Priority LNAs (with a Score of Greater than 24)

Easting (mE) Northing (mN)	Location	Score	Area (ha)
393777mE 6428820mN	1 Shipsey Place	24	1.17
392686mE 6428582mN		26	9.22
392926mE 6428711mN	173 Braddock Road	26	1.56
393005mE 6428677mN		26	1.37
393084mE 6428646mN	159 Braddock Road	26	1.12
393164mE 6428616mN	151 Braddock Road	26	0.78
393244mE 6428585mN	149 Braddock Road	26	0.48
392443mE 6431463mN	24 Lugg Place	28	1.56
392443mE 6431203mN		28	0.11
392524mE 6431345mN		28	5.9 x 10-4
392566mE 6431601mN	28 Lugg Place	28	0.69
392607mE 6430795mN	12 Nicolas Drive	28	0.09
392613mE 6430999mN	32 Nicolas Drive	28	0.16
392614mE 6431376mN	2 Lugg Place	28	0.94
392631mE 6431200mN	76 Nicolas Drive	28	1.06
392635mE 6430905mN	24 Nicolas Drive	28	0.38
392638mE 6430647mN	135 Mortimer Road	28	1.15
392976mE 6430630mN		28	0.02
393027mE 6431705mN	165 Mortimer Road	28	44.29
393030mE 6431552mN		28	1.2 x 10-3
393030mE 6431532mN		28	1.5 x 10-4
393030mE 6431529mN	122 Nicolas Drive	28	0.01
393032mE 6431346mN	168 Nicolas Drive	28	4.5 x 10-3
393033mE 6431254mN	180 Nicolas Drive	28	2.7 x 10-4
393118mE 6431726mN	131 Nicolas Drive	28	0.85
393127mE 6431645mN		28	0.01

7 BIODIVERSITY VISION, DIRECTIONS AND ACTIONS

7.1 VISION

The City's biodiversity vision is to:

Prioritise, protect and enhance the City's natural areas

7.2 STRATEGIC DIRECTIONS

To achieve the City's biodiversity vision, the strategic directions (objectives) are to:

- 1. Increase the protection status of significant biodiversity in the City, including on local government managed or owned lands, and on private land.
- 2. Appropriately manage LNAs to reduce identified threats.
- 3. Increase the viability and resilience of LNAs by establishing or enhancing buffers and regional and local ecological linkages.
- 4. Achieve long-term community engagement in local biodiversity management.
- 5. Embed the consideration of biodiversity as standard in all decisions and activities of the City.









Aspect	Action	Timeframe
Increase the prote	ection status of significant biodiversity	
LNAs	Further assess and refine the prioritisation of identified LNAs (Section 5.2), including local reserves, for those LNAs not determined to be of high conservation value as identified in this LBS.	Within 5 years
	Establish a system to hold new information collected on LNAs by establishing a LNA Inventory and ensure areas are vested for conservation and recreation.	Within 1 year
Offsets	Where opportunities arise with development applications lodged, secure private land for inclusion in the City's LNAs as part of offset packages, including via development projects. Proponents to fund management of these LNAs for a period of time (sufficient to improve the bushland condition to an acceptable level), before responsibility is returned to the City. Each property shall be subject to a management plan that outlines actions, responsibilities, timeframes and funding avenues.	Ongoing
	As part of the further assessment and prioritisation of identified LNAs (Section 5.2), determine LNAs with the potential to be purchased as offsets.	Within 5 years
	Investigate opportunities, via local planning policies, which require new vegetation plantings to offset the clearing of vegetation on private land	
Clearing	Avoid or minimise further clearing of LNAs, especially areas within vegetation associations or complexes for which the current extent of those associations of complexes is close to the 30% retention threshold for that Biodiversity Planning Precinct.	Ongoing
Clearing	No further clearing of LNAs supporting vegetation associations or complexes for which the current extent of those associations of complexes falls below the 30% retention threshold for that Biodiversity Planning Precinct	
Illegal clearing	Prosecute instances of illegal clearing under the Planning and Development Act 2005, with funds from infringements contributing to the LBS fund (see below).	Ongoing
LBS fund	Establish a fund that collects from illegal clearing infringements and utilises those funds for implementing actions as outlined in this LBS. Investigate how any cash-in-lieu for the POS fund may also be used for management of LNAs.	Within 2 years
Wetlands	Consider amendments to the Local Planning Scheme for areas adjacent to wetlands and wetland buffers, to protect LNAs associated with and adjacent to wetlands.	Within 1 year
	Retain all remaining vegetated areas classified as CCW and REW Geomorphic Wetlands of the Swan Coastal Plain.	Ongoing

1.4	
C	Э.
2	٦
~	

8

Aspect	Action	Timeframe
TECs/PECs	Protect, regenerate and restore TEC or PEC vegetation and fauna habitat per "prioritisation".	As per prioritisations made (Section 5.2)
Rural planning	Consider the prioritisation and retention of biodiversity-significant areas within LNAs associated with rural developments, via appropriate spatial positioning, selection and approval of building envelopes.	Ongoing
Vegetation retention targets	Establish and plan for the achievement of a set of targets for areas of retained native vegetation (a certain % of each complex, areas of wetlands, etc.) as applicable to the various precincts.	Within 1 year
Tree Register	Establish and include a significant tree register within the Local Planning Strategy and Scheme	Ongoing
Appropriately ma	anage LNAs	
LNAs	For all LNAs that have been identified to be areas of high conservation value, undertake a rapid assessment to ground-truth the status of remnant vegetation, general condition, threats, and apparent opportunities for management and prioritise accordingly.	Within 5 years
TECs	Undertake a desktop mapping exercise to consolidate the patches of TECs in the City to enable planning and further prioritisation of LNAs.	Within 5 years
LNA Inventory	Regularly update mapping and information within the established LNA Inventory.	Ongoing, or at least every 2 years
Wetlands	Protect, restore and manage all vegetated wetlands and buffers within the City.	As per prioritisations made (Section 5.2)
TECs/PECs	Ensure all proposed development that may impact a LNA which contains TEC, PEC or habitat for significant flora or fauna, has been suitably assessed by ecological specialists.	Ongoing
Developer bonds	Collect bonds from developers ensuring appropriate management of LNAs, which the City can utilise for management, if required.	Ongoing

Aspect	Action	Timeframe
Increase buffers and ecological linkages		
Ecological linkages	Protect, regenerate and restore vegetation within, and adjacent to defined ecological linkages as per "prioritisation".	As per prioritisations made (Section 5.2)
Revegetation	Find opportunities for linkages to be rehabilitated, with a focus on the limited east-west links.	Ongoing
Wetland buffers	Establish a new Policy for management of wetland buffers on private property.	Within 2 years
	Protect and begin to restore/revegetate buffers of all Geomorphic wetlands within the City.	Ongoing
TECs/PECs	Protect and begin to restore/revegetate buffers of LNAs containing TECs, PECs or habitat of significant flora or fauna.	Ongoing
Achieve long term community engagement in local biodiversity management		
Consultation	Carry out public consultation as per usual City procedures to consider feedback from the community for incorporation into the LBS.	Within 5 years
Stewardships	Formalise an environmental stewardships initiative for private properties that support significant LNAs.	Within 5 years
Private property LNA self- management	Develop a plan to incentivise private property management of LNAs (e.g. 'Wetland Care' and 'Bush Care'), including activities such as providing professional advice and labour for land management activities and/or providing native plants for residents.	Within 5 years
Landowners Conservation Initiative	Develop and implement the Bushland and Wetlands Conservation Initiative (BAWLCI).	Within 5 years
Management of TECs on private property	Identify and look to manage private properties that support Tuart woodlands and forests.	Within 5 years
	Identify and look to manage private properties that support Banksia woodland.	Within 5 years
	Identify ways to support retention, protection and management on private properties that support Tumulus mound springs.	Within 5 years


Aspect	Action	Timeframe
Achieve long term co	mmunity engagement in local biodiversity manage	ment (continued)
Management of Threatened and Priority flora populations on private property	Based on current known population data, identify private properties supporting populations of Threatened and Priority flora and look to manage these sites.	Within 5 years
Industry sponsorship	Investigate opportunities for private industry (e.g. BHP, Alcoa) in the City to sponsor or fund LBS initiatives.	Within 5 years
Small business- friendly approvals	Consider an Action Plan for the development of small business-friendly environmental approvals pathways. Identify internal processes to ensure that the strategic direction is achieved.	Within 5 years
Implementation status	Provide an update on the implementation status of the Local Biodiversity Strategy within the City's Annual report.	Within 5 years
Embed biodiversity i	n all decisions and activities of the City	
Biodiversity procedures	Develop procedures associated with this LBS to ensure that the consideration of biodiversity is standard in all decisions and activities of the City, hand-in-hand with the consideration of sustainability principles.	Ongoing
Endorsement	Obtain endorsement of the Local Biodiversity Strategy's vision, strategic directions and strategic actions from Council.	Ongoing

References 8

Australian Museum (2021) What is biodiversity? https://australian.museum/learn/science/ biodiversity/what-is-biodiversity/ Accessed 9 November 2021

Beard, J. S. (1990) Plant Life of Western Australia. Kangaroo Press, Kenthurst NSW.

Beeliar Regional Park Community Advisory Committee (BRPCAC) (2006) Beeliar Regional Park Final Management Plan. Plan prepared for the Conservation Commission of Western Australia.

Berwick, M. and Thorman, R. (1998) National Local Government Biodiversity Strategy (Berwick and Thorman 1999).

City of Canning (2018) Local Biodiversity Strategy. City of Canning.

City of Kwinana (1992) Local Planning Scheme No. 2. Unpublished document prepared by the City of Kwinana.

City of Kwinana (2014) Kwinana Natural Areas Management Plan 2014-24. Unpublished document prepared by the City of Kwinana.

City of Kwinana (2018) Environmental Education Strategy (2019 - 2024). December 2018. Unpublished document prepared by the City of Kwinana.

City of Kwinana (2019) Local Biodiversity Study. Unpublished document prepared by City of Kwinana.

City of Kwinana (2021a) Draft Local Planning Strategy - Part 1, Strategy 2021-2036. Unpublished document prepared by the City of Kwinana.

City of Kwinana (2021b) Draft Local Planning Strategy - Part 2, Background and Analysis 2021-2036. Unpublished document prepared by the City of Kwinana.

City of Kwinana (2021c) Strategic Community Plan 2021 - 2031. Unpublished document prepared by the City of Kwinana

City of Kwinana (2021d) Climate Change Plan 2021- 2026. Unpublished document prepared by the City of Kwinana.

City of Swan (2015) Local Biodiversity Strategy. Draft report prepared by the City of Swan.

City of Wanneroo (2018) Local Biodiversity Plan 2018/19 - 2023/24. Unpublished Report prepared by the City of Wanneroo.

Conservation International (2021) Biodiversity Hotspots. Targeted investment in nature's most important places. https://www.conservation.org/priorities/biodiversity-hotspots Accessed 9 November 2021

Commonwealth of Australia (2019) Australia's Strategy for Nature 2019 - 2030. https://www. australiasnaturehub.gov.au/sites/default/files/2020-11/australias-strategy-for-nature.pdf Accessed 11 November 2021

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005. Canberra.

Davis, R.A. and Brooker, L. (2008) Ecological Linkages and Urban Fauna at Risk on the Swan Coastal Plain, Perth, Western Australia. Final Report. Unpublished report prepared for the Swan Catchment Council.





Del Marco, A., Taylor, R., Clarke, K., Savage, J., Cullity, J., and Miles, C (2004) Local Government Biodiversity Planning Guidelines for the Perth Metropolitan Region. Western Australian Local Government Association and Perth Biodiversity Project.

Department of Agriculture, Water and the Environment (DAWE) (2021) Protected Matters Search Tool. http://environment.gov.au/epbc/protected-matters-search-tool

Department of the Environment, Water, Heritage and the Arts (DEWHA) (2009) Ecosystem Services: Key Concepts and Applications, Occasional Paper No.1, Department of the Environment, Water, Heritage and the Arts, Canberra.

Department of Parks and Wildlife (DPaW) (2010) Jandakot Regional Park Management Plan 2010. Conservation Commission of Western Australia.

Department of Biodiversity, Conservation and Attractions (DBCA) (2019) 2019 Statewide Vegetation Statistics formerly CAR Reserve Analysis): Full Report. Remote Sensing and Spatial Analysis Program, Current as of March 2019, WA Department of Biodiversity, Conservation and Attractions, Perth. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics Accessed 4 January 2021.

Department of Biodiversity, Conservation and Attractions (DBCA) (2021a) Request for Threatened and Priority Flora information. Species and Communities Branch. Ref: 09-082FL.

Department of Biodiversity, Conservation and Attractions (DBCA) (2021b) Request for Threatened and Priority Fauna information. Species and Communities Branch. Ref: FAUNA#6774.

Department of Biodiversity, Conservation and Attractions (DBCA) (2021c) NatureMap https:// naturemap.dbca.wa.gov.au/

Department of Biodiversity, Conservation and Attractions (DBCA) (2021d) Threatened and Priority Ecological Communities Database Search request. Ref:32-0721EC

Department of Conservation and Land Management (CALM) (1997) Wetlands Conservation Policy for Western Australia. Review of Public Submissions 1997.

Department of Environment and Conservation (DEC) (2006) A 100-year Biodiversity Conservation Strategy for Western Australia DRAFT Phase One: Blueprint to the Bicentenary in 2029.

Department of Environment and Conservation (DEC) (2011) Sedgelands in Holocene dune swales, Interim Recovery Plan 2011-2016. Department of Environment and Conservation, Perth.

Department of Environment and Energy (DEE) (2016) Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain Ecological Community, Environment Protection and Biodiversity Conservation Act 1999

Department of Water and Environmental Regulation (DWER) (2020) Perth Groundwater Map. https://maps.water.wa.gov.au/Groundwater/ Accessed 25 January 2022.

Department of Planning, Lands and Heritage (DPLH) (2018) South Metropolitan Peel Sub-regional Planning Framework. March 2018. Western Australian Planning Commission. Perth.

Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) (2012) National Wildlife Corridors Plan: A framework for landscape-scale conservation. Commonwealth of Australia.

Department of Primary Industries and Regional Development (DPIRD) (2020) Current Extent of Native vegetation - Western Australia (DPIRD-005) Publicly Available Shapefile. https://catalogue. data.wa.gov.au/dataset/native-vegetation-extent

Environmental Protection Authority (EPA) (2008) Guidance Statement No. 33: Environmental Guidance for Planning and Development.

Environmental Protection Authority (EPA) (2015) Perth and Peel @ 3.5 Million: Environmental Impacts, Risk and Remedies. Interim strategic advice of the Environmental Protection Authority to the Minister for Environment under section 16€ of the Environmental Protection Act 1986. Office of the Environmental Protection Authority. Perth.

Gibson, N., Keighery, B., Keighery, G., Burbidge, A. and Lyons, M. (1994) A Floristic Survey of the southern Swan Coastal Plain. Unpublished report prepared by the Western Australian Department of Conservation and Land Management and the Western Australian Conservation Council for the Heritage Commission.

Gioia, P. (2010) South Coast NRM Region - flora summary. Department of Environment and Conservation. Western Australia Perth.

Government of Western Australia (2000a) Bush Forever, Volume 1: Policies, Principles and Processes. Department of Environmental Protection, Perth, Western Australia.

Government of Western Australia (2000b) Bush Forever, Volume 2: Directory of Bush Forever sites. Department of Environmental Protection, Perth, Western Australia.

Government of Western Australia (2010) State Planning Policy 2.8: Bushland Policy for the Perth Metropolitan Region. State Planning Policy prepared under section 26 of the Planning and Development Act, 2005.

Government of Western Australia (2011) WA Environmental Offset Policy. September 2011. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/ WAEnvOffsetsPolicy-270911.pdf Accessed 11 November 2021

Government of Western Australia (2014) WA Environmental Offsets Guidelines. August 2014. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/WA%20Environmental%20 Offsets%20Guideline%20August%202014.pdf Accessed 11 November 2021.

Government of Western Australia (2019) 2018 State Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.

Heddle, E. M., Loneragan, O. W., and Havel, J. J (1980) Atlas of Natural Resources. Western Australia Department of Conservation and Environment.

Hopper, S. D., and P. Gioia (2004) The southwest Australian floristic region: evolution and conservation of a global hotspot of biodiversity. Annual Review of Ecology, Evolution, and Systematics 35:623-650.

International Union for Conservation of Nature and Natural Resources (IUCN 1980) World Conservation Strategy, Living Resource Conservation for Sustainable Development.

Ironbark Environmental (2007) Draft Biodiversity Strategy. Unpublished document prepared for the City of Kwinana.

Ironbark Environmental (2013) Natural Area Conservation in the City of Kwinana Paper. Unpublished report prepared for the City of Kwinana.



Jackson WJ, Argent RM, Bax NJ, Clark GF, Coleman S, Cresswell ID, Emmerson KM, Evans K, Hibberd MF, Johnston EL, Keywood MD, Klekociuk A, Mackay R, Metcalfe D, Murphy H, Rankin A, Smith DC & Wienecke B (2017). Australia state of the environment 2016: overview, independent report to the Australian Government Minister for the Environment and Energy, Australian Government Department of the Environment and Energy, Canberra. https://soe.environment. gov.au/theme/overview/topic/land-use-change-and-habitat-fragmentation-and-degradationthreaten-ecosystems

Keighery, B., Keighery, G., Longman, V.M., and Clarke, K.A. (2012) Weed and native flora quadrat data compiled between 1990 – 1996 for the Swan Coastal Plain. Data compiled for the Departments of Environmental Protection and Conservation and Land Management.

Lindenmayer, D. and Burgman, M. (2005) Practical Conservation Biology. CSIRO Publishing. Collingwood, Australia.

Lovett, S., Price, P. and Cork, S. (2004) Riparian ecosystem services. Fact Sheet 12. Land and Water Australia, Canberra.

Miles, C. (2001) NSW Murray Catchment Biodiversity Action Plan. Nature Conservation Working Group Inc. Albury, New South Wales.

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) South West Regional Ecological Linkages Technical Report, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Nam Natura Consulting (2020) 2020 Kalamunda Local Biodiversity Strategy. City of Kalamunda Biodiversity Conservation Action Plan 2020 – 2030. Technical Report. October 2020. Unpublished report prepared for the City of Kalamunda.

National Biodiversity Strategy Review Task Group (2009) Australia's Biodiversity Conservation Strategy 2010-2020. Consultant Draft. Australian Government, Department of the Environment, Water, Commonwealth of Australia.

Perth Biodiversity Project (PBP)(2013) Central Perth Regional parklands concept. Vegetation connectivity analysis. Capital City Planning Framework. Supporting document. February 2013.

Shire of Kalamunda (2008) Local Biodiversity Strategy. Shire of Kalamunda.

South West Group (2014) Towards Establishing A Green Network. Western Australia Local Government Association (WALGA).

Smith, P. and Sivertsen, D. (2001) Draft background paper Part B: Setting goals and targets. Centre for Natural Resources, Department of Land and Water Conservation, Parramatta (unpublished draft).

Threatened Species Scientific Committee (TSSC) (Department of the Environment and Energy (DEE)) (2016) Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (s 266B) Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community.

Urban Bushland Council (2011) Perth's Banksia Woodlands, Precious and Under Threat. Proceedings of a symposium on the ecology of these ancient woodlands and their need for protection from neglect and destruction, 25 March 2011

Western Australian Planning Commission(WAPC) 1984/2014 Metropolitan Region Scheme. June 2014

APPENDIX A – GEOMORPHIC WETLANDS WITHIN THE CITY OF KWINANA

UFI	Wetland Name	Wetland Classification	Management Category
6382	Unknown	Sumpland	Conservation Category
6384	Unknown	Sumpland	Conservation Category
6386	Unknown	Sumpland	Conservation Category
6389	Unknown	Sumpland	Conservation Category
6391	Unknown	Sumpland	Conservation Category
6392	Unknown	Sumpland	Conservation Category
6537	Spectacles South	Sumpland	Conservation Category
6539	Spectacles North	Sumpland	Conservation Category
6614	Unknown	Sumpland	Conservation Category
6615	Unknown	Sumpland	Conservation Category
6616	Unknown	Sumpland	Conservation Category
6666	Sandy Lake	Sumpland	Conservation Category
6679	Unknown	Dampland	Conservation Category
6721	Sandy Lake	Sumpland	Conservation Category
6725	Mandogalup Swamp North	Sumpland	Conservation Category
6795	Unknown	Dampland	Conservation Category
6799	Unknown	Dampland	Conservation Category
6800	Unknown	Dampland	Conservation Category
6801	Unknown	Dampland	Conservation Category
6806	Unknown	Dampland	Conservation Category
6808	Unknown	Dampland	Conservation Category
6811	Unknown	Dampland	Conservation Category
6812	Unknown	Dampland	Conservation Category
6900	Unknown	Dampland	Conservation Category
6903	Unknown	Sumpland	Conservation Category
12918	Unknown	Sumpland	Conservation Category
12980	Unknown	Sumpland	Conservation Category
12981	Mandogalup Swamp South	Dampland	Conservation Category



6

UFI	Wetland Name	Wetland Classification	Management Category
13079	Sandy Lake	Sumpland	Conservation Category
13080	Unknown	Sumpland	Conservation Category
13082	Sandy Lake	Sumpland	Conservation Category
13506	Not Applicable	Sumpland	Conservation Category
13959	Unknown	Sumpland	Conservation Category
13961	Unknown	Dampland	Conservation Category
13963	Unknown	Sumpland	Conservation Category
13965	Unknown	Sumpland	Conservation Category
14064	Unknown	Sumpland	Conservation Category
14148	Sandy Lake	Sumpland	Conservation Category
14663	Mandogalup Swamp Mid South	Sumpland	Conservation Category
14685	Unknown	Dampland	Conservation Category
15166	Unknown	Dampland	Conservation Category
15196	Unknown	Sumpland	Conservation Category
15290	Sandy Lake	Sumpland	Conservation Category
15333	Unknown	Sumpland	Conservation Category
15391	Long Swamp	Sumpland	Conservation Category
15397	Unknown	Sumpland	Conservation Category
15399	Unknown	Sumpland	Conservation Category
15584	Mandogalup Swamp Mid South	Sumpland	Conservation Category

LOCAL BIODIVERSITY STRATEGY

Mandogalup Swamp Mid South

Bollard Bulrush

Swamp

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Wattleup Lake

Unknown

Mandogalup Swamp Mid North

Unknown

Unknown

Unknown

Unknown

Mandogalup Swamp North

Mandogalup Swamp

North

Mandogalup Swamp North



and Classification	Management Category
	Conservation
Sumpland	Category
Sumpland	Conservation Category
Sumpland	Resource Enhancement
Sumpland	Resource Enhancement
Dampland	Resource Enhancement
Dampland	Resource Enhancement
Sumpland	Resource Enhancement
Lake	Resource Enhancement
Sumpland	Resource Enhancement
Sumpland	Resource Enhancement
Dampland	Resource Enhancement
Dampland	Resource Enhancement
Sumpland	Resource Enhancement
Dampland	Resource Enhancement
Sumpland	Resource Enhancement
Sumpland	Resource Enhancement
Sumpland	Resource Enhancement

8

UFI	Wetland Name	Wetland Classification	Management Category
6729	Unknown	Dampland	Resource Enhancement
6794	Unknown	Dampland	Resource Enhancement
6796	Unknown	Dampland	Resource Enhancement
6802	Unknown	Dampland	Resource Enhancement
6807	Unknown	Dampland	Resource Enhancement
6814	Unknown	Dampland	Resource Enhancement
6815	Unknown	Dampland	Resource Enhancement
6887	Unknown	Dampland	Resource Enhancement
6889	Unknown	Dampland	Resource Enhancement
6891	Unknown	Dampland	Resource Enhancement
6892	Unknown	Dampland	Resource Enhancement
6895	Unknown	Dampland	Resource Enhancement
6899	Unknown	Dampland	Resource Enhancement
12919	Unknown	Dampland	Resource Enhancement
13689	Unknown	Dampland	Resource Enhancement
13693	Unknown	Dampland	Resource Enhancement
13750	Unknown	Sumpland	Resource Enhancement
13967	Unknown	Dampland	Resource Enhancement
13968	Unknown	Dampland	Resource Enhancement
13969	Unknown	Dampland	Resource Enhancement

LOCAL BIODIVERSITY STRATEGY

Unknown



tland Classification	Management Category
Sumpland	Resource Enhancement
Palusplain	Resource Enhancement
Palusplain	Resource Enhancement
Dampland	Resource Enhancement
Not Assessed	Resource Enhancement
Dampland	Resource Enhancement
Sumpland	Resource Enhancement
Sumpland	Resource Enhancement
Sumpland	Resource Enhancement

00

UFI	Wetland Name	Wetland Classification	Management Category
15867	Bollard Bulrush	Sumpland	Resource
15007	Swamp	Samplana	Enhancement
15935	Unknown	Dampland	Resource Enhancement
15936	Unknown	Dampland	Resource Enhancement
6381	Unknown	Dampland	Multiple Use
6520	Mandogalup Swamp	Dampland	Multiple Lice
6530	South	Dampland	Multiple Use
6531	Unknown	Dampland	Multiple Use
6538	Unknown	Dampland	Multiple Use
6668	Sandy Lake	Sumpland	Multiple Use
6669	Sandy Lake	Sumpland	Multiple Use
6716	Mandogalup Swamp	Sumpland	Multiple Use
	North		
6793	Unknown	Sumpland	Multiple Use
6803	Unknown	Dampland	Multiple Use
6810	Unknown	Dampland	Multiple Use
6901	Unknown	Sumpland	Multiple Use
6926	Unknown	Dampland	Multiple Use
12921	Unknown	Dampland	Multiple Use
13327	Bollard Bulrush Swamp	Sumpland	Multiple Use
13727	Unknown	Dampland	Multiple Use
13728	Unknown	Dampland	Multiple Use
13731	Unknown	Dampland	Multiple Use
13732	Unknown	Dampland	Multiple Use
13737	Unknown	Sumpland	Multiple Use
13738	Unknown	Sumpland	Multiple Use
13740	Unknown	Sumpland	Multiple Use
13741	Unknown	Sumpland	Multiple Use
13753	Unknown	Dampland	Multiple Use
13958	Unknown	Sumpland	Multiple Use
13962	Unknown	Sumpland	Multiple Use
13966	Unknown	Sumpland	Multiple Use



Wetland Classification	Management Category
Sumpland	Multiple Use
Dampland	Multiple Use
Sumpland	Multiple Use
Dampland	Multiple Use
Sumpland	Multiple Use
Not Assessed	Multiple Use
Not Assessed	Multiple Use
Sumpland	Multiple Use
Dampland	Multiple Use
Sumpland	Multiple Use
Sumpland	Multiple Use
Dampland	Multiple Use
Not Assessed	Multiple Use
Sumpland	Multiple Use
Dampland	Multiple Use
Palusplain	Multiple Use
Sumpland	Multiple Use
Sumpland	Multiple Use
Dampland	Multiple Use
Dampland	Multiple Use
Dryland	Not Applicable
No Longer a Wetland	Not Applicable
No Longer a Wetland	Not Applicable
Dryland	Not Applicable
No Longer a Wetland	Not Applicable
No Longer a Wetland	Not Applicable
No Longer a Wetland	Not Applicable

APPENDIX B – PRIORITISATION OF HIGH CONSERVATION VALUE LNAS

,	\rea (ha)	1.56	0.11	0	69.0	60.0	0.16	0.94	1.06	0.38	1.15	0.02	44.29	0	0	0.01	0
		28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_7b	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Criteria	P3_7a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-4
	P_3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	•	•	0	0	0	0	0	0	0	0	0	0	•	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Locality	CASUARINA			CASUARINA		CASUARINA			CASUARINA	CASUARINA						
	Туре	2			Ч	DR	DR	Ч	DR	BR	RD		ßD			DR	DR
Ro	oad Name	1066			9901	NICOLAS	NICOLAS	1066	NICOLAS	NICOLAS	MORTIMER		MORTIMER			NICOLAS	NICOLAS
	ot/ Rd No.	24			28	12	32	2	76	24	135		165			122	168
Ea Nor	sting (mE) thing (mN)	392443mE 6431463mN	392443mE 6431203mN	392524mE 6431345mN	392566mE 6431601mN	392607mE 6430795mN	392613mE 6430999mN	392614mE 6431376mN	392631mE 6431200mN	392635mE 6430905mN	392638mE 6430647mN	392976mE 6430630mN	393027mE 6431705mN	393030mE 6431552mN	393030mE 6431532mN	393030mE 6431529mN	393032mE 6431346mN

	Area (ha	a)	0.01	9.22	1.56	1.37	1.12	0.78	0.48	1.17	1.27	1.26	1.21	0.01	1.48	1.77	0.7	0.04	0.65
	Score		28	26	26	26	26	26	26	24	23	53	22	22	22	22	22	22	22
	P6_	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_	1	m	m	m	m	m	m	m	0	0	0	0	0	m	m	m	m	m
	P4.	1	0	-	-	-	-	-	-	-	-	-	0	0	-	-	-	-	-
	P3_	_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_	_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_	_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_	_8	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
	P3_	_7b	4	4	4	4	4	4	4	4	4	4	4	4	0	0	0	0	0
	P3_	_7a	4	4	4	4	4	4	4	4	4	4	4	4	0	0	0	0	0
	P3_	_6	•	0	•	•	0	0	0	0	0	0	0	0	•	•	0	0	0
	P3_	_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_		0	0	•	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P3_	_3b	0	0	0	0	0	•	0	0	0	0	0	0	4	4	4	4	4
	P3_		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_		2	0	•	0	0	•	0	0	0	0	0	0	0	0	0	0	0
	P1_		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_		•	0	0	•	•	•	•	•	•	•	0	0	0	•	•	0	•
	P1_		-	-	-	1	1	1	1	1 3	1 3	1 3	~ _	~	~	1	-	-	1
	P1_	_28													-				
	Locality	у			WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	CASUARINA	WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD
	Туре				RD		ßD	RD	ßD	Ы	ßD	DR	ßD		ß	RD	b	ßD	ßD
F	toad Nan	me			BRADDOCK		BRADDOCK	BRADDOCK	BRADDOCK	SHIPSEY	BARKER	LAVERY	BARKER		BARKER	BARKER	BALKA	BRADDOCK	BRADDOCK
ι	ot/ Rd N	No.			173		159	151	149	-	106	100	22		129	135	9	48	52
E	asting (m Northin (mN)	1g	393127mE 6431645mN	392686mE 6428582mN	392926mE 6428711mN	393005mE 6428677mN	393084mE 6428646mN	393164mE 6428616mN	393244mE 6428585mN	393777mE 6428820mN	394032mE 6429726mN	394719mE 6431478mN	393769mE 6430420mN	393825mE 6430507mN	393855mE 6429573mN	393965mE 6429362mN	394038mE 6429619mN	394053mE 6429118mN	394065mE 6429354mN

10

An	ea (ha)	1.36	0.43	1.27	0.63	0.65	0.27	0.45	0.12	0	0	7.22	15.87	4.34	0.01	0.04	0.31	3.57
	Score	22	22	22	22	22	22	22	22	20	20	20	20	19	19	19	19	40
	P6_2	0	0	0	0	0	0	0	0	-	-	-	-	0	0	0	0	
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P5_1	m	m	m	m	m	m	m	m	0	0	0	0	0	m	m	m	
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	P3_9c	2	2	2	2	5	2	2	2	2	2	2	2	2	2	2	2	
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P3_8	0	•	0	0	•	•	•	•	•	•	•	0	0	0	•	•	
-	P3_7b	•	•	•	•	•	•	•	•	4	4	4	4	4	•	•	•	2
Criteria	P3_7a	0	•	•	0	•	•	•	•	4	4	4	4	4	0	•	•	
	P3_6	0	•	0	•	•	•	•	0	0	0	0	0	0	0	•	•	1
	P3_5	0	•	0	0	0	•	•	0	0	0	0	•	0	0	0	0	
	P3_4	0	0	0	0	•	•	•	•	•	0	0	0	0	-	-	-	
	P3_3b	4	4	4	4	4	4	4	4	0	0	0	0	0	•	0	0	
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	
	P1_2d	0	0	0	0	0	0	•	0	•	•	0	•	0	0	0	0	
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	
	P1_2b	m	m	m	m	m	m	m	m	0	0	0	•	0	m	m	m	
	P1_2a	-	-	-	-	-	-	-	-	0	0	0	0	0	-	-	-	
	ocality	WELLARD		PARMELIA	PARMELIA	PARMELIA	WELLARD				and when the							
	Туре	ß	ъ	ßD	ßD	RD	RD	RD	RD		RISE	GDNS	RD	PDE				
Roa	id Name	BARKER	BALKA	BANKSIA	BANKSIA	BRADDOCK	BRADDOCK	BANKSIA	BANKSIA		BLACKBOY	TIMBERTOP	BERTRAM	BRENTFORD				
Lot	/ Rd No.	121	10	149	147	42	32	145	133		22			22				1
	ing (mE) hing (mN)	394066mE 6429602mN	394147mE 6429646mN	394160mE 6429563mN	394207mE 6429347mN	394221mE 6429268mN	394318mE 6429254mN	394327mE 6429326mN	394394mE 6429240mN	389348mE 6430423mN	389378mE 6430395mN	389434mE 6430483mN	389992mE 6431027mN	388997mE 6429255mN	391428mE 6432536mN	391521mE 6432081mN	391527mE 6432146mN	391695mE

Are	ea (ha)	0.68	1.34	7.5	0.01	0.27	1.79	3.27	1.79	3.27	0.36	3.65	0.43	0	0.35	67.67	0	0.01	29
S	icore	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18
	P6_2	0	0	0	0	0	•	•	•	0	•	0	0	•	•	0	•	0	-
	P6_1	0	0	0	0	0	•	•	0	0	•	•	0	•	0	0	0	•	c
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	m	m	~	0	0	m	•	m	0	m	m	m	3	m	m	m	m	•
	P4_1	-	-	-	0	0	0	0	0	0	-	0	-	0	0	0	0	0	<
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	•
	P3_9b	0	•	0	•	0	0	0	0	0	•	0	0	0	•	•	0	0	•
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	ſ
	P3_8	0	0	0	0	•	•	•	•	0	•	•	0	0	•	0	0	•	•
iria	P3_7b	•	0	0	0	0	•	•	•	•	•	•	•	•	•	0	0	0	3
Criteria	P3_7a	•	•	0	•	•	•	•	•	0	•	•	•	•	•	•	•	•	1
	P3_6	•	•	•	•	•	0	0	•	•	•	•	•	•	•	•	•	•	<
	P3_5	•	•	•	4	4	•	4	•	4	•	•	0	•	0	0	•	•	1
	P3_4	-	1	1	0	1	0	0	0	1	-	•	1	0	0	0	0	0	
	P3_3b	4	4	4	4	4	4	4	4	4	4	4 0	4	4	4	4	4	4	
	P3_3a P_3	0	0	0	0	0	2	0	2	0	0	2	0	2	2	2	2	2	
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_2b	m	~	~	~	~	~	m	~	~	m	m	m	~	~	~	~	m	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lo	ocality		BERTRAM	CASUARINA	ANKETELL	ANKETELL			WELLARD		ANKETELL	WELLARD	ANKETELL						HOPE
	Туре		FWY	ßD	RD	RD			RD		RD	RD	RD						é
Roa	d Name		KWINANA	ORTON	TREEBY	TREEBY			MORTIMER		THOMAS	MORTIMER	THOMAS						THALANTY
Lot/	/ Rd No.				74	74			110		793	136	811						
Easti No (ing (mE) orthing (mN)	391755mE 6432278mN	391788mE 6432286mN	391875mE 6432284mN	392050mE 6434968mN	392055mE 64349587mN			392296mE 6430414mN	392355mE 6435054mN	392378mE 6433821mN	392398mE 6430520mN	392424mE 6433873mN	392663mE 6430078mN	392664mE 6430073mN	392686mE 6430378mN	392843mE 6430078mN	392981mE 6430265mN	388535mE

10

06

A	rea (ha)	0.55	2.74	0.18	0	0	20.88	0.35	0	1.76	0.01	0.71	0	0	0	0	0	0.48
	Score	18	18	18	18	18	18	10	10	18	30	100	<u>80</u>	18	18	18	18	18
	P6_2	0	0	0	0	0	0	0	0	•	•	•	•	0	0	0	0	0
	P6_1	0	•	•	0	0	0	0	0	0	•	•	•	0	0	•	•	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	m	m	m	0	0	m	m	m	m	m	m	m	m	m	m	m
	P4_1	0	0	0	0	0	0	0	0	0	-	0	-	-	0	0	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	-	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	0
	P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Criteria	P3_7a	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	0	0	•	0	0	•	•	•	0	0	0	0	0	•	0	0	0
	P3_4	-	-	-	-	-	-	-	-	-	0	-	0	0	-	-	0	0
	P3_3b	0	0	•	0	•	•	•	•	•	•	•	•	0	0	0	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	2	0	•	0	2	2	•	•	•	•	•	•	0	0	0	0	0
	P1_2d	0	0	•	•	•	0	0	0	0	•	0	0	0	•	0	•	•
	P1_2c	0	0	0	0	0	0	0	0	•	•	•	0	•	0	0	0	0
	P1_2b	e	m	m	m	m	m	m	m	m	m	m	m	m	m	m	e	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality	MANDOGA- LUP	MANDOGA- LUP	WANDI				WANDI	WANDI	WANDI		ANKETELL						
	Туре	RD	ß	CRES				RWY	CRES			ß						
Ro	ad Name	ROWLEY	HOFFMAN	MORNINGTON				KWINANA	MORNINGTON			THOMAS						
Lot	/ Rd No.	66										819						
Eas Nort	ting (mE) hing (mN)	391977mE 6438847mN	392151mE 6437309mN	392193mE 6436792mN	392200mE 6437108mN	392212mE 6438123mN	392215mE 6438530mN	392256mE 6437366mN	392274mE 6436886mN	392381mE 6436700mN	392557mE 6428608mN	392561mE 6433932mN	392571mE 6428603mN	392623mE 6428587mN	392685mE 6436972mN	392686mE 6436973mN	392863mE 6428502mN	392876mE 6428505mN

Ar	ea (ha)	0	2.82	0.42	0.83	1.12	1.12	1.35	5.11	0.84	1.45	0	0.49	0.83	0.49	1.69	1.16	1.07
	Score	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P6_1	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P5_1	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P3_9b	•	•	•	•	•	•	0	0	0	0	•	•	0	0	•	•	
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	P3_8	0	0	0	0	0	•	0	0	0	0	0	•	0	0	0	0	•
	P3_7b	0	0	0	0	0	0	0	0	0	0	•	•	•	0	0	0	4
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
Ŭ	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_4	•	•	•	0	0	0	0	0	0	0	0	0	0	•	0	•	
	P3_3b	•	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	•
	P_3	0	0	0	0	0	0	0	0	•	0	•	•	0	0	0	0	
	P1_2d	•	0	•	0	•	•	•	•	•	0	0	•	0	•	•	•	
	P1_2c	•	•	•	0	0	0	0	0	0	•	•	•	•	•	0	•	-
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
L	ocality	WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD										
	Туре	RD	RD	RD	Ы	RD	RD	DR	RD	DR	RD		ßD	PWY	RD	PWY	RD	-
Roa	id Name	BRADDOCK	BRADDOCK	BRADDOCK	NELLA	BRADDOCK	BRADDOCK	ARUNDEL	BRADDOCK	ARUNDEL	BRADDOCK		BARKER	ALEXANDER	BARKER	ALEXANDER	BARKER	and a second
Lot	/ Rd No.	173	178	172	38	128	120	64	108	78	108		179	32	179	22	167	
East Nort	ting (mE) hing (mN)	392876mE 6428505mN	392905mE 6429022mN	393002mE 6428941mN	393029mE 6429080mN	393238mE 6428918mN	393346mE 6429039mN	393406mE 6429446mN	393430mE 6429231mN	393464mE 6429314mN	393494mE 6429220mN	393544mE 6429298mN	393718mE 6429243mN	393661mE 6429706mN	393718mE 6429243mN	393727mE 6429598mN	393759mE 6429431mN	393778mE

10

Ar	ea (ha)	0	0.4	0	0.04	0.51	0	0.17	0.29	0.12	0	0	0.36	0.87	1.08	0.01	2.9	22.71
	Score	18	18	18	18	18	18	18	18	00	100	18	18	18	18	18	18	11
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	m	~	m	m	~	m	m	m	m	m	0	0	m	m	m	m	m
	P4_1	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-	•	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	•	0	0	0	•	•	•	0	0	0	0	0	0	0	0	•	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	-	0
	P3_7b	0	0	•	0	•	0	0	•	0	0	•	•	•	•	0	0	0
Criteria	P3_7a	0	0	0	0	•	•	•	•	•	0	0	0	0	0	0	•	0
	P3_6	•	0	•	•	•	0	0	0	0	•	0	•	0	•	0	•	•
	P3_5	0	0	0	0	•	0	•	0	•	•	0	0	0	0	0	0	•
	P3_4	0	•	•	•	•	•	•	•	0	•	0	0	0	•	•	•	•
	P3_3b	0	0	0	0	0	0	0	•	•	0	4	4	0	0	0	0	0
	P3_3a	4	4	4	-4	4	4	4	4	4	4	4	4	4	4	4	4	0
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	•	•	0	0	2
	P1_2d	•	0	0	0	0	•	•	•	•	0	0	0	0	0	0	•	0
	P1_2c	0	0	0	0	0	0	0	0	0	•	•	•	•	•	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality	WELLARD	WELLARD		WELLARD	CASUARINA	CASUARINA	CASUARINA	CASUARINA	CASUARINA	CASUARINA	LEDA						
	Туре	8	ßD		RD	RD	ßD	RD	RD	RD	ßD	RD	C	DR	DR	DR	DR	ßD
Roa	id Name	BRADDOCK	BARKER		BARKER	BRADDOCK	BARKER	BARKER	BRADDOCK	BRADDOCK	BRADDOCK	BORN	MELALEUCA	LAVERY	LAVERY	LAVERY	GOODMAN	WELLARD
	/ Rd No.	54	171		129	54	135	121	48	48	42	92	17	101	105	123	19	
Eas Nort	ting (mE) hing (mN)	393792mE 6429208mN	393825mE 6429294mN	393901mE 6429609mN	393948mE 6429583mN	393956mE 6429352mN	393956mE 6429352mN	393987mE 6429579mN	394052mE 6429302mN	394109mE 6429239mN	394111mE 6429244mN	394235mE 6431571mN	394258mE 6431571mN	394712mE 6431652mN	394888mE 6431735mN	394889mE 6431769mN	394981mE 6430977mN	385794mE 6430029mN

Ar	ea (ha)	12.76	0	0	0.33	6.22	0	0.69	0	0.28	0.62	0	0.88	0.12	0.53	0.4	1.67	0.29
	Score	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	11
	P6_2	-	-	- 1	-	0	0	0	0	•	•	0	•	•	0	0	0	c
	P6_1	0	0	0	0	•	•	•	0	•	•	0	0	0	0	0	0	c
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	m	0	0	0	0	m	m	m	m	m	m	m	m	m	m	m	•
	P4_1	-	-	-	-	-	0	0	0	0	0	0	0	0	0	•	0	•
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	•
	P3_9b	•	•	•	•	•	•	•	0	0	0	0	0	0	•	•	•	•
	P3_9a	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	•
	P3_8	0	0	•	•	1	•	•	•	•	•	0	•	•	•	0	•	•
	P3_7b	•	•	0	•	•	•	•	•	•	•	•	•	•	•	•	•	٩
Criteria	P3_7a	•	•	•	•	•	•	•	•	•	•	•	•	0	0	•	•	
	P3_6	•	•	•	•	•	•	•	0	•	•	0	•	•	•	•	•	
	P3_5	0	•	0	0	•	•	•	•	•	•	•	•	•	0	•	0	
	P3_4	•	0	-	-	-	0	•	0	•	0	0	•	0	0	0	•	•
	P3_3b	0	4	4	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4	4	4	4	4	4	
	P3_3a	2 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P_3 P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_2b	m	~	m	m	m	m	m	m	m	m	m	~	~	m	m	m	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
L	ocality							WELLARD	WELLARD	WELLARD	WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	MILLI ADD
	Туре							RD	RD	RD	RD		DR	DR	DR	DR	RD	
Roa	id Name							WOOLCOOT	WOOLCOOT	WOOLCOOT	WOOLCOOT		ARUNDEL	ARUNDEL	ARUNDEL	ARUNDEL	WOOLCOOT	
Lot	/ Rd No.							145	145	129	93		26	22	28		19	
East Vort	ting (mE) hing (mN)	386044mE 6430900mN	390510mE 6436972mN	390510mE 6436972mN	390704mE 6436789mN	391374mE 6438539mN	392594mE 6429571mN	392604mE 429541mN	392675mE 6429437mN	392764mE 6429667mN	392841mE 6429734mN	392859mE 6429675mN	392861mE 6429483mN	392875mE 6429571mN	392896mE 6429465mN	392990mE 6429675mN	393101mE 6429807mN	393142mE

10

Ar	ea (ha)	0.44	0.95	0.73	1.05	96.0	1.18	0	0.81	0.98	12	1.02	0.27	0.01	0.66	0.67	0	0.58
	Score	17	17	17	17	17	11	11	1	17	11	11	17	17	17	17	17	11
	P6_2	0	0	0	0	0	•	•	0	0	0	0	0	0	0	0	0	0
	P6_1	•	•	0	0	0	0	0	0	0	•	0	•	•	0	•	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P4_1	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_7b	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0
Criteria	P3_7a	•	•	•	•	0	0	0	•	0	0	0	0	0	•	•	•	•
	P3_6	0	•	0	0	0	•	•	•	0	•	0	•	0	0	•	0	•
	P3_5	0	0	0	0	0	•	•	0	0	0	0	0	0	0	0	•	•
	P3_4	0	0	0	0	0	•	•	0	0	•	•	•	•	0	•	0	0
	P3_3b	0	0	0	•	0	•	0	0	0	0	•	0	0	0	0	0	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	•	0	0	•	•	•	•	•	•	•	0	•	0	0	0	•
	P1_2d	•	•	•	•	0	•	0	•	0	0	0	0	•	•	•	•	•
	P1_2c	0	0	0	0	0	•	•	•	•	•	•	•	0	•	0	•	•
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-
	ocality		WELLARD	CASUARINA	WELLARD	CASUARINA	WELLARD	WELLARD	WELLARD	WELLARD								
	Туре		DR	ъ	RD	DR	U	G	σ	DR	DR	DR	PWY	RD	ΡWΥ	ъ	J	PKWY
	id Name		ARUNDEL	CHANDLER	BRADDOCK	ARUNDEL	CHANDLER	CHANDLER	CHANDLER	ARUNDEL	ARUNDEL	NICOLAS	ALEXANDER	BORN	ALEXANDER	CHANDLER	CHANDLER	ALEAXANDER
Lot	/ Rd No.			27	108	43	23	21	21	52	59	151	27	91	6	Ħ	7	
Eas Nort	ting (mE) hing (mN)	393144mE 6429623mN	393181mE 6429764mN	393199mE 6429830mN	393234mE 6429281mN	393248mE 6429594mN	393307mE 6429872mN	393315mE 6429907mN	393327mE 6429815mN	393330mE 6429439mN	393353mE 6429680mN	393422mE 6431741mN	393449mE 6429739mN	393463mE 6431656mN	393477mE 6429558mN	393501mE 6429816mN	393505mE 6429818mN	393524mE 6429625mN

	ea (ha)	-	1.06	0.57	0.8	0.73	0.03	1.84	0	0.1	0.34	0.86	0.03	0	0.52	0.02	0.57	0.41
	Score	17	17	17	17	11	17	11	11	11	11	4	17	17	17	17	16	16
	P6_2	0	0	0	0	0	0	0	0	0	•	0	•	•	0	•	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	•	•
	P4_1	0	0	0	0	•	0	0	0	0	•	0	0	0	0	0	-	
	P3_9c	2	2	2	2	2	5	2	2	~	2	5	2	2	2	2	2	•
	P3_9b	•	•	•	•	•	•	•	•	0	•	0	0	0	0	•	•	•
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	•
	P3_8	0	•	•	•	•	•	•	•	•	•	0	0	0	•	•	•	•
g	P3_7b	•	0	•	0	•	0	•	•	•	•	•	•	•	•	•	0	<
Criteria	P3_7a	•	0	•	0	•	0	•	•	•	•	•	•	•	•	•	•	<
	P3_6	•	•	•	0	•	0	•	•	•	•	•	•	•	0	•	•	*
	P3_5	•	0	0	0	0	0	•	•	•	•	•	•	•	•	•	0	4
	P3_4	0	•	•	0	•	•	•	•	•	•	0	0	•	•	•	-	•
	P3_3b	0	0	•	0	•	0	•	•	•	•	•	•	•	0	0	0	<
	P3_3a	4	4	4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4	4	4	0 4	0 4	0 4	
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_2c P1_2b	m	m	m	m	~	m	m	m	m	m	m	m	m	m	m	m	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
L	ocality	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD		CASUARINA		WELLARD	WELLARD	CASUARINA			CASUARINA	CASUARINA	MANDOGA- LUP	
	Туре	ßD	ßD	YWY	DR	ßD		RD		RD	RD	DR			ß	DR	RD	
Roa	id Name	BARKER	BARKER	ALEXANDER	ARUNDEL	MORTIMER		BORN		BARKER	BARKER	LAVERY			MORTIMER	GOODMAN	CLEMENTI	
Lot	/ Rd No.	14	18	27	73	240		101		135	1/1	15			343	14		
Easi lorti	ting (mE) hing (mN)	393563mE 6430466mN	393581mE 6430351mN	393589mE 6429766mN	393622mE 6429427mN	393652mE 6430607mN	393657mE 6430696mN	393684mE 6431752mN	393742mE 6430697mN	393786mE 6429508mN	393875mE 6429401mN	394549mE 6430737mN	394552mE 6430751mN	394639mE 6430728mN	394649mE 6430738mN	394652mE 6430781mN	390615mE 6436350mN	390647mE

LOCAL BIODIVERSITY STRATEGY

11

A	rea (ha)	0	0.04	0	96.0	0.12	0.07	1.83	0.01	0	0.15	0.14	0.1	2.79	0	0.33	0.01	31.67
		16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	P6_2	•	0	0	0	0	0	•	•	•	•	0	0	0	0	0	0	0
	P6_1	0	•	•	•	•	•	•	0	•	•	0	0	0	•	•	•	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	•	0	0	•	0	0	0
	P3_9a	2	5	2	2	2	2	2	2	2	2	2	2	2	2	~	2	2
	P3_8	•	0	•	•	•	•	•	0	•	0	•	0	0	•	0	•	0
	P3_7b	0	0	0	0	0	•	•	•	•	•	•	•	•	•	0	0	0
Criteria	P3_7a	•	•	•	•	•	•	•	•	0	0	0	0	0	•	•	•	•
	P3_6	•	0	•	0	0	•	•	•	•	•	•	•	•	•	0	0	0
	P3_5	0	0	0	0	0	0	•	•	0	0	0	•	0	0	0	0	0
	P3_4	-	-	-	-	-	-	-	-	-	-	-	77	-	-	-	-	-
	P3_3b	•	0	0	0	0	•	•	•	•	0	•	0	0	0	0	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	•	•	•	•	•	•	•	•	0	0	0	0	0
	P1_2d	0	0	0	•	•	•	•	•	0	•	0	0	0	0	0	•	•
	P1_2c	•	0	0	0	0	0	0	0	0	•	0	•	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	ocality						MANDOGA- LUP	PARMELIA	ORELIA	ORELIA	PARMELIA		MANDOGA- LUP	MADOGALUP				MANDOGA- LUP
	Туре						ßD	RD	ß	RD	RD		RD	ßD				RD
Ro	ad Name						MANDOGALUP	SULPHUR	THOMAS	THOMAS	SULPHUR		MANDOGALUP	ROWELY				ROWLEY
Lo	t/ Rd No.						63		530	636	8602							10
Eas Nort	iting (mE) thing (mN)	390663mE 6432422mN	390670mE 6432421mN	390685mE 6432990mN	390685mE 6432991mN	390687mE 6433002mN	390733mE 6436698mN	390734mE 6432755mN	390767mE 6433089mN	390793mE 6433106mN	390835mE 6433097mN	390837mE 6433118mN	390851mE 6436618mN	390953mE 6438510mN	390999mE 6432326mN	391036mE 6432346mN	391041mE 6432365mN	391058mE 6438608mN

Ar	ea (ha)	0.43	0.43	0	0	0.49	0.07	0.41	0	0.05	0.31	0.18	0.98	0.45	0	2.15	0.05	0.2
	Score	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	P6_2	0	•	•	0	0	0	0	0	0	0	0	•	0	0	•	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	•
	P4_1	-	-	-	-	-	-	-	-	-	-	÷	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_9b	0	0	0	0	0	•	0	•	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0
	P3_7b	0	•	•	0	0	0	0	•	0	0	0	0	0	0	•	•	0
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	-
Ű	P3_6	•	•	•	•	•	0	0	0	0	0	0	0	•	0	•	•	•
	P3_5	0	0	0	0	0	0	0	0	0	•	•	•	•	0	0	0	-
	P3_4	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
	P3_3b	0	0	0	0	0	0	•	•	•	•	•	•	•	0	•	0	c
	P3_3a	4	4	4	4	4	-4	4	4	4	4	4	4	4	4	4	4	Y
	P_3	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	c
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2b	m	m	m	m	m	~	m	m	m	m	m	m	m	m	m	m	~
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ocality	THE SPECTA-CLES				THE SPECTA- CLES	THE SPECTA- CLES			MANDOGA- LUP	THE SPECTA- CLES	MANDOGA- LUP	THE SPECTA- CLES	THE SPECTA- CLES			MANDOGA- LUP	MANDOGA-
	Туре	ß				LANE	LANE			ß	LANE	ß	LANE	N			RD	GO
Roa	ad Name	SPECTACLES				MCDOWELL	MCDOWELL			ROWELY	MCDOWELL	ROWELY	MCDOWELL	McDOWELL			ROWELY	DOWEIV
	/ Rd No.					24	28				24		28					
Easi Nort	ting (mE) hing (mN)	391250mE 6433734mN	391261mE 6433316mN	391290mE 6433255mN	391352mE 6438942mN	391381mE 6433519mN	391382mE 6433577mN	391411mE 6433243mN	391412mE 6433244mN	391414mE 6438931mN	391447mE 6433576mN	391480mE 6438946mN	391492mE 6433759mN	391519mE 6433776mN	391525mE 6433615mN	391527mE 6433584mN	391529mE 6438948mN	391638mE

11

- 19	Area (ha)	0	0.24	1.96	0	0.08	1.83	0.06	0.52	0.48	0.72	0	17.0	2.63	0	3.26	2.1	2.6
	Score	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	•	0	•	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	~	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	•	0	0	0	0	0	0	0	•	0	0	0	0	•	0	0
	P3_7b	•	•	•	•	0	0	0	0	0	0	0	0	0	•	•	•	•
Criteria	P3_7a	0	0	0	0	0	0	•	•	•	•	•	•	0	•	0	0	0
	P3_6	0	•	•	•	•	•	•	0	0	•	0	0	•	•	•	•	•
	P3_5	0	0	•	•	0	•	•	•	•	•	•	•	•	•	0	0	0
	P3_4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_3b	0	0	0	0	0	0	0	0	0	•	0	0	•	0	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	0	0	0	0	0	0	0	0	•	0	•	•	0	•	0	0
	P1_2d	0	•	0	0	0	0	•	0	•	•	•	0	0	0	0	0	0
	P1_2c	0	•	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	Locality	MANDOGA- LUP	MANDOGA- LUP	MANDOGA- LUP		CASUARINA	CASUARINA		ANKETELL	ANKETELL	CASUARINA		CASUARINA			WANDI	ANKETELL	CASUARINA
	Туре	ß	ß	LOOP		RD	RD		RD	RD	ßD		RD			RD	RD	RD
R	oad Name	ROWELY	ROWELY	BECKER		ORTON	ORTON		TREEBY	TREEBY	ORTON		ORTON			ANKETELL	ANKETELL	ORTON
U	ot/Rd No.					46	56		48	56	09		129			651	686	92
Ei No	isting (mE) rthing (mN)	391720mE 6438956mN	391721mE 6438955mN	391753mE 6438607mN	391869mE 643240mN	391906mE 6432386mN	391959mE 6432576mN	391971mE 6435492mN	391988mE 6435226mN	392008mE 6435137mN	392009mE 6432542mN	392156mE 6432276mN	392199mE 6432281mN	392230mE 6432661mN	392230mE 6432661mN	392317mE 6435687mN	392337mE 6435351mN	392355mE 6432607mN

Ar	ea (ha)	69.0	0.39	0	0.66	0	2.02	0.21	0	0.01	1.27	0.02	0.42	0.32	111	0.49	0.05	0.05
	Score	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	
	P6_2	0	0	0	0	•	0	•	•	•	•	•	0	0	0	0	0	
	P6_1	•	•	•	•	•	•	•	0	•	•	0	0	•	•	•	•	
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P5_1	0	0	0	0	0	0	0	•	0	0	0	•	0	0	0	0	3
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
	P3_9b	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	5	2	2	
	P3_8	0	0	0	•	0	0	0	0	0	•	0	0	0	0	0	•	3
	P3_7b	•	0	0	0	0	0	0	0	0	•	•	0	•	•	0	0	1
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_6	•	0	0	0	0	0	0	0	0	0	0	0	0	•	•	•	1
	P3_5	0	0	0	0	0	0	0	0	•	0	0	0	0	•	0	•	
	P3_4	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	P3_3b	0	•	•	0	•	•	•	•	•	•	•	•	0	0	0	0	1
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3
	P_3	0	0	0	•	0	0	•	•	•	•	•	•	0	•	•	•	1
	P1_2d	0	0	0	0	0	0	•	•	•	•	0	•	•	0	0	•	3
	P1_2c	0	0	0	0	0	0	•	•	0	•	•	•	•	0	0	0)
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	e	m	m	m	1
	P1_2a	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	,
	ocality	CASUARINA	ANKETELL		CASUARINA		ANKETELL	CASUARINA		CASUARINA	CASUARINA		WANDI	WANDI	CASUARINA	CASUARINA		
	Туре	ßD	RD		ßD		RD	RD		RD	RD		£	£	RD	RD		
Roa	id Name	ORTON	TREEBY		LANDGREN		TREEBY	ORTON		ORTON	ORTON		KENBY	KENBY	ORTON	ORTON		
Lot	/ Rd No.	96	28		38		28	96		96	110		21	12	110	110		
Easi Nort	ting (mE) hing (mN)	392375mE 6432386mN	392389mE 6435438mN	392400mE 6432641mN	392407mE 6432263mN	392421mE 6435665mN	392443mE 6435567mN	392446mE 6432639mN	392449mE 6435506mN	392506mE 6432575mN	392508mE 6432407mN	392509mE 6432642mN	392521mE 6435924mN	392625mE 6435968mN	392639mE 6432549mN	392640mE 6432441mN	392640mE 6432416mN	392642mE

LOCAL BIODIVERSITY STRATEGY

11

Ar	ea (ha)	0.05	0.35	2.57	0.93	0.94	1.02	0.02	0	0	0.86	0.01	1.4	0	1.07	0.13	1.02	1.28
	Score	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	15
	P6_2	0	0	0	0	0	0	0	0	0	•	0	•	0	0	0	0	-
	P6_1	0	0	•	•	•	•	•	0	0	0	0	0	•	0	•	•	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	•	0	•	•	0	0	0	0	0	0	0	0	0	m
	P4_1	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	•	•	•	•	•	0	0	0	0	0	0	0	0	•	•	•	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	0	0	•	•	•	•	-	-	-	-	-	-	-	-	-	-	0
	P3_7b	0	0	0	•	•	•	•	•	0	0	•	•	0	0	0	0	0
Criteria	P3_7a	0	0	•	•	0	•	•	0	0	0	0	0	0	0	0	0	•
	P3_6	•	•	•	•	•	0	•	0	0	•	0	•	0	•	•	•	0
	P3_5	•	0	0	•	0	0	0	•	•	•	0	•	0	0	0	0	•
	P3_4	-	-	-	-	-	-	0	0	0	•	0	0	•	•	•	•	•
	P3_3b	0	0	•	•	•	•	•	•	•	•	•	•	0	0	0	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	•
	P_3	0	0	•	•	•	•	•	•	•	•	•	•	•	0	•	•	0
	P1_2d	0	0	0	•	0	•	0	0	0	0	0	0	•	0	0	0	•
	P1_2c	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality		CASUARINA	ANKETELL	WANDI	WANDI	ANKETELL				WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	KWINANA
	Туре		RD	RD	RD	ßD	RD				b		ъ	b	ъ	U	U	ßD
Roa	id Name		ORTON	ANKETELL	IYON	NOAT	TREEBY				BALKA		BALKA	BALKA	BALKA	SHOULDER	SHOULDER	WELLARD
	/ Rd No.		126	734	692	692	35				9		3	6	6	٣	90	1059
Easi Norti	ting (mE) hing (mN)	392646mE 6432530mN	392675mE 6432414mN	392678mE 6435372mN	392692mE 6435847mN	392735mE 6435871mN	392841mE 6435331mN	394031mE 6429700mN	394120mE 6429793mN	394137mE 6429789mN	394200mE 6429747mN	394201mE 6429748mN	394209mE 6429774mN	394232mE 6429958mN	394319mE 6429857mN	394328mE 6428515mN	394421mE 6428538mN	385735mE

A	rea (ha)	0.69	2.38	2.34	27.9	0.07	0.07	0.07	1.48	0.33	1.72	0.88	1.66	1.74	0.05	26.12	0	0.02
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2	2
	P5_1	m	m	m	m	m	m	m	0	0	•	•	•	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-		-		-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	~	0	0	0	•	0	0	•	2	2	~
	P3_9b	0	0	0	0	0	•	0	•	•	•	•	•	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	•	0	0	0	0	•	•	0	•	•	•	0	0	0	0	0
	P3_7b	•	•	•	•	•	•	0	0	0	0	0	0	0	•	•	•	•
Criteria	P3_7a	0	•	0	0	•	•	0	•	0	•	•	•	•	0	0	•	0
	P3_6	0	•	•	0	•	•	•	•	0	•	0	•	•	0	0	•	0
	P3_5	•	0	0	0	0	0	•	•	0	•	•	•	•	0	0	•	0
	P3_4	0	0	0	0	•	0	0	-	-	-	-	-	-	-	-	-	0
	P3_3b	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0
	P3_3a	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	0	0	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-
	ocality		KWINANA BEACH	LEDA	LEDA				HOPE VALLEY		HOPE VALLEY	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY		PARMELIA
	Туре		ßD	RD	RD				ß		ß	ß	ß	ß	ß	ßD		٩
Roa	ad Name		WELLARD	WELLARD	WELLARD				MANDOGALUP		MANDOGALUP	MANDOGALUP	MANDOGALUP	MANDOGALUP	MANDOGALUP	MANGDOGA- LUP		CAMPDEM
Lot	/ Rd No.								325		317	311	297	289	1/2			
Eas Nort	ting (mE) hing (mN)	385740mE 6431792mN	385813mE 6431817mN	385843mE 6431178mN	386212mE 6430033mN	386262mE 6430416mN	386262mE 6430416mN	386262mE 6430416mN	389168mE 6438236mN	389177mE 6438216mN	389191mE 6438113mN	389249mE 6438058mN	389272mE 6438037mN	389536mE 6438130mN	389540mE 438040mN	390044mE 6437371mN	390223mE 6436337mN	390230mE

11

A	rea (ha)	0.15	0	0.36	0.01	0.03	0	0.01	0.34	0.22	0.03	0.28	0.62	0	0.22	0.21	1.96	0.71
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	5	15	15
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-	0	•	0	0	0	0	0	0	0
	P3_9c	~	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2
	P3_9b	•	0	•	•	0	0	0	0	0	0	0	0	0	0	0	0	•
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	•	0	0	0	0	0	0	•	•	•	•	•	•	•	•
	P3_7b	•	0	0	0	0	0	0	0	0	•	•	•	0	0	0	0	0
Criteria	P3_7a	•	0	•	0	0	0	0	0	0	•	•	•	0	•	•	•	•
	P3_6	•	•	•	0	0	0	0	0	0	•	•	•	0	•	0	0	•
	P3_5	•	0	•	0	•	•	0	•	•	•	•	0	0	0	0	•	•
	P3_4	•	•	•	0	0	0	0	0	-	-	-	-	-	-	-	-	-
	P3_3b	•	•	0	0	0	0	•	•	•	•	0	0	0	•	•	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	•	0	0	0	0	0	•	•	0	•	•	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	0	0	0	0	0	0	0	•	•	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
i	ocality	PARMELIA								MANDOGA- LUP	MANDOGA- LUP	MANDOGA- LUP	MANDOGA- LUP	MANDOGA- LUP		MANDOGALUP		MANDOGALUP
	Туре	d)							AVE	ß	ß	ß	RD	ß		ß		ß
Ro	ad Name	CAMPDEN							HUNTINGTON	NORKETT	NORKETT	MANDOGALUP	MANDOGALUP	ROWLEY		MANDOGALUP		MANDOGALUP
Lo	/ Rd No.									67	67		57	10		56		56
Eas Nort	ting (mE) hing (mN)	390284mE 6431571mN	390538mE 64318833mN	390548mE 6431911mN	390551mE 6431922mN	390554mE 6431868mN	390580mE 6431868mN	390626mE 6432075mN	390789mE 6429028mN	390870mE 6437553mN	390913mE 6437631mN	390960mE 6436481mN	390965mE 6436402mN	390973mE 6438923mN	390979mE 6438935mN	391016mE 6436450mN	391067mE 6435949mN	391084mE 6436408mN

Ar	ea (ha)	0.41	3.84	0.01	0.17	0.12	0	0	0.38	0.1	0.08	0.18	1.15	0.04	10.55	0.58	0.17
	Score	15	15	15	5	15	15	15	15	15	15	15	15	15	5	5	¥
	P6_2	0	0	0	0	0	0	0	0	0	•	•	•	0	0	0	0
	P6_1	0	0	0	0	•	•	0	0	0	0	0	0	0	0	•	-
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	•
	P5_1	0	0	0	0	0	•	0	•	0	•	0	0	0	0	0	-
	P4_1	•	•	0	-	0	0	0	-	-	0	0	0	-	0	•	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_9b	•	•	0	0	0	0	0	0	0	0	0	0	0	0	•	-
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	0	0	0	0	•	0	0	0	0	0	0	0	•	0	•	-
	P3_7b	0	0	0	0	0	0	0	0	0	•	•	•	0	0	0	c
Criteria	P3_7a	0	0	0	0	•	•	•	0	0	0	0	0	0	0	0	•
	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	e
	P3_5	0	0	0	0	0	•	0	•	•	•	0	0	0	•	0	-
	P3_4	-	-	-	0	-	-	-	0	0	-	-	-	0	-		
	P3_3b	•	0	0	0	0	0	0	•	•	•	0	0	0	0	•	-
	P3_3a	4	4	-4	4	4	4	4	4	4	4	4	4	4	4	4	*
	P_3	•	0	0	0	0	0	0	•	•	•	•	•	•	0	0	-
	P1_2d	•	•	•	•	•	•	•	0	•	•	•	•	0	•	•	-
	P1_2c	•	•	0	0	0	0	0	0	•	•	•	•	•	•	0	-
	P1_2b	m	m	m	~	ŝ	m	m	m	m	m	m	m	m	3	m	~
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality	MANDOGALUP	BERTRAM			BERTRAM			WELLARD	WELLARD		MANDOGA-LUP	CASUARINA	WELLARD		CASUARINA	MANDOCA.1110
	Туре	RD	RD		PROM	RD			РКМҮ	U	ß	RD	FWY	80		RD	ua
Roa	id Name	ANKETELL	SULPHUR		MCWHIRTER	NOSNHO			MOONSTONE	AURORA	ANKETELL	ROWELY	KWINANA	INDIGO		THOMAS	DOMELY
Lot	/ Rd No.	211	8601														
East	ling (mE) hing (mN)	391107mE 6435838mN	391118mE 6432921mN	391237mE 6435761mN	391255mE 6429036mN	391416mE 6433224mN	391424mE 6432702mN	391424mE 6432698mN	391589mE 6429598mN	391713mE 6429384mN	391747mE 6435659mN	391760mE 6438943mN	391775mE 6432904mN	391782mE 6429391mN	391798mE 6438361mN	391810mE 6433396mN	391869mE

11

20

Ar	ea (ha)	0.44	0.51	0.05	1.33	0.17	0.3	2.12	2.09	0.32	0	0.18	0.62	0	0.35	0	0.15
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	•	•	•	•	0	0	0	0	0	0	0	0	•	0	•	0
	P6_1	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	•	0	•	0	•	0	0	0	0
	P4_1	-	0	0	0	0	0	0	-	-	-	0	0	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	5	2	2	2	2	2	2	2	2
	P3_8	0	0	0	0	0	0	0	•	0	•	0	0	0	0	0	0
	P3_7b	•	•	•	•	•	0	0	0	0	•	0	0	•	•	0	0
Criteria	P3_7a	0	0	0	•	0	•	•	•	•	•	•	•	0	0	0	0
	P3_6	0	•	0	•	0	0	0	0	0	•	0	•	•	0	0	0
	P3_5	0	0	0	•	0	0	0	0	•	•	•	•	•	0	0	0
	P3_4	•	-	-	-	-	-	-	0	0	0	-	-	-	-	-	-
	P3_3b	•	•	0	0	0	•	0	0	0	0	0	0	0	•	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	•	•	•	•	•	0	0	0	0	0	0	0	•	•	•
	P1_2d	0	0	0	0	•	0	0	•	•	•	•	•	•	0	0	0
	P1_2c	•	•	0	•	•	0	0	0	0	0	0	0	0	0	•	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	~
	P1_2a	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	ocality	WELLARD		MANDOGA-LUP		MANDOGA-LUP	WANDI		WELLARD			ANKETELL		ANKETELL	CASUARINA		CASUARINA
	Туре	ß		ß		ß	ß	Ø	Ø			RD	ßD	Ø	RD		RD
	id Name	MILLAR		ROWELY		ROWLEY	ANKETELL	HOFFMAN	MILLAR			TREEBY	HOFFMAN	TREEBY	THOMAS		THOMAS
Lot	/ Rd No.	593					651		593			74		82			
Eas Nort	ting (mE) hing (mN)	391892mE 6429351mN	391899mE 6437314mN	391934mE 6438898mN	391961mE 6437125mN	391966mE 6438874mN	391987mE 6435715mN	392002mE 6437456mN	392107mE 6429398mN	392122mE 6429490mN	392127mE 6429440mN	392133mE 6434960mN	392136mE 6437384mN	392137mE 6434885mN	392140mE 6433342mN	392147mE 6435878mN	392155mE

Ar	ea (ha)	0	0.14	12.65	0.16	1.4	0.9	0.18	0.5	0.35	173	0	0.13	0.16	0.29	0.81	0.14
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	5	2	5	5	2	2	5	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P4_1	-	-	-	0	0	0	0	0	-	0	0	0	-	0	-	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	•	0	0	0	0	0	•	•	•	•	•	•	0	•	0	-
	P3_7b	•	0	0	0	•	•	0	•	0	0	•	0	0	0	0	0
Criteria	P3_7a	•	•	0	0	0	0	0	0	0	0	0	0	•	•	0	c
	P3_6	0	•	•	•	0	•	•	•	•	•	•	•	0	0	0	-
	P3_5	•	•	0	•	0	0	0	•	0	•	•	0	•	•	•	-
	P3_4	0	•	0	-	-	-	-	-	0	-	-	-	•	-	0	-
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	c
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
	P1_2d	0	•	0	0	0	0	0	0	0	•	•	•	•	0	0	0
	P1_2c	•	0	0	0	0	•	•	•	0	0	0	0	0	0	•	-
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	e	~
_	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
L	ocality		CASUARINA	WELLARD	ANKETELL	CASUARINA	WANDI	ANKETELL	ANKETELL	CASUARINA	WANDI		WANDI	CASUARINA		CASUARINA	WANDI
	Туре		RD	RD	RD	RD	Ð	RD	RD	RD	FWY		9	RD		RD	æ
Roa	id Name		ORTON	WOOLCOOT	TREEBY	ORTON	KENBY	TREEBY	THOMAS	LANDGREN	KWINANA		ATALAYA	LANDGREN		LANDGREN	KENBY
Lot	/ Rd No.		129		74		25	74	793	46				38		64	35
East Iorti	ting (mE) hing (mN)	392160mE 6432031mN	392202mE 6432063mN	392204mE 6429458mN	392221mE 6434969mN	392279mE 6432954mN	392287mE 6436097mN	392300mE 6434974mN	392322mE 6433709mN	392334mE 6432209mN	392342mE 6438354mN	392342mE 6438356mN	392365mE 6436245mN	392434mE 6432254mN	392437mE 6433490mN	392440mE 6432009mN	392466mE

12

	ea (ha)	5 0.4	5 4.87	0	5 0.33	0	5 0.14	0.89	5 0.37	5 1.19	0.3	69:0	0.26	5 0.1	0	5 1.25	5 0.26
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	0	0	•	•	0	•	0	0	0	0	0	0	•	0	•	0
	P6_1	•	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	•	0	0	•	0	0	0	0	0	0	0	0	•	•	•	0
	P4_1	-	2 1	2 1	2 0	2 0	-	•	•	-	•	•	-	-	2 1	2 0	-
	P3_9c	0 2	0	0	0	0	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0	0	0 2
	P3_9b	2 (2 0	2 (2 0	2 0	2	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 (2 (2
	P3_9a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_8 P3_7b	0	0	0	•	-	0	0	0	0	0	0	0	0	0	0	0
Criteria	P3_70 P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_4	0	0	0	-	-	0	-	-	0	-	-	0	0	0	-	0
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	-1	4	4	4	4	4	4
	P_3	0	0	0	•	0	•	0	0	0	0	0	0	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	~	m	m	m	m	~	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
t	ocality	WELLARD	WELLARD		ANKETELL	ANKETELL	CASUARINA		CASUARINA	WELLARD	WANDI		WELLARD	WELLARD			WELLARD
	Туре	RD	RD		ß	RD	Ø		RD	RD	Ð		Ы	ß			RD
Roa	id Name	WOOLCPPT	MILLAR		THOMAS	THOMAS	LANDGREN		ORTON	MILLAR	KENBY		NELLA	WOOLCOOT			WOOLCOOT
Lot	/ Rd No.		619		811	819	46		105	619	25		9	185			185
East Nort	ting (mE) hing (mN)	392473mE 6429517mN	392477mE 6428634mN	392481mE 6428642mN	392484mE 6433782mN	392485mE 6433779mN	392499mE 6432233mN	392506mE 6433169mN	392515mN 6432865mN	392534mE 6428988mN	392553mE 6435996mN	392605mE 6433194mN	392637mE 6429138mN	392638mE 6429095mN	392663mE 643216mN	392664mE 6432715mN	392674mE

	ea (ha)	5 0.07	5 0.39	5 0.7	5 0.54	5 0.26	5 0.17	5 0.42	5 0.65	5 0.26	5 0.03	5 137	5 0.07	5 0	5 0.31	5 0.18	5 1.14
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	0	0	0	0	0	0	0	0	•	•	0	0	0	0	0	0
	P6_1	0	0	•	0	•	0	0	0	0	0	0	0	0	0	•	0
	P5_1b	0 2	0 2	0 2	2	2	2	2	2	2	2	2	2	0 2	0 2	0 2	2
	P5_1	-	-	-	-	-	•	-	1 0	1	1 0	•	1	-	-	-	1
	P4_1 P3_9c	2	2	2	2	2	2	2	2	2	2	2 1	2	2	5	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	5	2	5	2	2	2
	P3_8	0	0	0	0	0		0	0	0	0	0	0	0	0	0	
	P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Criteria	P3_7a	0	0	•	0	•	0	0	0	0	0	0	0	0	0	0	0
3	P3_6	0	•	0	•	0	0	•	0	•	•	•	•	•	0	0	0
	P3_5	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0
	P3_4	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_3b	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	•	0	•	0	0	0	0
	P1_2d	0	0	•	0	•	•	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	•	0	0	•	0	0	•	0	0	0	•	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	~	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality	WELLARD	CASUARINA	CASUARINA	CASUARINA	CASUARINA	WELLARD	CASUARINA					WELLARD		WELLARD	WELLARD	WELLARD
	Туре	RD	RD	RD	ß	RD	ß	ß					ß		Ы	RD	RD
Roa	id Name	WOOLCOOT	LANDGREN	LANDGREN	LANDGREN	LANDGREN	BRADDOCK	LANDGREN					BRADDOCK		SHIPSEY	BRADDOCK	BRADDOCK
	/ Rd No.	185	45	23	23	23	173	23					128		20	149	141
Eas Nort	ting (mE) hing (mN)	392695mE 6429087mN	392753mE 6432206mN	392772mE 6432053mN	392797mE 6432053mN	392961mE 6432124mN	393019mE 6428733mN	393041mE 6432128mN	393112mE 6428750mN	393132mE 6428882mN	393205mE 6428828mN	393210mE 6428850mN	393221mE 6428883mN	393224mE 6428888mN	393338mE 6428519mN	393367mE 6428679mN	393392mE

12

	ea (ha)	5 0.92	0	0	5 0.2	6 0.01	0	0	5 1.61	5 13	0	1.71	0	5 153	0	5 1.36	0.01
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	0	0	0	0	0	0	0	0	0	•	•	•	0	0	0	-
	P6_1	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0	-
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	0	•	•	•	•	•	•	•	0	•	0	0	0	0	0	<
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	P3_9c	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	2	2	2	0 2	2	0 2	0 2	-
	P3_9b		2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	•	•		•	2 0	2 0	-
	P3_9a	0 2	0	0	0	0	0	0	0	0	0 2	0 2	0 2	0 2	0	0	۰ و
	P3_8 P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- -
Criteria	P3_70 P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ຮ	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0		0	-
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P3_4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	,
	P_3	0	0	0	0	0	0	0	0	•	0	0	•	•	0	0	-
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	•	0	0	•	-
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	~
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-		17	-
	ocality	WELLARD	WELLARD		WELLARD				WELLARD	WELLARD		WELLARD	WELLARD	WELLARD		WELLARD	
	Туре	RD	Ч		RD				ßD	RD		Ы	Ы	Ч		Ы	
Roa	id Name	BRADDOCK	SHIPSEY		BRADDOCK				BARKER	BRADDOCK		SHIPSEY	SHIPSEY	SHIPSEY		SHIPSEY	
	/ Rd No.	125	4		125				181	94		20	21	16		4	
East Norti	ting (mE) hing (mN)	393395mE 6428803mN	393414mE 6428827mN	393423mE 6428972mN	393431mE 6428967mN	393447mE 6428953mN	393465mE 6428985mN	393472mE 6428984mN	393548mE 6428975mN	393569mE 6428973mN	393570mE 6428972mN	393570mE 6428737mN	393588mE 6428719mN	393590mE 6428836mN	393590mE 6428817mN	393595mE 6428859mN	393599mE

	ea (ha)	0	0.18	-	0.71	0	2.02	1.05	0.66	0	0.4	1.49	0	0	0.14	0.12	0.05
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	0	0	0	•	•	0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	•	0	•	0	0	0	0	0	0	0	0	0	•	0	0	0
	P4_1	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	•	0	•	0	•	•	0	•	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	~	2	~	2	2	2	7	2
	P3_8	0	0	0	0	0	0	•	-	-	•	0	•	•	0	0	0
	P3_7b	•	0	0	•	•	•	•	0	0	0	•	•	0	0	•	0
Criteria	P3_7a	•	•	0	0	0	0	•	•	0	•	•	•	•	0	0	0
	P3_6	0	0	0	0	0	•	•	•	•	0	0	0	0	0	0	0
	P3_5	0	0	0	•	0	•	0	0	•	•	0	•	•	0	0	0
	P3_4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	•	•	•	0	•	0	0	0	0	0	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	•	•	•	•	•	0	0	0
	P1_2c	0	•	0	•	•	0	•	•	0	•	0	0	0	0	•	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	~
_	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality		WELLARD	WELLARD	WELLARD		WELLARD	WELLARD	WELLARD		WELLARD	WELLARD			WELLARD	WELLARD	WELLARD
	Туре		Ы	RD	Ы		Ы	RD	RD		RD	RD			RD	RD	ß
Roa	id Name		SHIPSEY	BRADDOCK	SHIPSEY		SHIPSEY	BRADDOCK	BARKER		DUCKPOND	BARKER			BRADDOCK	BRADDOCK	BRADDOCK
	/ Rd No.		21	74	21		13	79	43		210	88			5	5	31
Easi Nort	ting (mE) hing (mN)	393599mE 6428738mN	393733mE 6428700mN	393747mE 6429161mN	393774mE 6428657mN	393781mE 6429059mN	393838mE 6428796mN	393882mE 6428894mN	394011mE 6430351mN	394012mE 6430350mN	394015mE 6428588mN	394039mE 6429731mN	394099mE 6429794mN	394106mE 6429829mN	394147mE 6428692mN	394186mE 6428754mN	394204mE

12

26

Ar	ea (ha)	0.21	0.11	0.68	0	0.25	0.45	0.16	0	0.22	0.76	0.38	0	1.07	0.64	1.32	0.14
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	P6_2	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	•	0	0	0	•	•	•	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_9b	•	•	•	•	0	0	•	0	0	0	0	0	0	0	•	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	•	0	•	•	•	•	•	•	•	0	•	•	•	•	•	0
	P3_7b	•	•	•	•	0	•	•	•	•	•	•	•	•	0	•	0
Criteria	P3_7a	0	0	0	•	•	•	•	•	•	0	0	0	0	•	•	0
	P3_6	•	•	0	•	0	0	0	•	•	0	•	•	•	0	•	•
	P3_5	0	0	0	0	0	•	•	•	•	0	•	•	0	0	•	0
	P3_4	•	•	•	•	0	0	0	0	0	0	0	0	0	•	•	•
	P3_3b	0	0	0	0	0	0	0	0	0	0	•	0	•	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	•	•	•	•	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0
	P1_2b	m	m	m	m	m	m	m	m	e	m	3		m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
u	ocality	WELLARD		WELLARD		WELLARD		WELLARD		WELLARD	WELLARD	WELLARD		WELLARD	WELLARD	WELLARD	WELLARD
	Туре	ßD		ь		ß		ь		ß	RD	RD		ь	IJ	IJ	Ŀ
Roa	id Name	BRADDOCK		BALKA		BRADDOCK		BALKA		BRADDOCK	BANKSIA	BRADDOCK		BALKA	BALKA	BALKA	BALKA
	/ Rd No.	23		10		5		10		23	35	F		11	24	16	24
East Vort	ting (mE) hing (mN)	394227mE 6428876mN	394236mE 6428699mN	394246mE 6429740mN	394247mE 6429742mN	394260mE 6428716mN	394276mE 6428705mN	394296mE 6429734mN	394296mE 6429735mN	394301mE 6429008mN	394305mE 6428794mN	394307mE 6428846mN	394314mE 6429731mN	394327mE 6429761mN	394347mE 6429589mN	394366mE 6429705mN	394396mE

Ar	ea (ha)	0.26	0	0.45	0.86	0.44	69.0	0.19	0.42	0.32	0.79	0.16	1.25	0.26	0.86	0.79	0.08
	Score	15	15	15	15	15 (5	5	15	15	15 (15	15	15	5	5	15
		0	0			0	0	0	0	0	0	0	0	0		0	0
	P6_2 P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5	2
	P3_8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	•	•	•	•	0	0	0
0	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_4	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	•	0	0	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	•	•	•	•	0	•	•	•	•	•	•	•	•	0	•
	P1_2d	0	•	0	•	0	•	•	•	•	•	•	•	0	0	•	•
	P1_2c	0	0	0	•	•	0	•	•	•	•	0	0	0	0	0	•
	P1_2b	m	e	m	m	m	m	m	m	m	m	m	m	m	e	e	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality	WELLARD		WELLARD	CASUARINA	CASUARINA											
	Туре	b		RD	RD	b	IJ	RD	RD	ßD	ß	RD	Ŀ	RD	RD	DR	DR
Roa	ad Name	BALKA		LYDON	BANKSIA	BALKA	BALKA	IYDON	IYDON	IYDON	MORTIMER	IVDON	WILKINSON	LYDON	LYDON	LAVERY	GOODMAN
	/ Rd No.	24		85	87	23	23	67	78	67	356	70	20	19	70	95	38
East Nort	ting (mE) hing (mN)	394438mE 6429629mN	394464mE 6430115mN	394467mE 6430031mN	394473mE 6428697mN	394504mE 6429820mN	394510mE 6429843mN	394597mE 6429929mN	394646mE 6430298mN	394652mE 6429988mN	394668mE 6430507mN	394669mE 6430078mN	394671mE 6430312mN	394683mE 6429915mN	394695mE 6430151mN	394709mE 6431636mN	394783mE

12

28

|--|

P3_7b P3_7a P3_6 P3_5 P3_4 P3_3a P3_3a P3_3a P1_2d P1_2c P1_2b P1_2a Locality	I CT WELLARD 1 3 0 0 0 4 0 0 0 0 0	CT WELLARD 1 3 0 0 0 4 0 0 0 0 0	1 3 0 0 4 0 0 0 0 0 0	1 3 0 0 4 0 0 0 0 0 0	RD WELLARD 1 3 0 0 0 4 0 0 0 0 0	DR CASUARINA 1 3 0 0 0 4 0 0 0 0 0	DR CASUARINA 1 3 0 0 0 4 0 0 0 0 0	DR CASUARINA 1 3 0 0 0 4 0 0 0 0 0	RD CASUARINA 1 3 0 0 0 4 0 0 0 0 0	RD WELLARD 1 3 0 0 0 4 0 0 0 0 0	RD CASUARINA 1 3 0 0 0 4 0 0 0 0 0	RD CASUARINA 1 3 0 0 0 4 0 0 0 0 0	DR CASUARINA 1 3 0 0 0 4 0 0 0 0 0	RD CASUARINA 1 3 0 0 0 4 0 0 0 0 0	DR CASUARINA 1 3 0 0 0 4 0 0 0 0 0
Type Road Name Lot/Rd No.	394903mE 9 WILKINSON C1 6430640mN 9 WILKINSON C1	6 WITKINSON CI			14 LYDON RD	123 LAVERY DR	123 LAVERY DR	135 LAVERY DR	166 CASUARINA RD	20 LYDON RD	158 CASUARINA RD	188 CASUARINA RD	124 LAVERY DR	158 CASUARINA RD	13S LAVERY DR

12

30

Âr	ea (ha)	1.29	0.01	0.26	1.29	0.13	0.82	0.35	0.01	0.03	0	66.0	•	3.03	6.44	0.05	1.44
	Score	15	15	15	15	15	15	15	15	15	15	15	15	15	14	14	14
	P6_2	0	0	0	•	0	0	0	0	0	0	0	0	0	-	-	-
	P6_1	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	•	0	0	0	0	0	0	0	0	0	0	0	0	e se	m	m
	P4_1	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
	P3_9c	~	2	2	2	~	5	2	2	2	2	2	2	2	•	0	0
	P3_9b	0	0	0	0	0	0	0	0	•	0	0	0	0	0	•	0
	P3_9a	7	2	2	2	~	2	2	2	2	~	~	2	2	2	2	2
	P3_8	•	0	0	0	•	0	0	0	0	0	0	0	•	0	•	0
	P3_7b	•	•	•	•	•	•	•	•	•	•	•	0	0	•	0	•
Criteria	P3_7a	•	•	•	•	•	•	•	0	0	•	•	•	•	0	•	0
	P3_6	0	0	0	•	•	•	•	•	•	•	•	•	•	0	•	0
	P3_5	•	0	0	•	•	•	•	•	•	0	•	0	0	•	•	0
	P3_4	•	0	0	0	0	•	•	0	•	•	•	•	0	-	-	-
	P3_3b	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2d	•	0	0	0	0	•	0	0	0	0	0	0	0	0	•	0
	P1_2c	0	0	0	0	•	•	•	0	•	0	0	0	0	0	•	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	•	•	0
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
	ocality	CASUARINA		CASUARINA	CASUARINA	CASUARINA	CASUARINA	CASUARINA				WELLARD			HOPE VALLEY		HOPE VALLEY
	Туре	DR		RD	RD	RD	DR	RD				ßD			RD		RD
Roa	ad Name	LAVERY		CASUARINA	CASUARINA	CASUARINA	LAVERY	CASUARINA				CASUARINA			HOPE VALLEY		HOPE VALLEY
	/ Rd No.	138		166	180	188	141	188				242			192		198
Easi Nort	ting (mE) hing (mN)	395095mE 6431527mN	395095mE 6431530mN	395138mE 6431253mN	395143mE 6431122mN	395144mE 6430971mN	395145mE 6431682mN	395146mE 6431003mN	395147mE 6431773mN	395147mE 6431520mN	395149mE 6431344mN	395154mE 6430580mN	395158mE 6430345mN	395158mE 6430432mN	386821mE 6437036mN	386973mE 6436721mN	387040mE

A	rea (ha)	76:6	0.58	0	0.92	0.03	0.01	0	0	0.01	0.01	0	0	0.06	0	0	0
	Score	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	P6_2	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	0	•	•	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	m	m	m	m	0	0	•	•	•	0	•	•	0	0	0	0
	P4_1	-	-	÷	-	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	5
	P3_9b	•	•	•	•	•	0	•	0	0	0	0	0	0	•	•	•
	P3_9a	7	2	2	2	2	2	2	2	7	2	2	2	2	2	2	2
	P3_8	•	•	•	•	•	•	•	•	•	•	•	•	0	0	0	0
	P3_7b	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Criteria	P3_7a	0	•	•	•	•	•	•	•	•	•	0	•	•	0	0	•
	P3_6	•	•	•	•	0	0	0	0	0	•	0	•	0	•	•	•
	P3_5	0	0	0	0	0	•	•	0	•	•	•	•	0	0	0	0
	P3_4	-	-	-	-	0	0	0	0	0	•	0	0	0	0	•	•
	P3_3b	0	0	0	0	0	0	0	0	0	•	•	0	0	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	0	0 0	0	0	0	0	0	•	•	0	0	0	0	0	0 0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	0	0			8	3			0 M	9	3			
	P1_2b P1_2a	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-
	PI_2d						-		1002.2	210		290.0					
ι	ocality	HOPE VALLEY	HOPE VALLEY		HOPE VALLEY										WELLARD	WELLARD	WELLARD
	Туре	RD	RD		RD										£	₽	£
Ro	ad Name	HOPE VALLEY	HOPE VALLEY		HOPE VALLEY										SAPPHIRE	SAPPHIRE	SAPPHIRE
Lot	t/ Rd No.	140	198		268										336	238	240
Eas Nort	ting (mE) thing (mN)	387213mE 6436870mN	387220mE 6437024mN	387222mE 6436714mN	38730mE 6436916mN	391006mE 6431886mN	391006mE 6431886mN	391007mE 6431886mN	391302mE 6432147mN	391308mE 6432179mN	391308mE 6432179mN	391423mE 6430977mN	391427mE 6430977mN	391432mE 6431101mN	391619mE 6430430mN	391624mE 6430430mN	391641mE 6430430mN

13



Ar	rea (ha)	0.12	0	8.26	0.01	0.26	0	0.02	1.17	0.85	0.04	0.03	1.03	1.03	0.92	0.01	0.97
	Score	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P6_1	0	0	0	0	0	•	•	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	•	0	•	0	0	0	0	0	0	•	0	0	0
	P4_1	•	0	•	0	0	0	0	0	0	0	0	0	•	•	•	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	•	•	•	•	0	0	0	0	•	0	0	•	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	•	•	•	•	0	0	•	0	0	0	0	•	0	0
	P3_7b	•	0	0	0	0	0	0	0	0	0	•	•	•	•	•	0
Criteria	P3_7a	•	0	•	•	•	•	•	•	•	0	0	0	0	•	•	•
	P3_6	•	•	•	0	0	•	0	•	•	•	•	•	•	•	•	•
	P3_5	0	0	0	0	0	•	0	•	•	0	0	0	0	0	0	0
	P3_4	0	0	•	•	•	•	0	0	•	0	0	•	•	0	•	0
	P3_3b	0	0	0	0	0	•	0	•	•	•	•	•	•	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	0	0	0	0	0	0	0	0	•	0	•	•	0	0	0
	P1_2d	0	0	•	•	•	•	•	•	•	0	0	0	0	•	•	•
	P1_2c	•	•	•	•	0	0	0	0	•	•	0	•	•	•	•	•
	P1_2b	m 	- -	m	1 3	m 	m	1	m	m	m	m	m	m	~	~	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality			CASUARINA		CASUARINA			CASUARINA	CASUARINA	CASUARINA		CASUARINA	CASUARINA	CASUARINA	CASUARINA	CASUARINA
	Туре			RD		RD			Ы	DR	ß		Ы	DR	Ы	ß	ßD
Roa	ad Name			MORTIMER		ORTON			1066	NICOLAS	NICOLAS		1066	NICOLAS	1066	LANDGREN	LANDGREN
	/ Rd No.			16		129			35	41	33		62	25	=	84	74
Easi Vorti	ting (mE) hing (mN)	391641mE 6430430mN	391987mE 6431520mN	392037mE 6430888mN	392162mE 6431866mN	392168mE 6431912mN	392199mE 6430498mN	392199mE 6430496mN	392231mE 6431726mN	392242mE 6431260mN	392248mE 6431137mN	392305mE 6430678mN	392318mE 6431612mN	392319mE 6431336mN	392337mE 6431389mN	392353mE 6431845mN	392358mE

Ar	ea (ha)	0.16	0.42	0	0.01	0	0.62	0.87	0.01	1.38	0	0.64	0.93	0	0.01	1.56	0	13
	Score	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	P6_2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	•
	P5_1	0	0	0	•	0	0	0	0	0	0	0	0	•	•	0	0	
	P4_1	0	0	0	0	•	0	0	•	•	0	0	0	0	0	0	0	
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	~	5	2	2	
	P3_9b	0	0	•	•	0	0	0	0	•	0	0	0	•	0	0	0	•
	P3_9a	2	2	2	2	2	7	2	2	2	2	2	2	2	2	2	2	•
	P3_8	•	0	0	•	0	0	0	0	0	•	0	0	0	•	•	0	•
	P3_7b	•	0	0	•	•	•	0	•	0	0	0	•	•	0	0	0	•
Criteria	P3_7a	•	•	•	0	0	0	0	0	0	•	0	•	0	•	•	0	•
	P3_6	0	0	0	•	•	0	•	0	•	•	•	•	•	•	0	•	
	P3_5	•	•	•	•	•	0	0	0	0	•	0	0	•	•	•	•	•
	P3_4	0	0	0	•	0	0	0	•	•	•	•	•	•	•	•	0	
	P3_3b	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	,
	P_3	0	0	0	•	0	0	0	0	0	0	0	0	0	•	0	0	•
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	•
	P1_2c	0	•	0	0	•	•	•	•	0	•	0	0	0	0	0	0	•
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	.*
	P1_2a	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ocality	CASUARINA	WELLARD	WELLARD			CASUARINA	WELLARD		CASUARINA	CASUARINA	CASUARINA	CASUARINA		CASUARINA	CASUARINA	CASUARINA	THOMAS ST
	Туре	Ы	RD	ß			Ы	RD		RD	DR	Ч	DR		RD	ßD	RD	4
Roa	id Name	1066	MORTIMER	MORTIMER			10GG	WOOLCOOT		LANDGREN	NICOLAS	1066	NICOLAS		LANDGREN	LANDGREN	LANDGREN	1 AUG COLO
Lot	/ Rd No.	34	110	136			21			84	32	34	42		11	85	22	10
East Norti	ling (mE) hing (mN)	392377mE 6431743mN	392391mE 6430670mN	392397mE 6430629mN	392423mE 6431139mN	392429mE 6431455mN	392430mE 6431446mN	392462mE 6429794mN	392482mE 6431296mN	392510mE 6431763mN	392558mE 6431096mN	392598mE 6431748mN	392628mE 6431185mN	392668mE 6431766mN	392767mE 6431849mN	392876mE 6431826mN	392882mE 6432044mN	393089mE

13

34

	P4_1 P3_9c P3_9b P3_9a	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	2 0 2 0	
Criteria	P3_8 P3_7b P3_7a	0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
	P3_6 P3_5 P3_4	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	
	P3_3b P3_3a P_3	0 4	0 4	0 4	0 4	0 4	0 4	0 4	0 4 0	0 4 0	0 4 0	0 4 0	0 4 0	0 4 0	0 4	0 4	0 4	
	P1_2d P1_2c P1_2b	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0 8	3 0 0	3 0 0	3 0 0	3 0 0	3 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	24 24 24
	P1_2a ocality	WELLARD 1	WELLARD 1	CASUARINA 1	CASUARINA 1	CASUARINA 1	1	CASUARINA 1	CASUARINA 1	CASUARINA 1	WELLARD 1	1	CASUARINA 1	1	CASUARINA 1	1	CASUARINA 1	
	Туре	Ы	DR	DR	DR	DR		DR	DR	DR	DR		DR		DR		RD	
Roa	ad Name	NELLA	MCKEIG	NICOLAS	NICOLAS	NICOLAS		NICOLAS	NICOLAS	NICOLAS	ARUNDEL		NICOLAS		NICOLAS		MORTIMER	
	/ Rd No.	51	7	131	122	136		186	192	206	40		180		168		223	
Eas Nort	ting (mE) hing (mN)	393096mE 6429257mN	393097mE 6430321mN	393117mE 6431558mN	393133mE 6431531mN	393144mE 6431391mN	393156mE 6431533mN	393165mE 6431075mN	393193mE 6431060mN	393209mE 6430975mN	393215mE 6429478mN	393215mE 6431746mN	393237mE 6431248mN	393237mE 6431248mN	393251mE 6431309mN	393255mE 6431317mN	393275mE 6430872mN	

	ea (ha) Score	14 0.81	14 0.23	14 0.12	14 0.99	14 1.15	14 0.87	14 0.37	14 0.13	14 0.32	14 0.28	14 0.13	14 1.01	14 0.06	14 0.66	14 0.78	14 0.37	C0 0 11
	P6_2	0	0	0	0	0	0	•	•	0	•	0	0	0	0	0	0	•
	P6_1	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	,
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	P4_1	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	
	P3_9c	~	2	2	2	2	7	2	2	2	2	2	2	5	2	2	2	
	P3_9b	0	0	0	0	0	0	0	0	0	0	•	•	•	0	0	0	
	P3_9a	2	2	2	7	2	2	2	2	2	2	2	2	2	2	2	2	
	P3_8	•	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	
	P3_7b	0	0	0	0	0	0	•	•	•	0	0	•	0	0	0	0	
Criteria	P3_7a	•	0	0	0	0	0	•	0	0	•	0	•	•	•	•	•	
	P3_6	0	0	0	0	0	0	•	0	•	•	0	0	0	0	0	0	
	P3_5	•	0	0	0	0	0	•	•	0	•	0	0	0	•	•	•	
	P3_4	0	0	0	0	0	0	0	•	۰	•	0	•	0	0	0	0	
	P3_3b	•	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	
	P3_3a	4	4	4	4	4	4	4	4	4	4	-4	4	4	4	4	4	
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	•	0	•	0	0	
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
	ocality	CASUARINA		WELLARD	CASUARINA	WELLARD	CASUARINA	CASUARINA	CASUARINA	WELLARD	CASUARINA	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	
	Туре	DR		DR	DR	b	DR	DR	DR	DR	ßD	DR	ßD	DR	DR	IJ	ь	
Roa	ad Name	NICOLAS		MCKEIG	NICOLAS	BRUCE	NICOLAS	NICOLAS	NICOLAS	MCKEIG	BORN	MCKEIG	MORTIMER	MCKEIG	MCKEIG	BRUCE	BRUCE	
Lot	/ Rd No.	149		25	155	24	163	193	171	26	25	37	234	37	37	23	23	3
Easi Iort	ting (mE) hing (mN)	393316mE 6431742mN	393325mE 6431035mN	393416mE 6430331mN	393420mE 6431511mN	393421mE 6430344mN	393428mE 6431322mN	393432mE 6431082mN	393435mE 6431270mN	393450mE 6430034mN	393452mE 6430962mN	393497mE 6430221mN	393514mE 6430674mN	393527mE 6430184mN	393531mE 6430328mN	393547mE 6430443mN	393551mE 6430344mN	393557mF

13

Ar	rea (ha)	0.87	0.34	0.05	1.07	0.17	1.23	-	0.21	1.52	0.14	0.32	0	1.01	1.41	2.21	0.86	90.0
	Score	14	14	14	14	4	14	4	4	14	14	14	14	14	4	14	14	2
	P6_2	0	0	0	0	0	0	•	0	0	0	0	•	0	0	0	0	0
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	•	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	~	2	2	2	2
	P3_8	0	0	0	0	0	0	•	•	•	0	0	•	0	•	0	•	•
	P3_7b	•	0	0	0	0	0	•	•	0	•	•	•	0	0	0	•	0
Criteria	P3_7a	•	0	0	0	0	0	•	•	•	0	0	0	0	0	0	•	•
	P3_6	•	0	0	0	0	0	•	•	•	•	•	•	•	0	0	•	•
	P3_5	0	0	0	0	0	0	•	•	•	0	0	0	0	0	0	0	•
	P3_4	•	0	0	0	0	0	•	•	•	•	•	0	•	0	0	•	•
	P3_3b	•	0	0	0	0	0	•	0	•	0	0	0	0	0	0	0	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	-4	4	-4	4
	P_3	0	0	0	0	0	0	•	0	•	0	•	•	0	0	0	0	0
	P1_2d	0	0	0	0	0	0	•	0	•	0	0	0	0	0	0	•	0
	P1_2c	•	0	0	0	0	0	•	0	•	0	•	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ocality	WELLARD	CASUARINA	WELLARD	WELLARD	WELLARD	CASUARINA	CASUARINA	WELLARD	CASUARINA	WELLARD	CASUARINA	WELLARD	WELLARD	WELLARD	CASUARINA	WELLARD	CASUARINA
	Туре	DR	RD	DR	DR	J	ßD	RD	DR	RD	PWY	RD	ΡWΥ	PWY	DR	RD	PWY	RD
Roi	ad Name	MCKEIG	BORN	MCKEIG	MCKEIG	CHANDLER	BORN	BORN	MCKEIG	BORN	ALEXANDER	BORN	ALEXANDER	ALEXANDER	MCKEIG	BORN	ALEXANDER	BORN
Lot	I/ Rd No.	15	47	51	40		79	25	51	16	64	12	44	52	69	19	64	101
Eas Nort	ting (mE) hing (mN)	393561mE 6430244mN	393565mE 6431237mN	393584mE 6430178mN	393615mE 6430023mN	393618mE 6429999mN	393625mE 6431547mN	393628mE 6430935mN	393630mE 6430203mN	393649mE 6431650mN	393650mE 6430147mN	393658mE 6431023mN	393662mE 6429855mN	393665mE 6429867mN	393677mE 6430199mN	393693mE 6430918mN	393734mE 6430128mN	393760mE 6431764mN

A	rea (ha)	0.25	0.12	0.06	0	0.02	0.27	0.43	0.02	2.89	0.01	0	90.06	0.12	0.07	1.46	0	0.94
	Score	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	P6_2	•	0	•	0	0	0	0	0	0	•	•	•	•	0	•	0	0
	P6_1	•	0	•	0	0	0	•	•	0	•	•	0	•	0	•	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	•	0	0	0	•	•	•	•	•	•	0	0	0	•	0
	P4_1	•	0	0	0	0	0	0	0	0	•	0	•	0	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	•	0	•	0	•	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	0	0	0	0	•	•	•	•	•	•	0	0	0	0	0
	P3_7b	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	•	0
Criteria	P3_7a	0	•	0	0	0	0	0	0	0	•	•	•	0	•	0	0	0
	P3_6	0	0	•	•	0	0	•	•	0	•	•	0	0	•	0	•	•
	P3_5	•	•	•	0	0	0	0	0	0	•	0	•	0	•	0	•	0
	P3_4	•	0	•	•	0	0	•	•	•	•	•	0	0	0	•	•	0
	P3_3b	•	•	•	0	0	0	0	0	0	•	•	•	•	•	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	•	•	0	0	0	0	0	0	•	•	•	•	•	0	•	•
	P1_2d	0	•	0	0	0	0	0	•	0	•	•	•	•	0	0	0	0
	P1_2c	0	•	•	0	0	0	•	0	0	•	0	0	0	0	•	•	0
	P1_2b	m	m	m	e	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
L	ocality	WELLARD	CASUARINA	CASUARINA	CASUARINA		CASUARINA	CASUARINA		CASUARINA	CASUARINA	WELLARD		WELLARD		WELLARD	CASUARINA	WELLARD
	Туре	PWY	RD	RD	RD		RD	RD		RD	ß	ß		PWV		DR	RD	DR
Roi	ad Name	ALEXANDER	BORN	BORN	BORN		BORN	BORN		BORN	BORN	BARKER		ALEXANDER		MCKEIG	BORN	MCKEIG
Lot	/ Rd No.	40	101	91	69		79	27		59	35	F		40		78	46	88
Eas Nort	ting (mE) hing (mN)	393769mE 6429850mN	393781mE 6431660mN	393786mE 6431659mN	393786mE 6431345mN	393816mE 6431683mN	393820mE 6431462mN	393823mE 6431025mN	393823mE 6431329mN	393824mE 6431256mN	393826mE 6431156mN	393827mE 6430575mN	393828mE 6431462mN	393831mE 6429785mN	393832mE 6431152mN	393852mE 6430171mN	393852mE 6431136mN	393876mE 6430125mN

13

Criteria	P5_1 P4_1 P3_9c P3_9b P3_9a P3_8 P3_7a P3_7a P3_7a P3_6 P3_5 P3_4 P3_3b P3_3a P3_3a P_3 P_3 P3_24	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	0 0 4 0 0 0 0 0 0 2 0 2 0	
	P1_2c P1_2b	3 0	0 8	3 0	3 0	3 0	3	0 6	3	3 0	3	3	3 0	3 9	0 %	3	3 0	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ocality	WELLARD	CASUARINA	CASUARINA	CASUARINA		WELLARD	WELLARD	WELLARD		WELLARD	WELLARD	CASUARINA	WELLARD	CASUARINA	WELLARD		
	Туре	PWY	RD	RD	RD		RD	RD	RD		DR	DR	RD	ΡWΥ	RD	RD		
Ro	ad Name	ALEXANDER	BORN	BORN	BORN		BARKER	BARKER	BARKER		MCKEIG	MCKEIG	BORN	ALEXANDER	BORN	MORTIMER		
Lot	./ Rd No.	44	60	92	20		=	27	34		88	81	34	44	46	284		

Road N	Тур	Loca											-22	1.0									Sco	Area
	pe	ality	P1_2a	P1_2b	P1_2c	P1_2d	P_3	P3_3a	P3_3b	P3_4	P3_5	P3_7a P3_6	P3_7b	P3_8	P3_9a	P3_9b	P3_9c	P4_1	P5_1	P5_1b	P6_1	P6_2	ore	(ha)
	BORN RD	CASUARINA	-	m	0	0	0	4	0	0	0	0	0	0	~	0	2	0	0	2	•	•	4	0.17
			-	m	0	0	0	4	0	0	0	0	0	0	2	0	2	0	0	2	•	•	4	0.02
×	BARKER RD	WELLARD	-	m	0	0	0	4	0	0	0	0	0	0 0	2	0	2	0	0	2	۰	•	4	1.01
			-	m	0	0	0	4	0	0	0	0	0	0	2	0	2	0	0	2	•	•	4	0
ORTON	N RD	CASUARINA	-	m	0	0	0	4	0	0	0	0	0	0	3	0	2	0	0	2	0	0	14	0
BORN	N RD	CASUARINA	-	m	0	0	0	4	0	0	0	0	0	0	5	0	2	0	0	2	0	0	4	0.27
BARKER	RD RD	WELLARD	-	m	•	0	0	-4	0	0	0	0	0	0	2	0	2	•	0	2	•	•	14	1.22
			-	m	•	0	0	4	0	0	0	0	0	0	2	0	2	0	0	2	•	•	14	0.01
BORN	N RD	CASUARINA	-	m	•	0	0	4	0	0	0	0	0	0	2	0	2	0	0	2	•	•	14	0
BARKER	RD RD	WELLARD	-	m	0	0	0	4	0	0	0	0	0	0	2	0	2	0	0	2	•	•	14	0.31
BARKER	R RD	WELLARD	-	m	0	0	0	-4	0	0	0	0	0	0	2	0	2	•	0	2	•	•	14	0.98
			-	m	0	0	0	4	0	•	0	0	0	0	2	0	2	•	0	2	•	•	14	0.01
BORN	4 RD	CASUARINA	-	m	0	0	0	-4	0	0	0	0	0	0	2	0	2	0	0	2	•	0	14	0
IVDON	N RD	WELLARD	-	m	0	•	0	4	0	0	0	0	0	0	2	•	2	0	0	2	•	0	14	0.63
BARKER	ER RD	WELLARD	-	m	0	0	0	4	0	0	0	0	0	0	0 2	0	2	0	0	2	•	0	4	0.05
LYDON	N RD	WELLARD	-	e	•	•	•	4	0	0	0	0	0	0 0	2	0	2	•	•	2	•	•	14	0.28
BORN	N RD	CASUARINA	-	m	0	0	0	4	0	0	0	0		0	0	0	2	0	0	^	9	G	71	151

13

40

	P6_2 P6_1 P5_1b	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	2 0 0	
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P4_1 P3_9c	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	2 0	
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5	2	
	P3_8	•	•	0	•	0	0	•	0	0	0	0	0	0	•	0	•	
	P3_7b	0	0	0	0	0	0	0	0	•	0	•	•	0	•	0	0	
Criteria	P3_7a	•	•	•	•	0	0	•	•	•	•	•	0	0	•	•	•	
	P3_6	•	۰	•	•	0	0	0	0	•	•	0	•	•	•	•	•	
	P3_5	•	•	•	•	0	0	•	•	•	0	•	•	0	•	•	0	
	P3_4	•	0	•	0	0	0	0	•	•	•	•	•	•	•	0	•	
	P3_3b	0	0	0	0	0	0	0	•	•	•	•	•	0	0	0	0	
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	P_3	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0	0	
	P1_2d P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ocality	CASUARINA	WELLARD	WELLARD	WELLARD	CASUARINA	WELLARD	CASUARINA	WELLARD	CASUARINA	WELLARD							
	Туре	ßD	Ы	ß	Ч	RD	RD	ß	RD	ß	U	U	ß	ß	ß	С	RD	
Roi	ad Name	BORN	THORNE	IVDON	THORNE	BORN	LYDON	BORN	IVDON	BORN	MELALEUCA	MELALEUCA	BORN	BORN	BORN	MELALEUCA	IVDON	
Lot	/ Rd No.	34	22	120	22	46	120	92	129	102	21	11	34	46	80	5	E	

Ar	rea (ha)	0	132	1.07	1.59	1.33	0.93	6.0	1.19	0.02	0.18	0.23	0	1.06	0.94	1.09	0.14	0.74
	Score	4	4	14	4	4	14	14	14	14	14	14	14	14	14	4	7	14
	P6_2	0	0	•	0	0	0	•	•	•	0	0	•	•	0	0	•	0
	P6_1	•	•	•	•	0	0	•	0	0	0	0	0	•	0	•	•	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	•	0	•	0	0	•	•	•	•	0	•	0	•	0	•	•
	P4_1	0	•	0	0	0	0	•	•	•	•	0	•	0	0	0	0	C
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_9b	0	0	0	0	0	0	0	0	•	0	0	•	•	0	0	0	c
	P3_9a	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	•	0	•	0	0	0	0	0	•	•	0	•	0	0	•	0	•
	P3_7b	•	0	0	0	0	0	•	•	•	•	0	0	0	0	•	0	c
Criteria	P3_7a	•	•	•	•	0	0	0	0	•	•	0	•	•	•	•	•	•
	P3_6	0	0	0	0	0	0	0	•	•	•	0	0	0	0	0	0	•
	P3_5	•	•	•	•	0	0	•	•	•	•	0	0	0	•	•	•	c
	P3_4	0	0	0	0	0	0	•	0	0	•	•	•	•	•	0	0	c
	P3_3b	•	•	•	•	0	0	•	0	•	0	0	0	0	0	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	P_3	0	0	0	•	0	0	0	0	•	•	0	0	0	0	•	•	•
	P1_2d	0	•	0	0	0	0	0	0	0	0	•	0	0	0	•	•	•
	P1_2c	0	0	0	•	0	0	•	•	•	•	0	•	0	0	0	0	•
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	c
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ocality	CASUARINA	CASUARINA	CASUARINA	CASUARINA	WELLARD	CASUARINA	CASUARINA	WELLARD		CASUARINA	WELLARD	WELLARD	CASUARINA	WELLARD	CASUARINA	CASUARINA	WELLADD
	Туре	RD	DR	DR	DR	RD	DR	RD	RD		RD	Ч	Ч	U	ß	DR	σ	ā
Roa	ad Name	MORTIMER	LAVERY	LAVERY	LAVERY	LYDON	LAVERY	MORTIMER	IVDON		MORTIMER	THORNE	THORNE	MELALEUCA	IVDON	LAVERY	MELALEUCA	TUDAR
	/ Rd No.	317	39	59	29	106	73	317	95		319	24	25	21	88	49	21	
Eas Nort	ting (mE) hing (mN)	394248mE 6430819mN	394255mE 6431027mN	394258mE 6431244mN	394263mE 6430934mN	394266mE 6430175mN	394307mE 6431442mN	394346mE 6430732mN	394347mE 6429956mN	394357mE 6430140mN	394371mE 6430734mN	394390mE 6430401mN	394407mE 6430312mN	394408mE 6431719mN	394408mE 6430156mN	394413mE 6431154mN	394414mE 6431672mN	394417mE

14

Ar	rea (ha)	0	0	0.08	0.68	0.3	1.08	0	1.03	0.02	0.98	0.17	1.05	0.92	96.0	1.37	1.25	0
	Score	14	14	14	14	4	4	14	14	14	14	14	14	14	14	14	14	14
	P6_2	0	0	•	•	0	0	•	•	0	0	0	0	0	0	0	•	0
	P6_1	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	•	0
	P5_1b	2	2	2	2	7	7	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	•	•	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2	2	~
	P3_8	•	0	•	•	0	0	•	0	0	0	0	0	0	0	•	•	0
	P3_7b	0	0	0	0	0	0	0	0	•	•	0	•	0	0	0	0	0
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	•
	P3_6	0	0	0	0	0	0	0	0	•	•	•	•	0	0	0	0	c
	P3_5	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	c
	P3_4	0	0	•	0	0	0	0	0	•	•	•	•	0	0	0	0	<
	P3_3b	0	0	•	•	0	0	•	0	0	0	0	0	0	0	0	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	-4	4	4	4	Y
	P_3	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	c
	P1_2d	0	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	-
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	~
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	ocality				CASUARINA	CASUARINA	CASUARINA		CASUARINA		CASUARINA	CASUARINA	WELLARD	CASUARINA	CASUARINA	CASUARINA	CASUARINA	WELLARD
	Туре				U	RD	Ъ		U		U	DR	ĥ	DR	DR	DR	DR	Id
Roa	ad Name				MELALEUCA	MORTIMER	MELALEUCA		MELALEUCA		MELALEUCA	LAVERY	THORNE	LAVERY	LAVERY	LAVERY	LAVERY	THORNE
Lot	/ Rd No.				17	319	16		s		10	15	25	50	09	32	64	10
Eas Nort	ting (mE) hing (mN)	394418mE 6431688mN	394423mE 6431135mN	394427mE 6431121mN	394436mE 6431522mN	394438mE 6430902mN	394453mE 6431628mN	394456mE 6431417mN	394474mE 6431453mN	394474mE 6431453mN	394505mE 6431474mN	394526mE 6430937mN	394536mE 6430312mN	39458mE 6431134mN	394633mE 6431244mN	394633mE 6431097mN	394634mE 6431342mN	394651mE

Ar	rea (ha)	0.6	0.3	0.77	0.53	0	0.05	0.53	0.34	0	0	0.05	0.05	0.03	0.04	0.04	0.04	0.02
	Score	14	14	14	14	14	14	14	14	14	14	5	5	5	5	13	13	ŧ
	P6_2	0	0	0	0	0	0	•	0	•	0	-	-	-	-	-	-	-
	P6_1	•	0	•	0	0	0	•	•	•	•	0	•	•	0	•	•	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	•	•	•	•	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2	~
	P3_8	0	0	0	0	0	0	•	0	0	•	-		-	-	-	-	
	P3_7b	0	0	0	0	0	0	0	•	0	•	•	0	0	0	0	0	0
Criteria	P3_7a	0	•	0	0	0	0	0	0	0	0	0	0	0	0	•	0	•
	P3_6	0	0	•	0	0	0	0	•	•	•	0	0	0	0	0	0	c
	P3_5	•	•	•	•	0	0	•	0	0	•	0	0	0	•	•	•	•
	P3_4	0	0	0	0	0	0	•	0	0	0	•	•	•	0	0	0	c
	P3_3b	0	0	0	•	0	0	•	•	•	0	0	0	•	0	•	•	c
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	-4	4	4	4	4	4
	P_3	0	•	0	•	0	0	0	•	•	•	0	0	0	•	•	0	0
	P1_2d	0	0	0	0	0	0	•	0	•	•	0	•	•	0	0	0	•
	P1_2c	0	0	0	0	0	0	0	0	0	•	•	0	0	0	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	0	0	0	0	0	0	•
	P1_2a	-	-	-	-	-	-	-	-	-	-	•	0	0	0	•	0	0
	ocality	WELLARD	CASUARINA	CASUARINA	CASUARINA		CASUARINA	CASUARINA	CASUARINA			WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD
	Туре	Ч	DR	DR	DR		DR	ß	DR			ь	IJ	COVE	CNR	COVE	LANE	CNR
Roi	ad Name	THORNE	GOODMAN	GOODMAN	GOODMAN		GOODMAN	MORTIMER	GOODMAN			MELFORD	MELFORD	HINTON	AMPTON	HINTON	SPINNER	AMPTON
Lot	/ Rd No.	21	20	38	5		56	375	19			E	10	6	14	10	14	16
Eas Nort	ting (mE) hing (mN)	394653mE 6430354mN	394656mE 6431054mN	394751mE 6431247mN	394792mE 6430852mN	394818mE 6431167mN	394818mE 6431169mN	394896mE 6430847mN	394983mE 6430967mN	395091mE 6429571mN	395092mE 6429572mN	389295mE 6429065mN	389301mE 6429033mN	389306mE 6429004mN	389307mE 6429090mN	389312mE 6428970mN	389323mE 6429033mN	389324mE

14

	Score P6_2	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13	1 13
	P6_1	•	•	•	•	0	0	0	0	•	0	•	•	•	•	•	•	•
	P5_1b	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	0 2	·
	P5_1 P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	
	P3_8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	P3_7b	0	0	0	0	0	0	•	0	•	0	0	0	0	•	0	0	
Criteria	P3_7a	0	0	•	•	0	0	0	0	0	0	0	•	•	•	0	0	
	P3_6	•	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	•
	P3_5	•	•	•	•	0	0	0	0	0	0	0	0	•	•	•	0	•
	P3_4	•	•	•	•	0	0	•	•	0	•	•	•	•	•	•	•	•
	P3_3b	0	•	•	•	0	0	•	•	0	0	•	•	•	•	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	P_3	•	•	•	•	0	0	•	•	0	•	•	0	0	•	•	•	
	P1_2d	•	0	•	0	0	0	0	0	0	0	0	•	•	0	0	•	•
	P1_2c	0	0	0	0	0	0 0	0 0	0 0	0 0	0	0 0	0	0	0	0	0 0	•
	P1_2b P1_2a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
U	ocality	WELLARD		WELLARD	WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD							
	Туре	LANE	LANE	CNR	LANE	LANE	GR	8	LANE		ST	LOOP		LOOP	ß	ST	ST	TANE
Roa	ad Name	SPINNER	SPINNER	AMPTON	SPINNER	SPINNER	ASHBY	ASHBY	SPINNER		SILVERSMITH	BEAUCHAMP		BEAUCHAMP	ASHBY	SILVERSMITH	SILVERSMITH	COMMEN
Lot	/ Rd No.	12	12	18	16	10	9	5	80		28	149		153	s	30	32	2
East Nort	ting (mE) hing (mN)	389337mE 6429075mN	389337mE 6429075mN	389349mE 6429131mN	389350mE 6428945mN	389366mE 6429116mN	389370mE 6429148mN	389391mE 6429165mN	389403mE 6429137mN	389406mE 6429344mN	389409mE 6429522mN	389412mE 6429491mN	389412mE 6428973mN	389417mE 6429463mN	389418mE 6429187mN	389419mE 6429455mN	389426mE 6429419mN	389428mE

Ar	ea (ha)	60.0	0.05	0.04	0	0.08	60.0	0.16	0.02	0.06	0.09	0	0	0.07	0	0.25	153	0.03
	Score	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	÷
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	5	7	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2	2
	P3_9b	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	5	5	2	2	3	2	2	2	2	2	5	2	2	2
	P3_8	-	-		-	-	-	-	-	-	-		-	-	-	0	0	0
	P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•	•
	P3_4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ocality	WELLARD			WELLARD			PARMELIA										
	Туре	WAY	ST	WAY	WAY	ST	ST	ST	LANE	ST	ST			ST		RD	AV	
Roa	ad Name	WALPOLE	SILVERSMITH	WALPOLE	WALPOLE	SILVERSMITH	SILVERSMITH	SILVERSMITH	SPINNER	SILVERSMITH	SILVERSMITH			SILVERSMITH		ANKETELL	DURRANT	
Lot	/ Rd No.	24	34	22	20	40	42	44	4	38	36			46			15	
East Norti	ting (mE) hing (mN)	389430mE 6429318mN	389431mE 6429392mN	389434mE 6429285mN	389436mE 6429269mN	389437mE 6429261mN	389442mE 6429219mN	389442mE 6429217mN	389458mE 6429181mN	389460mE 6429329mN	389504mE 6429373mN	389511mE 6429215mN	389521mE 6429204mN	389529mE 6429184mN	389530mE 6429189mN	389851mE 6435573mN	390157mE 6432721mN	390184mE

14

A	rea (ha)	0.03	0.01	0.02	0.08	0.09	0.01	0.06	0.02	0.1	0.02	0.01	0.02	0.02	0.01	0.06	0.01	0.02
	Score	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P4_1	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	3	5	2	5	2	2	2	2	2	2
	P3_8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0
	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•	•
	P3_4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•
	P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
	P1_2b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
1	ocality	WELLARD																
	Туре	DR	LOOP	LOOP	DR	DR	LOOP	DR	100P	LOOP								
Ro	ad Name	HOMESTEAD	BEAUCHAMP	BEAUCHAMP	HOMESTEAD	HOMESTEAD	BEAUCHAMP	BEAUCHAMP										
Lo	t/ Rd No.	26	93	129	24	22	89	30	85	20	133	16	81	32	137	14	ш	75
Eas Nort	ting (mE) thing (mN)	389324mE 6429727mN	389327mE 6429894mN	389327mE 6429624mN	389329mE 6429764mN	389330mE 6429799mN	389330mE 6429910mN	389333mE 6429651mN	389341mE 6429939mN	389343mE 6429832mN	389345mE 6429598mN	389346mE 6429905mN	389353mE 6429968mN	389356mE 6429622mN	389358mE 6429595mN	389365mE 6429938mN	389365mE 6429993mN	389380mE 6430011mN

14

	ea (ha)	0.07	0.01	0.07	0.04	0.06	29.1	0.14	0.07	0.01	0	0.35	0.01	0.06	2 0.14	0.06	0.32	9.0
	Score	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	•
	P6_1	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	0	-	-		-	-	-	-	-	-	-	-
	P3_9c	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	P3_7b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•
	P3_6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_5	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•	e
	P3_4	•	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	
	P3_3b	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	•	G
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	0	0	0	0	2	0	0	0	0	0	0	0	0	0	•	0
	P1_2d	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	c
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L	ocality	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD	POSTANS	WELLARD	WELLARD			PARMELIA	WELLARD	WELLARD	WELLARD	WELLARD	PARMELIA	
	Туре	DR	LOOP	DR	DR	DR	RD	DR	DR			RD	DR	DR	DR	DR	ß	
Roa	id Name	HOMESTEAD	BEAUCHAMP	HOMESTEAD	HOMESTEAD	HOMESTEAD	MCLAUGHLAN	HOMESTEAD	HOMESTEAD			BERTRAM	BLACKSMITH	BLACKSMITH	BLACKSMITH	BLACKSMITH	SULPHUR	
Lot	/ Rd No.	12	73	10	80	9	45	2	4				26	28	30	32		
East Nortl	iing (mE) hing (mN)	389383mE 6429969mN	389397mE 6430056mN	389398mE 6430000mN	389406mE 6430030mN	389425mE 6430059mN	389426mE 6434412mN	389457mE 6430092mN	389468mE 6430085mN	389473mE 6430104mN	389485mE 6430190mN	389504mE 6430209mN	389855mE 6428757mN	389855mE 6428713mN	389865mE 6428665mN	389886mE 6428621mN	390493mE 6432969mN	391424mE

	ea (ha)	0.38	0.39	0.74	0.65	1.39	0	29.68	6.57	0	0.13	15.67	0	0.02	0.01	0.01	0.36	0.33
	Score	=	ŧ	Ħ	Ħ	Ħ	÷	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	Ħ	:
	P6_2	-	-	-	-	-	-	-	-	0	0	0	0	•	•	0	•	c
	P6_1	0	•	0	0	0	•	•	•	•	•	0	•	0	0	•	0	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	•
	P5_1	•	0	0	0	0	0	•	•	•	•	•	•	0	•	0	0	<
	P4_1	0	•	0	0	0	•	•	•	•	-	•	-	•	0	•	1	
	P3_9c	2	2	2	2	2	0	•	2	2	2	2	7	2	2	2	2	
	P3_9b	•	•	•	0	•	0	•	•	•	•	0	•	•	•	0	•	•
	P3_9a	2	2	2	2	2	2	2	2	7	2	2	2	2	2	2	2	•
	P3_8	0	0	0	0	0	0	0	0	-	0	-	0	-	-	-	0	•
-	P3_7b	0	•	0	•	•	0	0	0	0	0	0	0	•	•	•	•	4
Criteria	P3_7a	0	0	0	0	0	0	•	•	0	•	•	•	•	0	0	0	
	P3_6	0	•	0	0	•	0	0	•	0	•	0	0	0	•	0	•	•
	P3_5	0	0	0	0	0	0	•	•	•	•	•	•	•	•	0	0	3
	P3_4	0	0	0	0	0	0	•	•	•	0	0	0	0	0	0	0	
	P3_3b	•	•	•	0	0	0	•	•	•	•	0	•	0	•	•	•	3
	P3_3a	0	0	•	0	0	0	•	0	4	4	4	4	4	4	4	4	1
	P_3	•	•	•	•	•	2	2	•	•	0	0	0	0	•	•	•	3
	P1_2d	0	•	0	0	0	0	•	•	•	•	•	•	•	•	•	0	1
	P1_2c	0	•	•	0	0	•	•	0	•	•	0	•	•	0	0	•	-
	P1_2b	m	m	m	m	~	m	m	m	0	0	0	0	0	•	0	0	•
	P1_2a	-	-	-	-	-	-	-	-	•	0	0	0	0	0	0	0	
L	ocality	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH					WELLARD							
	Туре	ß	ßD	RD	RO	RD					PDE							
Roa	d Name	PORT	PORT	PORT	PORT	PATERSON					BRENTFORD							
	/ Rd No.	49	49	49	49						22							
	ing (m.C)																	
Norti	ing (mE) hing (mN)	383213mE 6431518mN	383247mE 6431317mN	383271mE 6431542mN	383613mE 6431346mN	384001mE 6431207mN	384390mE 6433982mN	384449mE 6434369mN	385609mE 6431904mN	388240mE 6431357mN	388337mE 6428671mN	38836mE 6431482mN	388388mE 6428601mN	388458mE 6430813mN	388562mE 6430961mN	388571mE 6431017mN	388591mE 6428824mN	388600mE

14

50

Ar	ea (ha)	1.04	0	6.7	0.11	0	0	0.01	0.7	90.06	0.01	•	0	0	0.12	0.14	0.01	0
	Score	=	Ħ	Ξ	=	=	÷	Ħ	Ħ	Ħ	Ħ	Ħ	=	=	Ħ	=	Ħ	=
	P6_2	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	•	•	0	0	0	0	0	0	0	0	0	0	0	•	0	0	-
	P4_1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P3_9c	2	2	•	2	2	2	2	2	2	~	2	2	2	2	2	2	-
	P3_9b	0	0	•	0	0	0	0	0	•	•	•	0	0	0	0	0	•
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	0	0	0	0	0	0	0	0	0	•	0	0	•	0	0	0	•
	P3_7b	0	•	•	0	•	0	•	0	•	•	0	0	0	•	•	0	•
Criteria	P3_7a	0	0	0	0	0	0	0	0	0	0	•	0	•	0	0	0	<
	P3_6	0	0	•	0	•	•	•	•	•	0	0	0	0	•	0	0	•
	P3_5	0	•	•	0	0	0	0	0	•	•	0	0	•	•	0	0	•
	P3_4	0	•	-	0	0	0	0	0	•	•	0	0	0	0	0	0	•
	P3_3b	•	•	•	•	•	•	0	0	0	0	0	0	0	•	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-
	P_3	•	•	•	•	•	•	•	0	•	•	0	0	0	•	•	•	•
	P1_2d	•	•	0	0	0	0	0	0	0	•	•	0	•	•	0	0	<
	P1_2c	•	•	•	0	•	•	•	•	•	•	•	•	•	•	•	•	•
	P1_2b	•	•	0	0	0	•	0	•	•	•	•	0	•	•	0	0	•
_	P1_2a	0	0	•	0	0	0	•	0	•	0	0	•	•	0	•	0	•
	ocality	WELLARD		HOPE VALLEY	WELLARD				WELLARD								WELLARD	
	Туре	PDE		ß	PDE				PDE								PROM	
Roa	id Name	BRENTFORD		POSTANS	BRENTFORD				BRENTFORD								SOMERFORD	
Lot	/ Rd No.	22			22				22								54	
Eas Nort	ting (mE) hing (mN)	388610mE 6428551mN	388614mE 6428851mN	388670mE 6437861mN	388675mE 6428602mN	388680mE 6428610mN	388704mE 6429217mN	388710mE 6429173mN	388716mE 6429222mN	388741mE 6428945mN	388787mE 6428854mN	388838mE 6428320mN	388849mE 6428541mN	388849mE 6428548mN	388942mE 6429335mN	388957mE 6429448mN	389035mE 6428469mN	389048mE

A	rea (ha)	0.01	0.01	0.06	0.01	0	0	0.13	0	0.04	0.05	0	0.02	0.03	0.01	0.01	0.19	0
	Score	÷	Ħ	Ħ	F	ŧ	=	Ħ	ŧ	Ħ	=	F	÷	Ħ	Ħ	Ħ	Ħ	=
	P6_2	0	0	0	0	•	0	•	-	-	-	-	-	-	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	-	-	-	-	-	-	-	0	0	0	0	•	•	0	•	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	5	2	2	2
	P3_8	0	0	0	•	•	0	0	0	0	0	0	0	•	0	0	0	•
	P3_7b	0	0	0	0	0	0	0	0	0	0	0	•	•	0	•	0	0
Criteria	P3_7a	0	0	0	•	0	•	0	0	0	0	0	0	0	0	0	0	•
	P3_6	0	0	0	•	0	0	•	0	•	0	0	•	•	0	•	0	0
	P3_5	0	0	0	•	0	•	•	0	•	0	0	0	0	0	•	0	0
	P3_4	•	•	•	•	•	0	•	0	0	0	0	0	•	•	•	0	•
	P3_3b	0	0	0	0	0	•	0	0	•	0	0	•	0	0	•	0	•
	P3_3a	4	-4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	•	0	0	•	•	0	0	0	0
	P1_2d	0	•	0	•	0	0	•	0	•	0	0	•	0	0	0	0	•
	P1_2c	•	0	0	0	0	0	0	0	•	0	0	•	•	•	•	0	0
	P1_2b	0	•	0	•	0	•	•	•	•	0	0	0	0	0	•	•	•
	P1_2a	•	•	•	0	0	0	0	0	0	0	0	0	0	•	•	•	0
	ocality	WELLARD	WELLARD		WELLARD	WELLARD	WELLARD		WELLARD			WELLARD	WELLARD	WELLARD	WELLARD		WELLARD	
Ĩ	Туре	PROM	PROM		PROM	PROM	PROM		IJ			IJ	LANE	ь	ы		LANE	
Ro	ad Name	SOMERFORD	SOMERFORD		SOMERFORD	SOMERFORD	SOMERFORD		COMBS			COMBS	SPINNER	KABER	KABER		SPINNER	
Lot	// Rd No.	52	50		48	46	44		m			00	σ	7	80		=	
Eas Nort	ting (mE) hing (mN)	389049mE 6428476mN	389051mE 6428484mN	389053mE 6428440mN	389053mE 6428491mN	389056mE 6428499mN	389058mE 6428506mN	389077mE 6428518mN	389354mE 6428903mN	389360mE 6428905mN	389366mE 6428913mN	389389mE 6428899mN	389397mE 6429027mN	389408mE 6428922mN	389414mE 6428941mN	389420mE 6428947mN	389428mE 6428980mN	389448mE 6428947mN

15

	P6_2 P6_1 P5_1b P5_1 P4_1 P3_9c P3_9a	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1 11	2 0 2 0 0 2 0 1 11	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1 11	2 0 2 0 0 2 0 1 11	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	2 0 2 0 0 2 0 1	
Criteria	P3_8 P3_7b P3_7a P3_6 P3_5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
	P3_4 P3_3b P3_3a P_3	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	0 4 0 0	•
	P1_2d P1_2c P1_2b	0 0	0 0	0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0
	P1_2a Locality	WELLARD 0	WELLARD 0	WELLARD 0	WELLARD 0	0	0	0	WELLARD 0	WELLARD 0	WELLARD 0	PARMELIA 0	WELLARD 0	WELLARD 0	WELLARD 0	0	c
	Туре	LANE	b	LANE	LANE				SI	TURN	TURN	W	ST	SI	ST		
R	oad Name	SPINNER	KABER	SPINNER	SPINNER				SILVERSMITH	BRANTWOOD	BRANTWOOD	PARMELIA	SILVERSMITH	SILVERSMITH	SILVERSMITH		
- Le	ot/ Rd No.	7	4	5	m				33	31	31		48	ш	50		
Ea No	asting (mE) rthing (mN)	389449mE 6429042mN	389459mN 6428940mN	389475mE 6429065mN	389503mE 6429086mN	389512mE 6428902mN	389512mE 6428902mN	389526mE 6429383mN	389529mE 6429405mN	389536mE 6428885mN	389536mE 6428885mN	389537mE 6431008mN	389543mE 6429106mN	389556mE 6429450mN	389556mE 6429111mN	389567mE 6429463mN	389581mE

A	rea (ha)	0.04	0	0.11	0.01	0.02	0	0	0.07	0.03	0.03	0.01	0.01	0.05	0	0	0.04	0.02
	Score	=	Ħ	Ħ	Ħ	=	=	Ħ	=	÷	ŧ	Ħ	Ŧ	=	F	Ħ	Ħ	=
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	•	0	0	•	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P3_9c	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_9b	0	0	0	0	0	•	0	0	0	•	0	0	•	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	5	2
	P3_8	0	0	•	•	0	•	•	0	0	0	0	0	0	0	0	•	•
-	P3_7b	0	0	0	0	0	0	•	•	0	•	•	0	•	0	0	0	0
Criteria	P3_7a	0	0	0	0	•	•	0	0	0	0	0	0	0	•	0	0	•
	P3_6	•	•	•	0	0	•	•	•	0	0	0	0	•	•	•	•	•
	P3_5	0	0	•	0	0	•	•	•	•	•	0	•	•	0	0	•	•
	P3_4	•	•	•	0	0	0	•	0	0	0	0	•	0	•	•	•	0
	P3_3b	0	0	•	0	•	•	•	•	•	•	0	•	•	0	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	•	•	•	•	•	0	•	•	0	0	0	•
	P1_2d	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2a	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
I	ocality	WELLARD	WELLARD	WELLARD	WELLARD	WELLARD		WELLARD		WELLARD	WELLARD	WELLARD						
	Туре	ST	TURN	ь	TURN	ST		ъ	ь	TURN	ST	TURN	ь	ь		ь	ST	Б
Ro	ad Name	SILVERSMITH	BRANTWOOD	COACHMAN	BRANTWOOD	SILVERSMITH		CROFTER	COACHMAN	BRANTWOOD	SILVERSMITH	BRANTWOOD	CROFTER	COACHMAN		COACHMAN	SILVERSMITH	CROFTER
Lo	t/ Rd No.	52	39	ñ	43	54		6	5	47	56	15	7	7		10		5
Eas Nort	iting (mE) thing (mN)	389591mE 6429091mN	389597mE 6428838mN	389619mE 6429362mN	389625mE 6428815mN	389632mE 6429090mN	389638mE 6429504mN	389639mE 6429504mN	389648mE 6429346mN	389655mE 6428793mN	389670mE 6429094mN	389675mE 6428785mN	389688mE 6429519mN	389696mE 6429313mN	389704mE 6429100mN	389705mE 6429308mN	389706mE 6429307mN	389707mE 6429539mN

15

54

	P1_2b 0 <th>P1_2d • • • • • • • • • • • • • • • • • •</th> <th>b3⁻39 a <t< th=""><th>P3.4</th><th></th><th>P3_7a O<th>P3_7b 0<th>P3_9a N<th>Max Max M</th><th>P5_1 O</th><th>P61 0</th></th></th></th></t<></th>	P1_2d • • • • • • • • • • • • • • • • • •	b3 ⁻ 39 a <t< th=""><th>P3.4</th><th></th><th>P3_7a O<th>P3_7b 0<th>P3_9a N<th>Max Max M</th><th>P5_1 O</th><th>P61 0</th></th></th></th></t<>	P3.4		P3_7a O <th>P3_7b 0<th>P3_9a N<th>Max Max M</th><th>P5_1 O</th><th>P61 0</th></th></th>	P3_7b 0 <th>P3_9a N<th>Max Max M</th><th>P5_1 O</th><th>P61 0</th></th>	P3_9a N <th>Max Max M</th> <th>P5_1 O</th> <th>P61 0</th>	Max M	P5_1 O	P61 0
WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD WELLARD			P1_2d 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P3_3b 0 <td>P3.5 0</td> <td>P3_7a O<td>P3_7b 0<td>M3 M3 M3<</td><td>bit 30 0<td>M¹ O</td><td>No.1 O</td></td></td></td>	P3.5 0	P3_7a O <td>P3_7b 0<td>M3 M3 M3<</td><td>bit 30 0<td>M¹ O</td><td>No.1 O</td></td></td>	P3_7b 0 <td>M3 M3 M3<</td> <td>bit 30 0<td>M¹ O</td><td>No.1 O</td></td>	M3 M3<	bit 30 0 <td>M¹ O</td> <td>No.1 O</td>	M ¹ O O	No.1 O

Ar	rea (ha)	0.04	0.03	0.11	0	0.5	3.53	2.98	6.27	22.08	10.35	8.04	0.51	2	0	1.27	0.34	0.59
	Score	Ħ	F	=	F	Ħ	10	10	10	10	10	10	10	10	10	10	10	10
	P6_2	-	-	-	-	0	0	0	-	0	0	-	-	0	0	0	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	•	-	-	0	-	-	0	-	-	0	0	•	-	•	0	0
	P3_9c	2	2	0	0	2	0	0	0	•	0	0	0	2	0	2	•	0
	P3_9b	0	•	0	0	•	0	0	0	0	0	0	0	0	0	•	•	0
	P3_9a	2	2	2	2	2	5	2	5	2	2	2	2	2	2	2	2	2
	P3_8	•	•	•	•	•	0	•	0	0	0	0	0	0	•	•	•	•
	P3_7b	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
Criteria	P3_7a	•	•	•	•	•	•	•	0	0	0	0	0	0	0	•	0	•
	P3_6	0	•	0	0	0	0	•	0	•	•	•	•	•	•	•	0	0
	P3_5	•	0	0	•	•	•	0	0	•	0	0	0	0	•	•	0	0
	P3_4	•	•	-	-	-	-	-	-	-	-	-	-	0	-	•	-	-
	P3_3b	•	•	0	0	•	•	•	•	•	•	•	•	0	0	•	0	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	•	0	0	0	0	0	0	0	•	0	0	•	0	0	0	0	0
	P1_2d	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2c	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2a	•	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ocality	WELLARD	WELLARD	HOPE VALLEY			NAVAL BASE	HOPE VALLEY	HOPE VALLEY	POSTANS	POSTANS	HOPE VALLEY	HOPE VALLEY	CALISTA	POSTANS		HOPE VALLEY	
	Туре	MEWS	U	ß	ß		ßD	ß	RD	RD	ß	RD	RD	RD	ßD	ßD	ß	
Roa	ad Name	GROOM	COOPER	ANKETELL	ANKETELL		COCKBURN	LUSSKY	HOPE VALLEY	ABERCROMBIE	ABERCROMBIE	HOPE VALLEY	HOPE VALLEY	SUMMERTON	ABERCROMBIE	Millar	HOPE VALLEY	
Lot	/ Rd No.	5	9				66	25	192	121	11	198	198	2	23		198	
Eas Nort	ting (mE) hing (mN)	389846mE 6429497mN	389857mE 6429461mN	389918mE 6435929mN	389919mE 6435930mN	391522mE 6435519mN	385412mE 6438171mN	386540mE 6438274mN	386889mE 6437686mN	386893mE 6434698mN	386900mE 6433905mN	387033mE 6437781mN	387139mE 6437093mN	387168mE 6431554mN	387243mE 6434560mN	387259mE 6427219mN	387413mE 6437461mN	387417mE 6436892mN

15

56

Ar	ea (ha)	0.75	0.49	0.69	4.45	0.56	1.23	1.24	0.03	4.97	0.28	0	14.42	0.22	0	0.2	0.56	0
	Score	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	P6_2	-	-	-	-	-	•	-	•	-	-	-	-	-	0	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	0	0	0	0	0	2	0	2	0	•	•	0	0	2	0	0	0
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_9a	2	2	2	2	2	5	2	2	2	2	2	2	2	2	2	2	~
	P3_8	0	•	•	0	0	0	0	0	0	0	0	0	0	0	•	0	0
-	P3_7b	0	0	0	0	0	0	0	0	•	•	0	•	0	0	0	0	0
Criteria	P3_7a	•	0	•	0	•	•	•	•	•	0	0	0	0	•	•	•	0
	P3_6	0	0	0	0	0	0	0	0	•	•	•	•	•	0	0	•	0
	P3_5	0	0	•	•	•	•	•	•	•	0	•	0	•	0	•	•	0
	P3_4	-	-	-	-	-	0	-	0	-	-	-	-	-	•	-	-	-
	P3_3b	0	0	0	0	0	0	•	•	•	•	•	•	•	0	0	0	•
	P3_3a	4	-4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	•	0	•	0	•	0	•	•	•	•	•	0	•	0	c
	P1_2d	0	0	•	0	•	0	0	0	0	0	•	0	•	0	0	0	c
	P1_2c	0	0	0	0	•	0	0	0	•	0	•	•	•	0	0	0	0
	P1_2b	0	0	0	0	•	0	0	0	0	•	0	0	0	0	0	0	0
	P1_2a	•	•	•	0	•	0	0	0	0	•	0	0	0	0	•	0	0
Lo	ocality	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY					HOPE VALLEY								
	Туре	RD	RD	ß	RD					RD								
Roa	d Name	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY					HOPE VALLEY								
	/ Rd No.	198	198	198														
East North	ing (mE) hing (mN)	387427mE 6437456mN	387431mE 6436995mN	387440mE 6437202mN	387441mE 6436988mN	387456mE 6437442mN	387514mE 6429017mN	387548mE 6437619mN	387665mE 6429100mN	387766mE 6436776mN	387791mE 6438315mN	387814mE 6438403mN	387830mE 6437890mN	387853mE 6438836mN	387873mE 6429107mN	387895mE 6438623mN	387917mE 6438771mN	387935mE

Ar	ea (ha)	0.01	0	1.33	0.18	0.14	1.8	0.5	1.4	8.24	0.2	0.59	0	0.07	0.11	0.57	0.23	0.81
	Score	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	P6_2	-	-	-	0	-	-	0	•	-	-	-	•	0	0	•	•	-
	P6_1	0	0	0	0	0	•	•	0	0	•	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	•	•	0	0	0	0	0	0	0	0	0	•	0	0	•	0
	P3_9c	0	0	0	5	0	0	~	2	0	0	0	2	2	2	2	2	0
	P3_9b	0	•	•	0	0	0	0	0	0	0	0	0	0	•	•	•	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P3_8	0	•	•	•	•	•	•	0	0	0	0	0	0	0	•	•	0
	P3_7b	0	•	0	•	•	0	•	0	•	•	•	0	•	•	•	•	0
Criteria	P3_7a	0	•	•	•	•	•	•	•	0	0	0	0	0	0	•	•	0
	P3_6	0	0	•	0	0	0	0	0	0	0	0	•	•	0	0	0	0
	P3_5	0	•	0	•	•	•	•	•	•	0	0	0	0	0	•	•	0
	P3_4	-	-	-	•	-	-	0	0	-	-	-	0	•	0	•	•	-
	P3_3b	0	0	•	0	0	•	•	•	•	•	•	0	•	0	0	•	c
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	•	•	0	•	0	•	0	•	•	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2c	0	0	0	0	0	0	0	0	0	•	0	•	•	0	0	0	0
	P1_2b	0	0	0	0	0	•	•	•	0	0	0	0	0	0	0	•	0
	P1_2a	0	0	0	0	0	0	0	0	0	0	•	0	•	0	0	•	0
L	ocality			HOPE VALLEY		HOPE VALLEY		LEDA	KWINANA TOWN CEN-TRE	HOPE VALLEY	HOPE VALLEY	HOPE VALLEY				KWINANA TOWN CEN-TER	WELLARD	HOPE VALLEY
	Туре			RD		RD		U	AVE	ß	RD	RD				AVE	ß	ßD
Roa	id Name			ASHLEY		ASHLEY		RUNNYMEDE	GILMORE	POSTANS	POSTANS	POSTANS				GILMORE	WELLARD	ASHLEY
	/ Rd No.			m		11					14						386	27
East Norti	ting (mE) hing (mN)	387936mE 6438087mN	387947mE 6438882mN	387956mE 6438240mN	387967mE 6429185mN	387993mE 6438188mN	388015mE 6437123mN	388055mE 6429338mN	388100mE 6430811mN	388115mE 6436800mN	388126mE 6438755mN	388127mE 6437563mN	388138mE 6430647mN	388138mE 6430651mN	388141mE 6430665mN	388160mE 6430984mN	388178mE 6430595mN	388188mE

15

	rea (ha) Score	10 0	10 0.13	10 0.06	10 0.01	10 0.26	10 0.27	10 1.84	10 0.97	10 0.03	10 0.84	10 0.01	10 0.16	10 0.01	10 0.1	10 0.75	10 0	10 2.39
		-	0	-	0	-	0	0	-	0	-	-	0	0	0	-	0	-
	P6_2 P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P5_1b	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	0	2	0	2	0	2	2	0	2	0	0	2	2	2	0	2	-
	P3_9b	0	0	•	0	0	•	0	0	0	0	0	0	0	•	0	0	•
	P3_9a	2	2	2	~	2	2	2	2	2	2	5	2	2	2	2	2	~
	P3_8	0	0	•	0	•	•	0	0	0	0	0	0	0	0	0	0	-
	P3_7b	0	0	0	0	0	0	0	0	0	•	0	•	•	0	0	0	•
Criteria	P3_7a	•	•	•	0	0	•	0	0	0	0	0	0	0	0	0	0	-
	P3_6	•	0	0	0	0	0	0	0	0	0	•	0	0	•	0	0	-
	P3_5	•	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0	•
	P3_4	-	•	-	•	-	•	•	-	0	-	-	•	0	•	-	•	
	P3_3b	0	0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	P_3	0	0	0	0	0	0	0	0	•	0	0	0	•	0	0	0	•
	P1_2d	0	•	•	0	•	•	0	0	0	•	0	0	•	0	0	0	•
	P1_2c	0	•	•	0	0	0	0	0	0	0	0	0	•	•	•	•	-
	P1_2b	0	0	•	•	•	•	•	•	0	0	0	0	•	•	0	•	-
	P1_2a	•	•	•	0	0	0	0	0	0	•	0	•	•	•	0	0	e
	ocality		WELLARD				WELLARD	WELLARD			HOPE VALLEY	HOPE VALLEY				HOPE VALLEY		HUDE VALLEY
	Туре		RD				RD	PDE			RD	RD				RD		u
Roa	id Name		WELLARD				WELLARD	BRENTFORD			SAYER	POSTANS				ASHLEY		ACULEV
Lot	/ Rd No.		386				386	22			86	31				40		5
East Nort	ting (mE) hing (mN)	388211mE 6438222mN	388213mE 6430528mN	388216mE 6438195mN	388242mE 6430627mN	388280mE 6438355mN	388283mE 6430399mN	388283mE 6428744mN	388288mE 6438320mN	388292mE 6430291mN	388308mE 6438793mN	388308mE 6438795mN	388345mE 6430960mN	388352mE 6430959mN	388364mE 6430585mN	388373mE 6438036mN	388383mE 6430572mN	388425mE

A	rea (ha)	0.87	9.0	0	2.11	0.02	4.59	0.21	0.76	0	m	0.01	0.01	0.01	0.01	0	0	0
		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	P6_2	0	-	0	-	-	-	0	-	-	-	•	•	0	0	0	0	0
	P6_1	0	0	0	•	0	•	•	0	0	0	0	0	•	0	•	0	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	•	0	•	•	•	0	0	0	0	0	0	0	0	•	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	2	0	2	0	•	0	2	0	0	0	2	2	5	2	5	2	2
	P3_9b	0	0	•	0	0	0	0	0	0	0	0	•	•	0	0	0	0
	P3_9a	2	2	2	2	2	7	2	5	2	2	~	2	5	2	2	2	2
	P3_8	0	•	•	•	•	0	•	0	0	0	0	•	0	•	•	•	•
	P3_7b	0	•	•	0	•	0	0	0	0	•	•	•	•	•	•	•	0
Criteria	P3_7a	•	0	•	•	•	•	•	•	0	0	0	•	0	•	•	•	•
	P3_6	•	•	•	•	•	•	•	0	•	•	•	•	•	•	•	•	•
	P3_5	•	0	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•
	P3_4	•	-	•	-	-	-	•	-	-	-	0	•	•	•	•	•	•
	P3_3b	•	•	0	•	•	•	•	0	•	•	•	•	0	0	•	0	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	•	•	•	•	•	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c P1_2b	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
	P1_20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	F1_20											-		-				
L	ocality	WELLARD	HOPE VALLEY		HOPE VALLEY	HOPE VALLEY	POSTANS		HOPE VALLEY	HOPE VALLEY	HOPE VALLEY	WELLARD		WELLARD	WELLARD	WELLARD	WELLARD	WELLARD
ł	Туре	ß	ßD		ßD	Ø	ß		RD	RD	RD	MEWS		LANE	LANE	LANE	LANE	LANE
Ro	ad Name	WELLARD	SAYER		ASHLEY	ASHLEY	ANKETELL		SAYER	SAVER	ANKETELL	CHARVIL		SONNING	SONNING	SONNING	SONNING	SONNING
Lot	t/ Rd No.	386	67		55	65			63	51		F		10	00	9	4	2
Eas Nort	ting (mE) hing (mN)	388428mE 6430554mN	388487mE 6438419mN	388501mE 6430283mN	388531mE 6438293mN	388535mE 6438308mN	388547mE 6435436mN	388561mE 6430499mN	388572mE 6438430mN	388573mE 6438455mN	388606mE 6435633mN	388614mE 6430086mN	388617mE 6430102mN	388620mE 6430117mN	388622mE 6430129mN	388625mE 6430141mN	388628mE 6430153mN	388633mE 6430167mN

15

60

	ea (ha)	10 0.01	10 1.05	10 0.31	10 0.68	10 0.02	0 3.08	0 7.72	0 3.46	0 1.74	0 2.04	0 0.62	0 1.61	10 0	10 0.01	10 1.16	10 0.01	10
-	Score						10	10	10	10	10	10	10					
	P6_2	0	0	•	•		-	-	•	-	-	-	-	-	-	-	-	-
	P6_1	•	0	•	•	•	•	•	•	•	•	0	0	0	•	•	•	e
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	~
	P5_1	0	0	•	0	•	•	0	•	0	•	•	0	0	0	0	•	c
	P4_1	0	•	0	0	0	0	0	0	0	0	•	•	0	•	•	•	•
	P3_9c	2	2	2	2	0	•	0	2	•	•	0	0	0	0	0	•	-
	P3_9b	0	•	•	0	•	0	0	0	0	0	0	0	0	•	0	•	•
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
	P3_8	0	•	•	•	•	•	0	0	•	0	0	•	0	•	•	•	•
Criteria	P3_7b	•	0	•	0	•	•	•	•	•	•	•	•	•	•	•	•	
Cit	P3_7a	0	0	•	•	•	•	•	•	•	•	0	0	0	0	•	•	•
	P3_6	•	•	•	•	0	•	0	•	•	0	•	•	•	•	•	•	•
	P3_5	•	0	•	•	•	•	•	•	•	•	•	0	•	0	0	0	•
	P3_4	0	•	•	•	-	-	2	•	-	-	-	-	-	-	-	-	
	P3_3b	0	•	•	0	•	•	•	•	•	•	•	0	0	•	0	•	•
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
	P_3	•	0	0	•	0	•	•	•	•	•	•	0	0	•	•	0	-
	P1_2d	0	0	•	•	•	•	•	•	0	0	0	0	0	•	•	•	c
	P1_2c	•	•	•	0	0	0	0	0	0	0	0	•	•	0	•	0	•
	P1_2b	0	0	0	0	•	•	•	•	•	0	0	0	0	0	0	0	•
	P1_2a	0	•	•	0	0	0	0	0	0	0	0	0	0	•	0	•	•
	ocality		WELLARD	BERTRAM			HOPE VALLEY	POSTANS		POSTANS	HOPE VALLEY	POSTANS	POSTANS	ORELIA	ORELIA	POSTANS	ORELIA	VIDELLA
	Туре		CIR	RD W			ß	ßD	GDN	RD	RD	RD	RD	Ы	Ы	ß	Ы	ā
Roa	id Name		LAMBETH	MILLAR			ANKETELL	MCLAUGHLAN	RUNNYMEDE	ANKETELL	ANKETELL	MCLAUGHLAN	MCLAUGHLAN	DOWLING	DOWLING	THOMAS	DOWLING	DMI IMOD
	/ Rd No.		27					65				65		11	19		21	ę
East Nortl	ting (mE) hing (mN)	388652mE 6430178mN	388671mE 6430213mN	388721mE 6427521mN	388750mN 6430402mN	388816mE 6434536mN	388965mE 6435577mN	388982mE 6434743mN	389007mE 6430258mN	389082mE 6435443mN	389148mE 6435811mN	389165mE 6435269mN	389343mE 6435340mN	389349mE 6433039mN	389372mE 6433035mN	389374mE 6433827mN	389392mE 6433035mN	389411mE

Ar	rea (ha)	0.01	5.86	1.25	0.01	0.03	1.09	0.03	1.66	0.05	2.76	3.6	0.54	1.43	0.02	1.47	0.01	0
	Score	10	10	10	10	10	10	10	10	10	6	10	10	10	10	10	10	10
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P3_9c	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0
	P3_9b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9a	2	2	2	2	2	2	2	2	2	2	5	2	2	2	2	5	2
	P3_8	0	0	•	•	•	0	•	•	0	0	0	0	0	0	0	•	•
	P3_7b	0	0	0	0	0	0	0	•	0	•	•	•	•	0	0	0	0
Criteria	P3_7a	0	•	0	0	0	0	•	•	0	0	0	0	0	0	0	0	0
	P3_6	•	0	•	0	0	0	0	0	0	0	0	0	0	0	•	•	•
	P3_5	0	0	•	0	•	•	•	•	•	•	0	•	0	0	0	0	•
	P3_4	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-
	P3_3b	0	0	•	•	•	0	•	•	•	•	•	•	•	0	0	•	0
	P3_3a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	0	0	0	0	0	0	0	•	0	•	0	0	0	0	0
	P1_2d	0	0	0	0	•	0	0	0	•	0	0	0	0	0	0	0	0
	P1_2c	•	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0
	P1_2b	0	0	0	0	•	0	•	0	0	•	0	0	0	0	0	0	0
	P1_2a	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	ocality	ORELIA	POSTANS	POSTANS	ORELIA	ORELIA	POSTANS		POSTANS	ORELIA	POSTANS	ORELIA		POSTANS		POSTANS		ORELIA
	Туре	Ы	RD	RD	Ч	Ч	RD		RD	Ы	RD	AV	RD	RD		RD		RD
Roa	ad Name	DOWLING	MCLAUGHLAN	MCLAUGHLAN	DOWLING	DOWLING	ANKETELL		MCLAUGHLAN	DOWLING	MCLAUGHLAN	HENNESSY	ANKETELL	ANKETELL		MCLAUGHLAN		WIGGINS
Lot	/ Rd No.	18	119	119	16	14				12		48		280		119		20
Eas Nort	ting (mE) hing (mN)	389430mE 6433023mN	389433mE 6434453mN	389443mE 6434965mN	389449mE 6433014mN	389467mE 6433002mN	389475mE 6435402mN	389481mE 6434656mN	389493mE 6434698mN	389513mE 6432987mN	389523mE 6435087mN	389543mE 6432713mN	389571mE 6435510mN	389587mE 6435451mN	389621mE 6432967mN	389639mE 6435192mN	389645mE 6432975mN	389664mE 6432950mN

16
62

| | MC | 4 | 4 |
 | *

 | 6
 | POI | * | * |
 | | |
 | | | | 20 |
|---------|---|---|---
--
--
--
--
--
---|--|---|---
---|--
--|--|---|--|--|---|
| id Name | CLAUGHLAN | ANKETELL | ANKETELL | ROACH
 | ANKETELL

 | PEDDER
 | RTCHESTER | ANKETELL | ANKETELL | |
 | | |
 | | PORT | | PORT |
| Туре | ß | RD | RD | Ы
 | ßD

 | WAY
 | AVE | RD | RD | |
 | | |
 | | RD | | RD |
| ocality | POSTANS | HOPE VALLEY | | ORELIA
 | HOPE VALLEY

 | PARMELIA
 | PARMELIA | HOPE VALLEY | HOPE VALLEY | |
 | | |
 | | KWINANA
BEACH | | KWINANA |
| P1_2a | • | • | • | 0
 | 0

 | 0
 | 0 | 0 | 0 | -
 | - | - | -
 | - | - | - | - |
| P1_2b | 0 | 0 | 0 | 0
 | 0

 | 0
 | • | 0 | • | m
 | m | m | m
 | m | m | м | m |
| P1_2c | • | 0 | 0 | 0
 | 0

 | 0
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | • | 0 | 0 | 0 |
| P1_2d | 0 | 0 | 0 | 0
 | 0

 | 0
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | |
| P_3 | 0 | 0 | 0 | 0
 | 0

 | 0
 | 0 | • | • | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4
 | 4

 | 4
 | 4 | 4 | 4 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0
 | 0

 | 0
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | |
| | - | - | - | -
 | -

 | -
 | - | - | - | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0
 | 0

 | 0
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0
 | 0

 | 0
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| | | | |
 |

 |
 | | | | |
 | | |
 | | | | 0 |
| | | | |
 |

 |
 | | | | |
 | | |
 | | | | 0 |
| P3_9a | 2 | 2 | 2 | 2
 | 2

 |
 | 2 | 2 | 2 | 2
 | 2 | 2 | 2
 | 2 | 2 | 2 | 2 |
| P3_9b | • | • | • | •
 | 0

 | •
 | 0 | • | 0 | 0
 | • | 0 | 0
 | • | • | • | 0 |
| P3_9c | 0 | 0 | 0 | 0
 | 0

 | 0
 | • | 0 | • | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| P4_1 | • | • | • | 0
 | 0

 | •
 | 0 | 0 | 0 | 0
 | 0 | 0 | •
 | • | 0 | • | 0 |
| P5_1 | 0 | 0 | 0 | 0
 | 0

 | •
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | 0 |
| P5_1b | 2 | 2 | 2 | 2
 | 2

 | 2
 | 2 | 2 | 2 | 2
 | 2 | 2 | 2
 | 2 | 2 | 2 | 2 |
| P6_1 | 0 | 0 | • | •
 | •

 | •
 | 0 | 0 | 0 | 0
 | 0 | 0 | 0
 | 0 | 0 | 0 | |
| P6_2 | - | - | - | -
 | -

 | -
 | - | - | - | -
 | - | - | -
 | - | - | - | - |
| Score | 10 | 10 | 10 | 10
 | 10

 | 10
 | 9 | 9 | 10 | 6
 | 6 | 6 | 6
 | 6 | 6 | σ | 6 |
| | P6_2
P6_1
P5_1b
P5_1
P3_9c
P3_9c
P3_9a
P3_9a
P3_9a
P3_7b
P3_7a
P3_76
P3_76
P3_76
P3_76
P3_76
P3_74
P3_76
P3_74
P3_36
P3_36
P3_36
P3_38
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_36
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_96
P3_76
P3_76
P3_76
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_56
P3_ | Score P P6_2 P6_1 0 P5_1b ~ P5_1 0 P5_1 0 P5_1 0 P3_9c 0 P3_9a ~ P3_9a ~ P3_9a 0 P3_7a 0 P3_7a 0 P3_5 0 P3_5 0 P3_3a 1 P3_3a 1 P3_3a 0 P1_2d 0 P1_2b 0 P1_2b 0 P1_2b 0 Structure Structure Structure 0 | Score P P P6_2 P6_1 O O P5_1b O O P5_1 O O P5_1 O O P4_1 O O P3_9c O O P3_9a O O P3_9a O O P3_9a O O P3_7b O O P3_7a O O P3_5 O O P3_3b O O P3_3a T T P3_3a O O P1_2d O O P1_2b O O | Score PP PP PP P6_2 FF FF FF P6_11 O O O P5_115 O O O P5_11 O O O P5_11 O O O P4_1 O O O P3_90 O O O P3_91 O O O P3_92 O O O P3_93 O O O P3_94 O O O P3_75 O O O P3_55 O O O P3_34 T T T P3_35 O O O P3_34 T T T P3_34 O O O P1_24 O O O P1_24 O O O P1_24 O O O P1_24 O O O P1_24 <td>Score P P P P P P6_2 P6_1 O O O O P5_1b O O O O P5_1 O O O O P5_1 O O O O P3_9 O O O O P3_9b O O O O P3_7b O O O O P3_7b O O O O P3_16 O O O O P3_3b O O O O P1_24 O O O O <td< td=""><td>Score PP PP PP PP PP PP P6_2 FF FF FF FF FF FF P6_11 O O O O O PP P5_11b O O O O O PP P5_11 O O O O O PP P3_90 O O O O O PP P3_9a O O O O O PP P3_9b O O O O O PP P3_9b O O O O O PP P3_7b O O O O O PP P3_7b O O O O O PP P3_7b O O O O O PP PP P3_3b O O O O O O PP PP PP PP PP PP PP PP PP<!--</td--><td>Score 92 93</td><td>Kore PP <</td><td>Score PP PP</td><td>Source 9<td>Kore S. S</td><td>Kore 9. 9</td><td>Kore 9</td><td>Nore 92 <</td><td>Kore 92 9</td><td>More 92 9</td><td>Matrix Matrix Matrix</td></td></td></td<></td> | Score P P P P P P6_2 P6_1 O O O O P5_1b O O O O P5_1 O O O O P5_1 O O O O P3_9 O O O O P3_9b O O O O P3_7b O O O O P3_7b O O O O P3_16 O O O O P3_3b O O O O P1_24 O O O O <td< td=""><td>Score PP PP PP PP PP PP P6_2 FF FF FF FF FF FF P6_11 O O O O O PP P5_11b O O O O O PP P5_11 O O O O O PP P3_90 O O O O O PP P3_9a O O O O O PP P3_9b O O O O O PP P3_9b O O O O O PP P3_7b O O O O O PP P3_7b O O O O O PP P3_7b O O O O O PP PP P3_3b O O O O O O PP PP PP PP PP PP PP PP PP<!--</td--><td>Score 92 93</td><td>Kore PP <</td><td>Score PP PP</td><td>Source 9<td>Kore S. S</td><td>Kore 9. 9</td><td>Kore 9</td><td>Nore 92 <</td><td>Kore 92 9</td><td>More 92 9</td><td>Matrix Matrix Matrix</td></td></td></td<> | Score PP PP PP PP PP PP P6_2 FF FF FF FF FF FF P6_11 O O O O O PP P5_11b O O O O O PP P5_11 O O O O O PP P3_90 O O O O O PP P3_9a O O O O O PP P3_9b O O O O O PP P3_9b O O O O O PP P3_7b O O O O O PP P3_7b O O O O O PP P3_7b O O O O O PP PP P3_3b O O O O O O PP PP PP PP PP PP PP PP PP </td <td>Score 92 93</td> <td>Kore PP <</td> <td>Score PP PP</td> <td>Source 9<td>Kore S. S</td><td>Kore 9. 9</td><td>Kore 9</td><td>Nore 92 <</td><td>Kore 92 9</td><td>More 92 9</td><td>Matrix Matrix Matrix</td></td> | Score 92 93 | Kore PP < | Score PP PP | Source 9 <td>Kore S. S</td> <td>Kore 9. 9</td> <td>Kore 9</td> <td>Nore 92 <</td> <td>Kore 92 9</td> <td>More 92 9</td> <td>Matrix Matrix Matrix</td> | Kore S. S | Kore 9. 9 | Kore 9 | Nore 92 < | Kore 92 9 | More 92 9 | Matrix Matrix |

A	rea (ha)	7.65	0.3	0.36	0.84	1.25	90.0	0.07	0.26	0.4	0.1	0.37	0.38	0.36	0.05	0.13	0.82	0.42
3	Score	σ	6	б.	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P6_1	0	•	0	•	•	0	0	0	0	•	0	•	0	•	•	•	•
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	•	•	•	•	0	•	•	0	0	0	•	•	•	•	•
	P4_1	•	•	•	•	0	0	0	0	0	•	0	0	•	•	•	•	0
	P3_9c	0	0	0	0	0	•	0	0	0	0	0	0	0	0	0	•	•
	P3_9b	0	•	•	0	0	0	0	•	0	•	0	•	0	•	0	•	0
	P3_9a	7	2	2	2	2	2	2	2	2	2	2	2	2	5	2	2	2
	P3_8	•	•	•	•	•	•	•	•	•	0	0	0	•	•	•	•	•
	P3_7b	•	•	•	•	•	•	0	•	•	•	•	•	•	•	•	0	•
Criteria	P3_7a	•	•	•	•	•	•	•	•	0	•	0	•	•	•	•	•	•
	P3_6	•	•	0	0	0	0	0	0	0	0	0	•	•	•	•	0	•
	P3_5	•	•	0	•	•	•	•	•	•	•	0	•	•	•	•	0	•
	P3_4	•	•	•	•	•	•	0	0	•	•	•	•	•	•	•	0	0
	P3_3b	•	•	•	•	•	0	•	•	•	•	•	•	•	•	•	0	•
	P3_3a	•	•	•	•	•	•	•	0	0	•	•	•	•	•	•	•	0
	P_3	•	0	0	0	•	0	•	•	•	•	•	•	•	0	0	0	0
	P1_2d	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P1_2c	m	e		m	m	m			m				3	m		m	
	P1_2b P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P1_28																	
Ļ	ocality	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH		KWINANA BEACH										
	Туре	ß	RD	ßD	RD	ßD		ßD	RD	ß								
Roa	ad Name	RISELEY	PORT	PORT	PORT	MASON		PORT	PORT	PORT	PORT	KWINANA BEACH	PORT	PORT	MASON	PORT	MASON	PORT
Lot	/ Rd No.		20	20	20			20	20	20	20		20	20	22	20		20
Eas Nort	ting (mE) hing (mN)	384131mE 6435722mN	384134mE 6432951mN	384162mE 6432074mN	384217mE 6431982mN	384308mE 6434850mN	384309mE 6436071mN	384319mE 6432915mN	384319mE 6432967mN	384325mE 6432864mN	384361mE 6432762mN	384450mE 6431910mN	384482mE 6433033mN	384490mE 6432857mN	384511mE 6433222mN	384530mE 6432566mN	384532mE 6434927mN	384534mE 6433000mN

16

LOCAL BIODIVERSITY STRATEGY

64

	/ Rd No. ting (mE) hing (mN)	384550mE 20 6432246mN 20	384562mE 20 6432744mN 20	384591mE 20 6432172mN 20	384608mE 22 6433714mN 22	384617mE 20 6432616mN 20	384636mE 6433723mN	384655mE 22 6433456mN 22	384657mE 6434019mN	384662mE 20 6433027mN 20	384672mE 20 6433048mN 20	384675mE 22 6433307mN 22	384698mE 6434753mN	384707mE 6433699mN	384711mE 20 6432558mN 20	384718mE 20 6432511mN 20	384740mE 6434119mN	384748mF
Roa	id Name	PORT	PORT	PORT	MASON	PORT	MASON	MASON	MASON	PORT	PORT	MASON	MASON	MASON	PORT	PORT		
	Туре	ß	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD	RD		1
	ocality	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH		KWINANA
	P1_2a	-	-	-	-	-	-	-	-	-	- 1	-	-	-	-	-	-	
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	P1_2c	•	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	3
	P1_2d	0	0	0	•	•	•	•	0	0	0	0	0	0	•	0	0	29
	P_3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_4 P3_3b	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P3_5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	P3_6	0	0	0	0	0	0	•	•	•	•	•	•	0	0	0 0	0	
Criteria	P3_7a	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	2
.e	P3_7b	0	0	•	0	0	•	0	•	•	•	•	•	0	0	0	0	2
	P3_8	•	•	•	•	•	•	•	•	•	0	0	0	•	•	•	•	2
	P3_9a	2	2	2	2	2	2	2	2	2	2	2	2	~	2	2	2	3
	P3_9b	0	•	•	•	0	•	0	•	0	0	0	0	•	•	•	•	2
	P3_9c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 3
	P5_1b	5	2	2	2	2	2	2	2	5	2	2	2	2	2	2	2	
	P6_2 P6_1	-	0	0	0	0	0	- 0	-	1	1	1 0	1	0	0	0	-	1
	Score	6	6	6	6	0	6	6	6	6	6	6	6	6	6	6	6	
	ea (ha)	0.12	0.42	0.21	0.11	0.14	0.12	0.28	2.46	0.13	0.17	0.2	0.96	0.43	0.45	0.83	0.17	

A	rea (ha)	0.55	0.15	0.01	0.01	0.01	0.5	0.27	0.22	0.23	0.34	0.19	0	1.25	0.16	0.32	0	0
		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	0	•	•	•	0	•	•	•	•	0	0	0	•	•	0	•	0
	P3_9b	•	•	•	•	•	0	0	0	0	0	0	0	•	•	•	•	•
	P3_9a	2	2	2	2	2	2	2	5	2	2	7	2	2	2	2	2	2
	P3_8	0	•	•	•	•	0	•	0	0	0	0	0	0	0	•	•	•
	P3_7b	0	0	0	•	0	0	0	0	0	0	•	•	•	0	•	•	0
Criteria	P3_7a	0	•	•	•	•	•	•	0	0	0	0	0	0	•	•	•	•
	P3_6	•	•	0	•	0	0	•	•	•	•	•	•	•	•	•	0	0
	P3_5	•	•	0	•	•	•	•	•	•	0	0	0	0	•	•	•	0
	P3_4	•	•	•	•	•	•	0	0	•	•	•	•	•	•	•	•	•
	P3_3b	•	0	•	•	0	•	•	0	•	•	0	0	0	0	•	•	•
	P3_3a	0	0	0	•	0	0	0	0	0	•	•	•	•	0	0	0	•
	P_3	•	0	0	0	0	0	0	0	0	•	0	0	0	•	0	0	0
	P1_2d	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2c	•	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0
	P1_2b	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ţ	ocality	KWINANA BEACH					KWINANA BEACH							KWINANA BEACH				KWINANA BEACH
	Туре	RD					ß							RD				ST
Ro	ad Name	DONALDSON					PATERSON							PATTERSON				RICHARDSON
Lot	t/ Rd No.	6																2
Eas Nort	ting (mE) thing (mN)	384773mE 6434202mN	384779mE 6434022mN	384779mE 6433472mN	384779mE 6433472mN	384779mE 6433472mN	384782mE 6432264mN	384785mE 6432604mN	384789mE 6433820mN	384802mE 6432331mN	384805mE 6433664mN	384806mE 6433917mN	384806mE 6433917mN	384815mE 6432771mN	384820mE 6432176mN	384823mE 6432157mN	384838mE 6432327mN	384840mE 6432315mN

16

LOCAL BIODIVERSITY STRATEGY

66

A	rea (ha)	0.22	0	0.61	4.03	0.25	0.16	0.03	0.75	0.06	0.34	0.19	0	123	1.73	0.27	0.17	0.17
	Score	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	P6_2	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-
	P6_1	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P3_9c	0	0	•	0	•	•	•	0	•	•	0	0	0	0	0	•	0
	P3_9b	0	0	0	0	0	0	0	0	0	0	•	0	0	•	0	•	0
	P3_9a	2	2	2	5	2	2	2	2	5	~	2	2	2	2	2	2	2
	P3_8	•	0	•	•	•	•	0	0	0	0	0	0	0	•	•	•	•
	P3_7b	•	0	•	0	•	•	0	0	•	•	•	0	0	•	0	0	0
Criteria	P3_7a	•	•	•	•	•	•	•	0	0	•	0	0	•	•	•	•	•
	P3_6	0	0	0	0	0	0	0	•	•	•	•	•	•	0	0	•	0
	P3_5	•	•	0	0	•	•	•	•	•	•	•	0	•	0	•	•	•
	P3_4	•	•	•	0	0	0	0	0	0	•	•	•	-	•	0	•	0
	P3_3b	0	0	•	0	•	0	•	•	•	•	•	•	•	•	•	0	•
	P3_3a	0	•	•	0	0	0	0	•	0	•	•	•	4	0	0	•	0
	P_3	0	0	0	0	0	0	0	•	•	•	•	•	0	0	0	0	0
	P1_2d	0	•	0	0	•	0	0	0	•	•	•	•	0	0	0	•	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	•	•	0	0	0	•	0
	P1_2b	e	m	m	m	m	m	m	m	m	m	m	m	•	m	m	m	3
	P1_2a	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-
	ocality	KWINANA BEACH	KWINANA BEACH		KWINANA BEACH		KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH		KWINANA BEACH	NAVAL BASE	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH	KWINANA BEACH
	Туре	ß	ST		RD		ST	ST	RD	Ы	ST		ST	ßD	RD	RD	RD	RD
Roi	ad Name	THOMAS	RICHARDSON		MASONA		RICHARDSON	RICHARDSON	ROCKINGHAM	BURTON	RICHARDSON		RICHARDSON	COCKBURN	MASON	MASON	MASON	ROCKINGHAM
Lot	I/ Rd No.		2				2			Ħ	2		9	66	51	51	51	F
Eas Nort	ting (mE) hing (mN)	384846mE 6433820mN	384851mE 6432128mN	384861mE 6433867mN	384878mE 6433180mN	384882mE 6433935mN	384890mE 6432128mN	384929mE 6432126mN	384933mE 6433205mN	384941mE 6433919mN	384979mE 6432141mN	384982mE 6433866mN	384994mE 6432148mN	385010mE 6438122mN	385055mE 6433428mN	385076mE 6433379mN	385171mE 6433441mN	385242mE 6433387mN

A	rea (ha)	132	1.32	0	1.8	1.16	0.98	0.4	1.06	0.5	1.63	0.01	0.01	0.97	0.63	2.6	0.32	0.58
	Score	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	P6_2	-	-	0	0	•	0	•	0	•	-	•	•	0	0	0	0	0
	P6_1	0	0	0	•	0	0	0	0	0	0	0	0	0	0	0	0	0
	P5_1b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P5_1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	P4_1	0	•	•	0	0	0	0	0	0	0	0	0	•	•	•	0	0
	P3_9c	0	•	0	•	0	0	0	0	•	•	0	0	•	0	•	•	0
	P3_9b	0	0	•	•	0	0	0	0	0	0	0	0	•	0	•	•	0
	P3_9a	7	2	~	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	P3_8	0	0	•	•	0	0	0	0	0	0	0	0	0	0	0	0	•
	P3_7b	•	•	0	0	0	0	0	0	0	0	•	0	•	0	•	•	0
Criteria	P3_7a	0	•	0	•	•	•	•	0	0	0	0	0	•	•	•	0	0
	P3_6	0	•	0	0	0	0	•	0	•	•	•	•	•	•	•	0	•
	P3_5	•	•	0	•	•	•	•	•	•	0	0	0	•	•	•	•	0
	P3_4	0	•	-	-	-	-	-	-	-	•	-	-	-	-	-	-	-
	P3_3b	0	0	0	0	0	•	0	0	0	•	0	0	•	0	•	0	•
	P3_3a	0	•	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	P_3	0	0	•	•	0	0	•	0	•	•	0	•	•	•	0	•	0
	P1_2d	0	0	0	•	0	•	0	0	0	0	0	0	•	0	•	0	0
	P1_2c	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0	0	0
	P1_2b	m	m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
	P1_2a	-	-	0	•	0	0	0	0	0	0	0	•	•	•	•	0	0
	ocality				POSTANS	HOPE VALLEY	POSTANS	HOPE VALLEY	POSTANS	HOPE VALLEY				POSTANS	MEDINA	POSTANS	POSTANS	
Ĩ	Туре				ß	RD	ßD	RD	RD	RD				RD	AV	RD	ßD	
Ro	ad Name				ABERCROMBIE	ABERCROMBE	ABERCROMBIE	ABERCROMBE	ABERCROMBIE	ABERCROMBE				MCLAUGHLAN	GILMORE	ABERCROMBIE	MCLAUGHLAN	
Lot	:/ Rd No.				23		106		138					45	46		45	
Eas Nort	ting (mE) hing (mN)	385700mE 6431950mN	385700mE 6431950mN	387255mE 6434271mN	387281mE 6434340mN	387456mE 6435926mN	387482mE 6434842mN	387488mE 6436106mN	387491mE 6434974mN	387494mE 6436166mN	387806mE 6437916mN	387982mE 6434031mN	387982mE 6434031mN	387982mE 6434031mN	387983mE 6433331mN	388036mE 6434526mN	388188mE 6434269mN	388292mE 6434587mN

16

LOCAL BIODIVERSITY STRATEGY

68

2.38 m 50 P6_2 P6_1 P5_1b P5_1 P4_1 P3_90 P3_9b P3_9a P3_8 P3_7b P3_7a P3_6 P3_5 P3_4 P3_3b P3_3a P_3 P1_2d P1_2c P1_2b P1_2a OPE VALLEY POSTANS POSTANS POSTANS VANA TO 8 AN N ANKETELL CLAUGHI MCLAUGH AUGI 45 Easting (m Northing (m 388294mE 6434245mN 388331mE 6434979mN 6433979mN 388781mE 6433865mN 388872mE 6435940mN 388415mE 6432193mN



LOCAL BIODIVERSITY STRATEGY





ADMINISTRATION

Cnr Gilmore Ave and Sulphur Rd, Kwinana WA 6167 PO Box 21, Kwinana WA 6966

Telephone 9439 0200

customer@kwinana.wa.gov.au

www.kwinana.wa.gov.au



17 REPORTS – BUILT INFRASTRUCTURE

17.1 DEVELOPMENT APPLICATION - TELECOMMUNICATIONS TOWER - LOT 2 (9) WOOLCOOT ROAD, WELLARD

SUMMARY

An application has been received seeking planning approval for a telecommunications tower at Lot 2 (9) Woolcoot Road, Wellard (refer to the context map: Attachment A).

Lot 2 (9) Woolcoot Road (the subject lot) is zoned Special Rural under the City of Kwinana Local Planning Scheme No.2 (LPS2). The subject lot is approximately 3.89 hectares in size and is currently owned and occupied by the Palmerston Association – a not for profit service that seeks to improve the lives of people affected by alcohol and other drugs. The subject lot abuts Woolcoot Road which also acts as the interface between the urban zone to the west and rural zone to the east.

The proposal is for a telecommunications tower and associated infrastructure to be located to the southwestern corner of the subject lot, towards the Woolcoot Road boundary – refer to Attachment A. The proposal was advertised for a period of 21 days with several submissions being received both supporting and objecting to the proposal. The application has also been assessed against relevant state and local planning policy provisions. During the consideration period, amended plans have been provided by the applicant to address concerns raised during public advertising and provide greater consistency with the relevant planning requirements.

City Officers do not have delegation to determine applications for Telecommunications Infrastructure in the Special Rural zone. Therefore, the application is referred to Council to determine. Following a detailed assessment and consideration of submissions, City Officers recommend the application be approved subject to conditions.

OFFICER RECOMMENDATION

That Council approve the application for a Telecommunications Infrastructure at Lot 2 (9) Woolcoot Road, Wellard subject to the following conditions and advice:

Conditions:

- 1. Prior to construction of the development, a Construction Management Plan is to be submitted to and approved by the City of Kwinana, addressing but not limited to:
 - a. hours of construction;
 - b. rehabilitation of any area utilised during construction that is outside of the 100 square metre 'lease area';
 - c. traffic management including addressing site access and egress arrangements during construction;
 - d. management of vibration and dust; and
 - e. management of construction noise and other site generated noise.
- 2. Prior to completion of the development, the vehicle crossover shall be located and constructed to the specifications and satisfaction of the City of Kwinana.
- 3. Within 90 days of the date of this approval, the landowner shall undertake planting of screen landscaping from the roadway and adjoining lots to the satisfaction of the City of Kwinana.

- 4. Stormwater drainage from roofed and paved areas shall be contained and disposed of on site at all times to the satisfaction of the City of Kwinana.
- 5. The proponent shall implement dust control measures for the duration of site and construction works and for the ongoing operation of the site to the satisfaction of the City of Kwinana.

Advice Notes:

- 1. In relation to Condition 1, should access be required from Woolcoot Road to construct the development, a Traffic Management Plan should be submitted as part of the Construction Management Plan to the City of Kwinana for review and approval prior to commencing works.
- 2. If the development the subject of this approval is not substantially commenced within a period of two (2) years, or another period specified in the approval after the date of the determination, the approval will lapse and be of no further effect.
- 3. The Minister for Planning has issued a formal notice extending the deadline for substantial commencement by an additional two (2) years for all applications approved during the current State of Emergency. In effect, this means that the timeframe for substantial commencement is now four (4) years from the date of this determination.
- 4. The applicant is advised that this conditional development approval is not a building permit giving authority to commence construction. Prior to any building work commencing on site a Building Permit must be issued and penalties apply for failing to adhere to this requirement.
- 5. The applicant should ensure that the proposed development complies with all other relevant legislation, including but not limited to, the *Environmental Protection Act 1986* and Regulations, *Health (Miscellaneous Provisions) Act 1911* and associated Regulations and the National Construction Code.
- 6. If an applicant or owner is aggrieved by this determination, there is a right of review by the State Administrative Tribunal in accordance with the *Planning and Development Act 2005* Part 14. An application must be made within 28 days of the determination.
- 7. The applicant is advised that under section 51C of the Environmental Protection Act 1986 (EP Act), clearing of native vegetation is an offence unless undertaken under the authority of a clearing permit, or the clearing is subject to an exemption. Exemptions for clearing that are a requirement of written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. Exemptions for low impact routine land management practices outside of environmentally sensitive areas (ESAs) are contained in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (the Clearing Regulations). You are advised to contact the Department of Water and Environment Regulation for further information.
- 8. The applicant is advised that due to the proposed development being located on an existing firebreak, a firebreak variation application is to be submitted to the City of Kwinana for approval prior to the end of October in the year the development is constructed. You are advised to contact the City for further information.

VOTING REQUIREMENT

Simple majority

DISCUSSION

Land Status

Local Planning Scheme No. 2:Special Rural ZoneMetropolitan Region Scheme:Rural Zone

Background

The proposal is for a monopole telecommunications tower that extends to a maximum height of 38.6 metres in addition to associated infrastructure at ground level. In summary, the proposal involves:

- The installation of a 35 metre monopole;
- The installation of a new triangular headframe atop the proposed monopole that extends up to a maximum height of 38.6 metres;
- The removal of vegetation (approximately nine bushes) for a 10 metre x 10 metre fenced lease area at the base of the tower;
- The installation of a 26sqm equipment shelter within the fenced lease area; and
- An access track connecting the lease area to Woolcoot Road.

The proposed development is located to the southwestern corner of the lot within a 100 sqm lease area. The tower and associated equipment shelter is located within the 100 sqm lease area that is enclosed by a 2.4-metre-high chain link fence. Due to the angle of the lot boundary, the fence that encloses the proposed infrastructure is setback between 0.02 and 4.5 metres to the Woolcoot Road boundary. The actual tower is approximately 23 metres from the Woolcoot Road pavement. The fencing is then setback 0.5 metres from the southern boundary. An equipment shelter is proposed to be setback approximately 2.5 metres from the nearest boundary with the tower being setback a minimum of 6.4 metres from the southern boundary. Up to nine existing shrubs and vegetation are proposed to be removed within the 100 sqm lease area. Vehicle access for maintenance purposes is proposed via a track and crossover onto Woolcoot Road. Once the infrastructure is operational, it will require access via the track up to four times annually for routine maintenance. Refer to the development plans: Attachment B.

Draft Local Planning Strategy

This proposal is considered to be in alignment with the City's adopted draft Local Planning Strategy through the following Strategic Direction which states:

To deliver an equitable distribution of accessible and integrated multi-functional public open spaces, community infrastructure and recreation facilities that supports healthy and socially connected communities.

Site Context and Zoning

The subject lot is located on the eastern side of Woolcoot Road, approximately 900 metres east of the Kwinana Freeway in Wellard and is zoned 'Special Rural' under LPS2. In terms of existing context, the land west of Woolcoot Road is zoned for development and is therefore in the process of urbanisation. A local structure plan exists on the lot to the west of Lot 2 Woolcoot Road and the Living Edge estate is further south of the site. The image below illustrates the structure plans that currently exist in close proximity to the site. The approved local structure plan directly to the west of the site designates a series of Residential R30 Lots with a lifestyle village located to the rear, further west – refer to Attachment E. These land uses will be approximately 100 metres away from the proposed telecommunications infrastructure. It should also be noted that (as seen in the image below) a Local Structure Plan has not yet been prepared for the lot directly west of the proposed development. This lot is affected by significant wetlands with only a small portion being capable of residential development adjacent to Woolcoot Road. It is envisaged that this future development would be approximately 50 metres from the proposed telecommunications infrastructure.



Figure 1 - Existing Local Structure Plans

The land east of Woolcoot Road (including the subject lot) comprises of rural lifestyle lots averaging two hectares in size.

The subject lot is actually larger than the average lot size for the Special Rural zone, being approximately 3.98 hectares in size. Notwithstanding, the lease area for the proposed telecommunications infrastructure is only 100 sqm. Several established buildings exist on the subject site that form the Palmerston Association operations. The 100 sqm lease area for the proposed telecommunications infrastructure is located to the southwestern corner of the lot, approximately 20 metres from the nearest building.

Site History

The wider area has historically been used for rural purposes with the subject lot being occupied by the Palmerston Association – a not for profit service that seeks to improve the lives of people affected by alcohol and other drugs. The 100 sqm lease area for the proposed telecommunication infrastructure is an underutilised area that includes a firebreak and some minor native vegetation. An image of the lease area as it exists can be seen in Attachment C.

Planning Assessment

Land Use

Telecommunications Infrastructure is listed as an 'SA' land use under LPS2. Under LPS2, 'SA' land uses are required to be advertised for public comment prior to a determination being made (refer to the public consultation section below).

The proposed development has been considered against the relevant scheme and policy requirements in addition to the submissions made as part of public advertising. An assessment against the relevant planning provisions is detailed below.

State Planning Policy 5.2

State Planning Policy 5.2 – Telecommunications Infrastructure (SPP5.2) seeks to provide clear guidance pertaining to the siting, location and design of telecommunications infrastructure. This planning policy aims (at a state level) to balance the need for effective telecommunications services with the community interest in protecting the visual character of local areas. An assessment against the relevant provisions of the Policy is outlined below.

SPP 5.2 Policy Provision	Planning Assessment
5.1.1 (ii)(a) be located where it will not be prominently visible from significant viewing locations such as scenic routes, lookouts and recreation sites.	There are no identified scenic routes, lookouts or recreation sites near the proposed development. The area is dominated by urban land to the west and rural lifestyle lots to the east.
5.1.1 (ii)(b) be located to avoid detracting from a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land.	The proposed tower is in an area that is undulating and comprises larger rural lots with significant vegetation. Due to the undulating nature of the area, there is not considered to be any significant views and therefore the tower will not impact or blight the landscape. Furthermore, the proposed tower is designed to be a monopole with a single head frame to reduce visual impacts. This design has a reduced impact on the landscape horizon which is characterised by significant above ground powerlines (refer to further commentary below in this respect).
	It is acknowledged that the tower is located on slightly elevated land compared to the existing and future urban area to the west of Woolcoot Road. The tower will likely impact the future residents directly to the west in terms of visual amenity, however, this is minimal due to the monopole design and undulating nature of the area that also includes significant powerlines.
	City Officers consider that the existing and proposed landscaping screening at ground level will reduce impacts and that the tower will blend with existing powerline structures in the area.

Г

٦

5.1.1 (ii)(c) not be located on sites where environmental, cultural heritage, social and visual landscape values maybe compromised.	The proposed location is on an existing firebreak and will only require minimal clearing of vegetation. The vegetation to be removed is not significant and will be offset by proposed screening vegetation between the proposed lease area and the Woolcoot Road boundary. There are no social or wider landscape values impacted.
5.1.1 (ii)(d) display design features, including scale, materials, external colours and finishes that are sympathetic to the surrounding landscape.	infrastructure and to achieve coverage objectives. City
5.1.1 (iii) local governments should consider exempting telecommunications infrastructure from the requirement for development approval wherethe infrastructure has a maximum height of 30 metres from finished ground level.	The proposed tower exceeds the exempted height of 30 metres by a maximum of 8.6 metres. The proponent has stated that this height is required considering the undulating nature of the area in addition to the significant lack of this type of infrastructure in the area. The nearest tower is located approximately 2.6 kilometres north west of the site in Casuarina.

Т

Local Planning Policy 13 – Telecommunications Infrastructure

Local Planning Policy 13 – Telecommunications Infrastructure (LPP13) seeks to provide guidance for the assessment and determination of development applications for telecommunications infrastructure within the City. The policy operates under and elaborates on the requirements of SPP5.2.

LPP 13 Policy Provision	Planning Assessment
1.1 Towers shall generally be located in Industrial, Commercial and Rural areas	The proposed tower is in a rural zone, consistent with this policy requirement.
1.2 Co-location of antennae facilities on single towers will be required except where technical impediments preclude such co-location or where the visual impact of two or more towers is less than that of co-located facilities.	The proposal is for a single tower with antennae facilities being co-located on the top of the tower on a triangular head frame. The applicant has indicated that at this stage two major telecommunication service providers have committed to utilising the tower.
1.3 Towers shall not be located within areas designated for Landscape Protection under the Scheme.	The proposal is not located within an area of Landscape Protection area as defined under LPS2, consistent with the policy.

1.4 Towers shall be sited so as to not intrude, encroach, obscure or detract from significant landscape features.	As discussed under Clause 5.1.1 (ii)(b) of SPP 5.2, this part of Wellard is undulating with road networks historically designed to respond to the undulating land. The tower is located on a slightly elevated portion of land, on the inside of a bend in Woolcoot Road, adjacent to existing powerline infrastructure. These factors in addition to that discussed under Clause 5.1.1 (ii)(b) of SPP 5.2 (as above) demonstrate that the tower is designed and sited to have minimal impact on the landscape.
1.5 Towers shall be of mono-pole construction.	The tower is of monopole construction.
1.7 The base of the tower and associated installations shall be screened by established vegetation. Where local trees do not exist, or their retention is not sufficient, the planting of mature trees approved by the City is required.	The applicant has provided amended plans showing vegetation to be located between the lease area and the Woolcoot Road boundary. This landscaping will provide for screening of the infrastructure at ground level.
1.9 The City may require the use of innovative tower structure design, particularly within an urban context, so that the external appearance of the tower is compatible with the surrounding built form and mimics urban structures such as clock towers, columns or includes urban art features.	The proposal is located in a rural zone; however, it is acknowledged that it is also adjacent to future urban development on the western side of Woolcoot Road. Landscape screening is therefore considered critical and has been provided to the Woolcoot Road boundary. The monopole construction will provide simplicity and minimal visual impact, compared to the high voltage powerlines that traverse the urban area (refer to further commentary below).
 1.10 Favourable consideration will generally be given to the establishment of towers in the following circumstances: where existing public utility corridors are used. where the tower height is in keeping with the height and bulk of surrounding built form. 	This part of Wellard has experienced poor phone/internet reception in the past, particularly in the 'lower lying' areas (such as Sunrise and Living Edge estates). The Tower is in close proximity to an existing corridor being used for high voltage powerlines and other services. The tower is located on a site that is being used by the Palmerston Association. The site is therefore much larger than the standard Special Rural lot and is used very differently than the standard lifestyle lots. Therefore, it is considered to be a much more suitable site for such infrastructure.

Public Consultation

As required under LPS2, the application was advertised to all properties within 400 metres of the proposed development for a period of 21 days. Six submissions were received during the advertising period, with three in support and three objecting to the proposal – refer to the schedule of submissions in Attachment D.

Key Planning Matters

The key planning matters identified within the above planning assessment and those raised as part of the submissions are further discussed below.

Visual Amenity and Local Character

To further understand the nature and design of the development, the proposed monopole tower measures 38 metres in height which is approximately 6 metres higher than the existing tower in Wellard Village (adjacent to the Wellard Village train station). The applicant has noted that at this location, a 35 metre monopole is required to meet the targeted coverage objectives for the telecommunication companies occupying the tower. The applicant also stated that prior to submission of the subject application, several locations in the Wellard east area were investigated, including the colocation of facilities. Several factors were considered noting the large spatial separation between this facility and the targeted coverage area and that there is no suitable infrastructure for co-location.

Further to the above planning assessment, telecommunications infrastructure is required to be designed and located such that it will not detract from significant views or detract from existing landscape features. Several concerns were raised in this regard as part of public consultation arguing that the proposal is inconsistent with the rural character and amenity of the area. While it is acknowledged the proposed tower will be visible from various perspectives in the area, the applicant has provided a photo montage showing visual impacts and how the tower has been sited to minimise impacts. The photo montage clearly demonstrates that from key locations in the area, the proposed infrastructure will not be a predominate feature on the horizon. Notwithstanding, it is noted that a montage has not been provided directly west of the site. City Officers note in this regard the visual amenity will be marginally impacted considering the large high voltage powerlines are located to the west. Furthermore, the future development areas directly to the west are largely impacted by wetland areas with the nearest residential lot approximately 50 metres from the proposed telecommunications tower. While the telecommunications infrastructure would be close to these future lots. City Officers are of the view that the monopole style of tower with screening at the base should not be a significant visual impact when viewed at a street level. The pole itself (at 1 metre width) with the rural background would not stand out as a visual intrusion. Lastly, it should be noted that there is a need for this type of infrastructure in the Wellard east urban cell and the proposed location is considered appropriate as it satisfactorily balances need and amenity.

Furthermore, the local landscape is characterised by large trees and undulating land that works to reduce impacts on views of significance. This can be seen in the photo montage – see Attachment D. It should also be noted that the proposed development is consistent with existing infrastructure in the area, noting a high voltage powerline is located only 500 metres west of the proposed development. The fact that the tower is located 500 metres from high voltage power lines will provide reasonable separating distance, reducing proliferation of similar infrastructure in the area. The design of the proposed tower being monopole with a single headframe will further work to reduce visual impacts. Lastly, City Officers consider that the existing and proposed landscaping screening at ground level will work to reduce visual impacts and that the tower will blend with existing powerline structures in the area.

Streetscape

Another key planning element that has been considered as part of this application is in relation to impacts of the proposed infrastructure on the existing streetscape. The proposed lease area is setback an average of 2.25 metres from the Woolcoot Road boundary. To reduce visual impacts on the streetscape, the applicant has provided amended plans showing screening landscaping within the Woolcoot Road setback area. This landscaping will reduce visual impacts on the streetscape. Furthermore, the proposed lease area is elevated above and located on a bend in Woolcoot Road – refer to the images in Attachment C. These factors work to reduce any visual impacts on the streetscape. It should also be noted that positioning the development along Woolcoot Road minimises impacts to the landowner and the operation of their business and allows for convenient access should emergency maintenance or access be required.

Community Benefit

Several submissions identified the value of the proposed development for the community. While several submissions outlined the need for such infrastructure in this developing area of Wellard east, concern was also raised that the proposal will not benefit the entire community and has potential to negatively impact surrounding properties. For example, it was noted that only select telecommunication companies will be provided on the tower, meaning not all residents in the catchment area will benefit. The applicant has confirmed that at this point in time, only two major telecommunication companies have committed to the tower. However, it was also noted that the tower has been designed to accommodate additional carriers and communication providers such as government entities and wireless service providers at a future time if required. City Officers are of the view that the submissions outlining the need for telecommunications infrastructure in this area should be emphasised. City Officers have received multiple queries and comments in recent years regarding the lack of phone reception in the area, particularly the growing urban residential estates such as the Living Edge and Sunrise Estates. The proposed and potential benefit of the telecommunications tower is considered to be appropriate and necessary for the local area.

Public Health

As telecommunications infrastructure continues to expand across Australia, there has been heightened community sensitivity regarding impacts on public health. Significant scientific research has been undertaken in the recent past with a consensus being reached, that mobile base stations are safe. Furthermore, all mobile carriers must abide by strict legislation and safety standards that are regulated by the Australian Communications and Media Authority (ACMA).

The relevant standard operates by placing a limit on the strength of the signal that mobile carriers can transmit to and from any telecommunications infrastructure. The environmental standard restricts the signal strength (also referred to as the electromagnetic energy) to a level that is low enough to protect all people at all times. The applicant has provided a technical report alongside the application that demonstrates compliance with the safety standard. This report noted that the proposed telecommunications infrastructure will operate at transmission levels that are much less than those allowed by the standard. In summary, the maximum electromagnetic energy levels from the proposed telecommunications tower represents 2.29% of those allowed by the relevant Australian standard, where 100% is still be considered safe. In this regard, the public health implications are considered to be minimal and do not override the benefits of the tower for current and future residents in the nearby area.

Conclusion

Adequate and reliable telecommunications are essential for all aspects of contemporary communities to maintain connected and cohesive social networks. Furthermore, contact between emergency services and the community increasingly relies on the telecommunications networks. The Wellard east locality is experiencing rapid growth that has led to increased mobile network demand. The proposed telecommunications infrastructure is considered to address the current and future demand of the area, particularly the urban area of Wellard east.

City Officers have considered the proposed telecommunications infrastructure on the subject lot and are of the view that the application can be supported. The proposal is consistent with the provisions and objectives of state and local policy. In this regard, key planning elements such as visual amenity, minimising streetscape impacts and maintaining public health have been considered appropriate, reducing impacts and providing for proper and orderly planning. The proposed infrastructure is considered to benefit the local community and therefore it is recommended the application be approved subject to standard conditions.

STRATEGIC IMPLICATIONS

This proposal will support the achievement of the following outcome/s and objective/s detailed in the Strategic Community Plan and Corporate Business Plan.

	Strategic Co	ommunity Plan	
Outcome	Strategic Objective	Action in CBP (if applicable)	How does this proposal achieve the outcomes and strategic objectives?
2 – A resilient and thriving economy and exciting opportunities	2.2 – Create strong regional connections that will improve the ability for residents to access jobs, training and goods and services	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes and strategic objectives	The proposal will provide more accessible wireless connections in the area.
3 – Infrastructure and services that are affordable and contribute to health and wellbeing	3.2 – Provide for an accessible and well connected City by integrating public transport and improving safe streets for driving, walking and cycling	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes and strategic objectives	The proposal will assist in providing for a smarter and more connected City while maintaining streetscapes.
4 – A unique, vibrant and healthy City that is safe, connected and socially diverse	4.2 – Improve Kwinana's perception by leveraging and promoting the unique attributes of the area and supporting feelings of safety and security in community	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes and strategic objectives	The proposal will assist in providing for safety and security for the community as it becomes more connected.

SOCIAL IMPLICATIONS

This proposal will support the achievement of the following social outcome/s, objective/s and strategic priorities detailed in the Social Strategy.

	Social	Strategy	
Social Outcome	Objective	Strategic Priority	How does this proposal achieve the social outcomes, objectives and strategic priorities?
1 – Healthy and Active	1.0 – A physically and mentally healthy and active community	1.8 – Address relevant requirements under the Public Health Act and Environmental Health Protection guidelines and regulations.	The applicant has demonstrated how the proposal will have minimal impact on public health.
2 – Connected and Inclusive	2.0 – Equitable and inclusive social connection and engagement with community life	2.4 – Facilitate initiatives that encourage social interaction and connection at both a local and community wide level	The proposal will assist in providing better connectivity for the modern community
4 – Safe and Resilient	4.0 – Safe enjoyment of community life	4.3 – Ensure community planning, infrastructure, transport, services and programs provide for safe use and participation	The proposal will assist in providing for greater use and participation in services and other infrastructure.

LEGAL/POLICY IMPLICATIONS

For the purpose of Councillors considering a financial or impartiality interest only, the landowner is the Palmerston Association and the applicants are Axicom Pty Ltd.

The following strategic and policy-based documents were considered in assessing the application:

Legislation

Planning and Development Act 2005 Planning and Development (Local Planning Schemes) Regulations 2015

<u>Schemes</u> Metropolitan Region Scheme City of Kwinana Local Planning Scheme No. 2

<u>Policies</u> State Planning Policy 5.2 Local Planning Policy No.13

FINANCIAL/BUDGET IMPLICATIONS

There are no financial/budget implications as a result of this proposal.

ASSET MANAGEMENT IMPLICATIONS

There are no asset management implications as a result of this proposal.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

The environmental and public health implications as a result of this development are considered to be minor. The applicant is proposing to plant vegetation to offset the proposed removal of vegetation as part of the development. Furthermore, the applicant has provided information and technical reporting demonstrating the electromagnetic energy generated by the telecommunications tower is minimal and will not have an adverse impact on public health.

COMMUNITY ENGAGEMENT

The application was advertised to all landowners and occupiers within 400 metres of the proposed development area for a period of 21 days. Six submissions were received during the advertising period. The content of each submission can be found in Attachment D and key planning matters are discussed in this report.

ATTACHMENTS

- A. Context Map
- B. Development Plans
- C. Photo Montage
- D. Schedule of Submissions
- E. Approved Local Structure Plan





DATE OF ISSUE	29.07.22	
DRAWING PACKAGE VERSION		
GENERAL DRAWINGS	ABIIIIIII	
G2 SITE SETOUT PLAN		
G3 SITE ELEVATION		
G4 CROSSOVER PLAN		
RADHAZ / EXCLUSION ZONE DRAWING		
STRUCTURAL DRAWINGS		
		AXICOM SITE NO: 3
ELECTRICAL DRAWINGS		
		SITE NUMBER
		BERTRAM SC
		DERTRAIT SC
FITOUT ROOM DRAWINGS		9 WOOLCOOT
II		WELLARD, WA,
TRANSMISSION DRAWINGS		
L1 LEASE PLAN		
REFERENCE DRAWINGS		
LI		
LI		
L I		
li		
LI		
1		
DISTRIBUTION LIST		GREENFIELD eJ
AXICOM AXICOM REGIONAL PM		UKLLINFIELD EJ
L I		
		PREL

com

3400883

640127 OUTH RD , 6170



IMINARY 640127-00





_				
ľ	GDA94 CO-ORDINATES		ZONE	GROUND LEVEL
	EASTING	392 961		
	NORTHING	6430339	50	A.H.D RL
	LATITUDE	-32.25855°	20	26m EL 0.0m
	LONGITUDE	115.86361°	1	

DUT P	DUT PLAN		
us R'Y	640127 - G2 B		







N		
,	640127 - L1	A



Photo Montage





Wellard WA 6170









9 Woolcoot Road Wellard WA 6170

Item 17.1 - Attachment C

Date: 24/7/2022



Image of Lease Area



Aerial of the Lease Area and Immediate Surrounds



Schedule of Submissions DA10328 Overall Summary of Submission **City Officer Response** object / support neutral 1. The proposed Telecommunication Tower is a necessary Support 1. Noted. development for the area. **Object** 1. The tower will be an 'eye sore' in the local area; 1. While it is acknowledged that telecommunications towers are not commonplace in the local area (with the nearest tower being approximately 2.5km to the north in 2. Exposure to electromagnetic radiation from the tower will Casuarina), the proposed tower is located in an undulating, rural area with significant impact the health of nearby residents; vegetation that works to reduce visual impacts. 2. The applicant has provided supporting technical reporting) including and Environment Electromagnetic Energy Report) which states that electromagnetic energy levels are 3. The tower will negatively impact on wildlife and fauna in the local area: much lower than those allowed by the Australian government. The maximum EME levels from this facility represent 2.29% of those allowed by the Australian standard, 4. The tower will attract lightning strikes which could cause where 100% would still be considered safe. The proposed lease area is only 100 sqm and only up to nine shrubs are proposed to bushfires that put local residents at risk; 3. be cleared. The proposed facility is not anticipated to adversely impact on any The tower will result in reduced land values in the area. threatened species or ecological communities. The applicant has advised that the proposed facility is designed with a lightning 4 protection and grounding system to direct lightning away from the monopole and sensitive electrical equipment and harmlessly into the ground, having minimal impact on the area. Land values are not a planning matter. Object 1. The tower will result in reduced land values in the area: Land values are not a planning matter. 1. 2. While it is acknowledged there are no similar telecommunication towers, there are high voltage power lines in close proximity. Furthermore, the development is proposed The tall, indiscreet tower will be visible from surrounding; on the border between rural and urban zoned land, considered to be a suitable properties and will not fit in with the surrounding rural aesthetic, environment and overall character of the area; location for this type of development. 3. The applicant has secured two major telecommunications carriers and has noted that 3. It will not be of benefit to the entire community and/or a additional carriers may choose to locate on this tower in future to provide greater number of the negatively affected surrounding properties benefit for all. Refer to comments above. (i.e. any Telstra customers; 4. 5. Refer to comments above

		Sc	hed	ule of Submissions DA10328
	4.	The tower will increase the risk of fires in an already bush fire prone area; towers attract lightning strikes and are prone to electrical faults;	6.	The applicant has demonstrated that a number of locations were considered prior to the submission of this application. The proposed location is considered to be consistent with planning requirements and can therefore be approved.
	5.	exposure to electromagnetic radiation and its impact on human health. No exposure at all is better than any amount irrespective of how minor the data suggests. – The proposed location does not meet the minimum 300 metre requirement from neighbouring residential estates;		
	6.	The tower could be erected further south on a larger rural property, causing less of a negative impact.		
Dbject	1.	The proposed telecommunications tower will be visible from future urban development - the visibility of the tower from future urban areas will reduce the amenity of the landscape views;	1.	Although the tower will be visible from future urban development to the west of the site, the visual impacts have been considered and are consistent with policy requirements. It should be noted that such infrastructure is typically located within or adjacent to urban areas – an example is a similar tower located within the Wellard Village urban centre.
	2.	A telecommunications tower of the size and scale being proposed is infrastructure that is not appealing for residents within view of their neighbourhood. The tower should be located away from residential areas and the location determined/supported by a technical Landscape Assessment;	2. 3. 4.	The tower is located in the rural zone and is surrounded by significant vegetation and undulating land which works to reduce impacts. An assessment of the impacts on the landscape has been provided and demonstrates minimal visual impact.
	3.	A telecommunication tower such as the one being proposed should be located away from a key urban road such as Woolcoot Road. The tower is proposed at the front of Lot 2 clearly visible and obtrusive to the streetscape;	5.	tower is located on a bend in Woolcoot Road that will work to reduce visual impacts. City Officers are of the view that the proposal will have minimal impact on the streetscape. While relocating the tower to the rear of the property may reduce streetscape impacts the applicant has sufficiently demonstrated that streetscape impacts have been
	4.	Woolcoot Road is a road used by urban residential users and is a pleasant drive with special rural on the eastern side and conservation on the western side. The tower would detract from this streetscape amenity;		mitigated through design and screening vegetation. As outlined above, adequate environmental considerations have been undertaken for the siting of the development. The proposed development is located in the special rural zone with the land to the west being zoned urban – there is no impact on conservation areas.
			ule of Submissions DA10328	
----------------	---	-------------------	--	
6. 7. 8.	property away from the road frontage; A Landscape Assessment has not been undertaken which demonstrates that the proposed site location is suitable. The proposed location is opposite a conservation area and will therefore detract from the visual landscape value of the conservation area.	10. 11. 12.	The proposed monopole is designed to have an unpainted grey finish that is considered to be most sympathetic in blending in with the surrounds. As outlined above, the visual impacts of the tower have been considered and are minimal. The applicant has provided a series of montages showing how the tower will appea in the surrounding landscape. Refer to comments above The applicant has advised that as high wind speeds can have a detrimental impact of the structural integrity of a headframe and the antennas installed at the top of a monopole, wind loading is an important factor in designing mobile base stations. The proposed facility has been designed in accordance with the local wind levels and is not anticipated to result in any vibrations. Refer to comments above regarding health impacts.	

	Schedule of Submissions DA10328			
	12. The proposal will cause wind vibrations that will impact the surrounding area.13. The proposal will cause health problems for surrounding residents.			
Support	1. No issues noted with this application or tower installation	1. Noted.		
Support	 There is currently no signal on either Optus or Telstra, and this is seen as a safety hazard, meaning a telecommunications tower is vital for the area. 	 City Officers concur that phone coverage in the area, particularly the new Living Edge Estate have been subpar. The City has received multiple phone queries of the years along these lines. Noted. 		
	 Please proceed with this project as this will improve the safety and communications in the Wellard area currently affecting the Living Edge and Sunrise Estates. 			



17.2 PROPOSED SCHEME AMENDMENT NO. 163 TO LOCAL PLANNING SCHEME NO.2 -REMOVAL OF 2% DEVELOPER CONTRIBUTION PLAN ADMINISTRATION FEE AND INTRODUCTION OF AN ESTIMATED ADMINISTRATION COST AS PER STATE PLANNING POLICY 3.6 - INFRASTRUCTURE CONTRIBUTIONS

SUMMARY

The purpose of this report is for the City to resolve to support the proposed Scheme Amendment No. 163 (Amendment 163) to the City of Kwinana Local Planning Scheme No. 2 (LPS2) affecting Developer Contribution Area's 1 through to 7 (refer Attachment A). Amendment 163 seeks to update LPS2's Developer Contribution requirements for administrative costs to be in accordance with the requirements of State Planning Policy 3.6 – Infrastructure Contributions.

The proposed amendment seeks to:

- a) Remove the existing Administrative costing requirements, being a flat 2% cost to cover administrative items for DCA 1 through to 7 under Schedule 5 of Local Planning Scheme No. 2; and
- b) Insert an amended Administrative costing requirement based on estimated staff time spent on managing DCA's 1 through to 7 under Schedule 5 of Local Planning Scheme No. 2.

The amendment was previously considered by Council for advertising and adopted at its meeting held 27 October 2021. The application was advertised pursuant to the requirements of clause 38 (3) of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations). No submissions have been received.

As per the requirements under clause 41(4) of the Regulations the City is now required to resolve to either support without modification, support with modifications or not support the amendment prior to providing the final amendment to the Department of Planning, Lands and Heritage (DPLH) for consideration by the Minister.

Given Amendment 163 will align the City's practice for Administration Costs associated with managing DCP's with SPP3.6 and there have been no submissions received in response to the amendment, City Officers recommend Amendment 163 be supported without modifications.

OFFICER RECOMMENDATION

That Council:

- 1. in accordance with Regulation 41(3)(a) of the *Planning and Development (Local Planning Schemes) Regulations 2015* determines to support without modification Scheme Amendment No. 163 to the City of Kwinana Local Planning Scheme No. 2 (LPS2) as per Attachment A for the purposes of:
- 2.
- (a) Amending Schedule V Development Contributions Plan 1, Bertram/Wellard/Parmelia (North East) / Orelia (East), by
- (b)
- (i) Replacing clause 1.3 (Administration Costs) with: Administrative costs, that may include:

- *i.* costs to prepare and administer the plan during the period of operation (including legal expenses, valuation fees, proportion of staff salaries, computer software or hardware for purpose of administering the plan);
- ii. costs to prepare Annual Report and monitoring;
- *iii.* costs to prepare and review cost estimates and the cost apportionment schedule;
- iv. any other costs as itemised in State Planning Policy 3.6.
- (ii) Replacing clause 2.3 (Administration Costs) in the section relating to "Cost Contribution Methodology" with:

As estimated in the DCP report.

- (c) Amending Schedule V Development Contributions Plan 2 through to 7 by:
 - (i) Replacing clause 5.1 under the heading "Administration costs" in the section relating to "Infrastructure and administrative items to be funded" with:
 - 5.1 Administrative costs, that may include:
 - *i.* costs to prepare and administer the plan during the period of operation (including legal expenses, valuation fees, proportion of staff salaries, computer software or hardware for purpose of administering the plan);
 - ii. costs to prepare Annual Report and monitoring;
 - *iii.* costs to prepare and review cost estimates and the cost apportionment schedule;
 - iv. any other costs as itemised in State Planning Policy 3.6.
 - (ii) Replacing text under the heading "Cost Contribution for Administration Costs" in the section relating to "Method for calculating contributions" with:

As estimated in the DCP report.

3. Authorises the Mayor and the Chief Executive Officer, in accordance with section 9.49a of the *Local Government Act 1995*, to execute under Common Seal Amendment No. 163 to Local Planning Scheme No. 2, and then submit to the Western Australian Planning Commission, for consideration and recommendation to the Minister for Planning for approval.

VOTING REQUIREMENT

Simple majority

DISCUSSION

The City has prepared Local Planning Scheme Amendment No. 163 in order to bring LPS2 up to date with current State Planning Policy 3.6 – Infrastructure Contributions (SPP 3.6) The Department of Planning, Lands and Heritage recently revised SPP 3.6 which now provides a cost calculation method for the administrative elements of managing a Developer Contribution Plan (DCP), whereby administrative costs should be estimated by officer time and billed to the DCP accordingly. Currently, LPS2 provides for a flat 2% administration cost to be billed to the DCP and as such, LPS2 is not in accordance with SPP 3.6.

Amendment 163 will modify LPS2 to be in line with the requirements of SPP 3.6, by enabling the City to recover actual costs incurred that are associated with the administration of the DCP's. The specific items the City can recover are tabulated within Schedule 4 of SPP3.6, thus the reference to that part of SPP3.6 within the amendment text. Those items must relate directly to the work the City must do to prepare and implement the DCP. Schedule 4 of SPP3.6 states:

'Administration Items should be itemised in the DCP and include estimated costs for each item in the DCP report:

- costs to prepare and review DCP cost estimates
- costs to prepare DCP cost apportionment schedule
- costs for undertaking valuations for DCP
- costs associated with structure planning and technical studies but only when associated with the preparation of a DCP
- fees for professional services directly linked to preparation and implementation of DCP (eg legal and accounting fees)
- costs for computer software and/or hardware upgrades necessary to enable DCP preparation
- proportion of staff salaries directly related to DCP administration 'management fees' should directly relate to the cost of labour to manage the DCP, rather than a percentage of total DCP costs
- details and justification of contingencies applied
- financial institution fees and charges associated with administration of DCP funds
- interest charged on loans taken out to pre-fund items included in DCP (established based on lending rates at the time DCP is prepared).'

Amendment 163 will affect DCP contribution areas 1 through to 7 under Schedule V of LPS2. DCP's 8 to15 are subject to Scheme Amendment 145, which is ongoing, and will pick up on changes from SPP 3.6 through the progression of Amendment 145.

Draft Local Planning Strategy

This proposal is considered to be in alignment with the City's adopted draft Local Planning Strategy through the following Strategic Action which states:

Implement, and regularly review, the City of Kwinana's development contribution plans in accordance with State Planning Policy 3.6 - Development Contributions for Infrastructure.

Background

The current 2% requirement was previously considered under the 2009 version of State Planning Policy 3.6. The implications are that administration of the DCP is calculated based on the total infrastructure costs in the DCA area, not on the actual time spent by officers on managing the DCP.

The West Australian Planning Commission (WAPC) resolved to approve State Planning Policy 3.6 – Infrastructure contributions and was published in the Government Gazette No. 79 in April 2021 which has standardised the methodology for how to account for DCP administration costs.

Amendment Type

As per Part 5, Division 1, regulation 34 of the Regulations), there are three scheme amendment types: basic, standard and complex. Under regulation 35(2), the local government is required to specify what type of amendment is proposed in addition to providing an explanation for forming that opinion.

The amendment is considered to be Complex under the provisions of the Regulations for the following reason(s):

• The amendment will amend a development contribution area.

The formal amendment documentation is provided in Attachment A.

This report is for council to finalise its adoption under Clause 42(4) of the PD Regulations 2015 without any modifications.

STRATEGIC IMPLICATIONS

This proposal will support the achievement of the following outcome/s and objective/s detailed in the Strategic Community Plan and Corporate Business Plan.

Strategic Community Plan					
Outcome	Strategic Objective	Action in CBP (if applicable)	How does this proposal achieve the outcomes and strategic objectives?		
3 – Infrastructure and services that are affordable and contribute to health and wellbeing	3.1 – Develop quality, affordable infrastructure and services designed to improve the health and wellbeing of the community	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes and strategic objectives	The Scheme Amendment aligns the Developer Contribution requirements to provide an equitable calculation model.		
	3.2 – Provide for an accessible and well connected City by integrating public transport and improving safe streets for driving, walking and cycling	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes and strategic objectives	The Scheme Amendment will allow for accurate costing methods associated with the administration of development costings for future infrastructure requirements.		
1 – A naturally beautiful environment that is enhanced and protected	1.1 – Retain and improve our streetscapes and open spaces, preserving the trees and greenery that makes Kwinana unique	N/A – There is no specific action in the CBP, yet this report will help achieve the indicated outcomes	The Scheme Amendment improves calculations the DCP for the implementation for infrastructure vital to streetscape		

	and strategic	construction and
	objectives	Public open spaces.

SOCIAL IMPLICATIONS

This proposal will support the achievement of the following social outcome/s, objective/s and strategic priorities detailed in the Social Strategy.

Social Strategy			
Social Outcome	Objective	Strategic Priority	How does this proposal achieve the social outcomes, objectives and strategic priorities?
2 – Connected and Inclusive	2.0 – Equitable and inclusive social connection and engagement with community life	2.9 – Demonstrate organisational leadership and best practice in inclusion and diversity including meeting all requirements under relevant Acts and regulations	The Scheme Amendment demonstrates the City's Officers capacity to align the Local Planning Framework in line with the State Planning Framework.

LEGAL/POLICY IMPLICATIONS

For the purpose of Councillors considering a financial or impartiality interest only, the proponent is the City of Kwinana.

Acts and Regulations

- Planning and Development Act 2005
- Planning and Development (Local Planning Schemes) Regulations 2015

<u>Schemes</u>

- Metropolitan Region Scheme
- City of Kwinana Local Planning Scheme No. 2

State Government Policies

• State Planning Policy 3.6 – Infrastructure Contributions

City of Kwinana

• Community Infrastructure Plan 2018

FINANCIAL/BUDGET IMPLICATIONS

Amendment 163 will allow the City to accurately and correctly recoup the costs of managing the DCP's rather than rely on a fixed 2% administration cost. This will result in DCP administration costs being fully borne by the DCP and not subsidised by the City, as occurs now for some of the DCPs.

The table below shows the recoverable Administration cost for each DCP, as per the current 2% fixed cost, alongside the actual cost to date and the resulting cost to the City.

DCP	2% Administration cost	Actual cost to date	Cost to City
1	291,402.15	349,691.07	58,288.92
2	132,804.16	190,364.52	57,560.36
3	737,735.08	128,266.15	0.00
4	518,096.13	118,814.93	0.00
5	1,051,302.73	137,708.91	0.00
6	436,642.47	124,149.78	0.00
7	29,051.19	107,695.44	78,644.25

DCPs 1, 2 and 7 have already reached the 2% cap for Administration costs and their operation is now being funded by the City, until this amendment is gazetted.

It is important to note that the costs are specific to each DCP and can not be shared between DCPs. So, whilst there are Administration funds available from other DCPs (i.e.: DCPs 3-6) they cannot be used to fund the administration of another DCP.

ASSET MANAGEMENT IMPLICATIONS

There are no asset management implications as a result of this report.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

There are no environmental/public health implications as a result of this report.

COMMUNITY ENGAGEMENT

The application was advertised in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015* for 60 days.

No submissions were received during the advertising period in regard to the proposed changes to Amendment 163 and the application is now required as per the Regulations to be considered by Council.

ATTACHMENTS

A. Scheme Amendment 163 - Removal of 2% DCP Administration cost - Scheme Amendment documentation

COVER PAGE



City of Kwinana Local Planning Scheme No. 2

Amendment No. 163

Summary of Amendment Details

Removal of 2% Developer Contribution Plan Administration fee and Introduction of the appropriated scheduled administration fee as per State Planning Policy 3.6 – Infrastructure contributions.

FORM 2A

Planning and Development Act 2005

RESOLUTION TO PREPARE OR ADOPT AMENDMENT TO LOCAL PLANNING SCHEME

Local Planning Scheme No. 2 Amendment No. 163

Resolved that the Local Government pursuant to section 75 of the *Planning and Development Act* 2005, amend the above Local Planning Scheme by:

 Amend Schedule V – Development Contributions Plan 1, Bertram/Wellard/Parmelia (North East) / Orelia (East),

a. Replacing clause 1.3 (Administration Costs) with:

Administrative costs, that may include:

- costs to prepare and administer the plan during the period of operation (including legal expenses, valuation fees, proportion of staff salaries, computer software or hardware for purpose of administering the plan);
- ii. costs to prepare Annual Report and monitoring;
- iii. costs to prepare and review cost estimates and the cost apportionment schedule;
- iv. any other costs as itemised in State Planning Policy 3.6.
- b. Replacing clause 2.3 (Administration Costs) in the section relating to "Cost Contribution Methodology" with:

As estimated in the DCP report.

i.

- 2. Amend Schedule V Development Contributions Plan 2 through to 7 by:
 - a. Replacing clause 5.1 under the heading "Administration costs" in the section relating to "Infrastructure and administrative items to be funded" with:
 - 5.1 Administrative costs, that may include:
 - costs to prepare and administer the plan during the period of operation (including legal expenses, valuation fees, proportion of staff salaries, computer software or hardware for purpose of administering the plan);
 - ii. costs to prepare Annual Report and monitoring;
 - iii. costs to prepare and review cost estimates and the cost apportionment schedule;
 - iv. any other costs as itemised in State Planning Policy 3.6.
 - b. Replacing text under the heading "Cost Contribution for Administration Costs" in the section relating to "Method for calculating contributions" with:

As estimated in the DCP report.

The amendment is complex under the provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* for the following reason(s):

• The Scheme Amendment is to identify or amend a development contribution area or to prepare or amend a development contribution plan

Dated this 18th day of work to 2021

(Chief Executive Officer)

Chief Executive Officer

1.0 INTRODUCTION

The City of Kwinana has prepared this report as rationale for amending Local Planning Scheme No.2's Schedule V - Development Contribution Plans (DCP's), Method of Calculating the Cost Contribution for Administration Costs within Development Contribution Plan's 1 to 7.

The City is modifying the Scheme to respond to State Planning Policy 3.6 – Infrastructure Contributions (SPP 3.6). The Scheme currently requires a 2% cost contribution for the purposes of Administration costs associated with administering the development contribution plan. SPP 3.6 requires an appropriated calculation method in lieu of a flat percentage fee. The City is amending the Scheme and its DCP's to be in accordance with the State Planning Policy's requirements.

This report details the current scheme and the modified requirements in accordance with SPP 3.6. The Amendment is considered complex due to it being a modification to a developer contribution plan under regulation 34 of the *Planning and Development (Local Planning Schemes) Regulations 2015.*

2.0 BACKGROUND

Location

The proposed amendment affects all DCP's 1 to 7.

- DCP 1 Bertram / Wellard / Parmelia (North East) / Orelia (East)
- DCP 2 Wellard East Standard Infrastructure
- DCP 3 Casuarina Standard Infrastructure
- DCP 4 Anketell Standard Infrastructure
- DCP 5 Wandi Standard Infrastructure
- DCP 6 Mandogalup Standard Infrastructure
- DCP 7 Wellard/Bertram Standard Infrastructure

Site Area

Each DCP area contains specific boundaries which can be found within Schedule V of the City of Kwinana Local Planning Scheme No. 2

3.0 STATE & REGIONAL PLANNING CONTEXT

State Planning Policy 3.6 – Infrastructure Contributions

State Planning Policy 3.6 – Infrastructure Contributions was amended and finalised in April 2021. SPP 3.6's purpose is to set out the principles and requirements that apply to the collection of infrastructure contributions in both new and established areas. The framework embedded within SPP 3.6 ensures that there is a clear, transparent and equitable way for the requirement of infrastructure contributions to be administered. In respect to this amendment SPP 3.6 highlights the methodology by which Administrative costs associated with DCP's should be collected.

Under Clause 6.4 of SPP 3.6:

- "other costs reasonably associated with the preparation, implementation and administration of a DCP"

This allows and enables a Local Government to cover costs which pertain to the application of a DCP.

Clause 6.10.5 & 6.10.8 of SPP 3.6 illustrates the scope of Administrative items which can be captured within the DCP stating:

- administration costs associated with office accommodation and facilities for staff undertaking DCP administration;
- Administrative items may be included as a DCP item, but they must relate directly to the work local government must do to prepare and implement the DCP. All administration items are to be individually itemised in the DCP.
- Items that may be included are detailed in the Schedule 4 and may include:
 - technical consultant fees for other studies, plans, reports, and project management associated with the development of land if required to inform the preparation of the DCP.

Schedule 4 of SPP 3.6 further expands on the requirements and content of a DCP:

Schedule 4 – Requirements and Content of a Development Contribution Plan				
	Administrative items may be included as a DCP item, however, must relate directly to the work local government must do to prepare and implement the DCP. Administration Items should be itemised in the DCP and include estimated costs for each item in the DCP report: • costs to prepare and review DCP cost estimates			
	 costs to prepare DCP cost apportionment schedule 			
	 costs for undertaking valuations for DCP 			
	· costs associated with structure planning and technical			
	studies but only when associated with the preparation of			
Administrative Items	a DCP			
	· fees for professional services directly linked to			
	preparation and implementation of DCP (e.g. legal and			
	accounting fees)			
	· costs for computer software and/or hardware upgrades			
	necessary to enable DCP preparation			
	· proportion of staff salaries directly related to DCP			
	administration - 'management fees' should directly relate			
	to the cost of labour to manage the DCP, rather than a			
n	percentage of total DCP costs			
	 details and justification of contingencies applied 			

 financial institution fees and charges associated with
administration of DCP funds
 interest charged on loans taken out to pre-fund items
included in DCP (established based on lending rates a
the time DCP is prepared).

Under the SPP 3.6 - Guidelines the policy brings forth the consideration and preparation of the ongoing administrative costs and specifies that including management fees as an administration costs should not be applied on a percentage basis of overall cost of the DCP, and should directly relate to the estimated costs of the individual tasks and labour components related to administrating the DCP.

4.0 LOCAL PLANNING CONTEXT

Local Planning Strategy

The changes are in accordance with the Local Planning Strategy. The Strategy focuses on the following two actions which are directly related to Development Contributions. It is considered that the amendment meets the intent of the Local Planning Strategy.

Action 19:

Pursue development contributions for community, public open space, social, road and other infrastructure items for improvement or provision as appropriate, in accordance with the City of Kwinana's Community Infrastructure Plan and approved local structure plans.

Action 20:

Implement, and regularly review, the City of Kwinana's development contribution plans in accordance with State Planning Policy 3.6 - Development Contributions for Infrastructure.

Local Planning Scheme

Local Planning Scheme No.2 currently provides a 2% requirement of the total cost to be allocated towards the administrative costing for DCA's 1 through to 7, this calculation does not reflect the appropriate method of calculation nor does it have any clear merit or justification. This current methodology is not in compliance with SPP 3.6 as it does not provide a well-defined and visible methodology on the cost contribution.

SPP 3.6 provides the correct methodology of calculating the administrative work which is related to the DCP.

Local Planning Policies

Local Planning Policy No. 4 – Administration of Development Contribution Plans

Local Planning Policy No. 4 (LPP4) – Administration of Development Contribution plans currently provides guidance in accordance with SPP3.6 in the application of the entire Development Contribution costing. LPP4 currently does not have any provisions which relate to the

.

administrative cost contributions. The Policy is currently under review and will be amended to meet the provisions of SPP 3.6.

5.0 CONCLUSION

The proposed amendment will align the City's Local Planning Scheme with the State Planning Policy 3.6 – Infrastructure Contributions to remove the 2% administration fee and insert reference to an estimated administration fee, which will improve accuracy and transparency when applying administrative costs to Development Contribution Plans.

FORM 2A

Planning and Development Act 2005

RESOLUTION TO PREPARE OR ADOPT AMENDMENT TO LOCAL PLANNING SCHEME

Local Planning Scheme No. 2 Amendment No. 163

Resolved that the Local Government pursuant to section 75 of the *Planning and Development Act* 2005, amend the above Local Planning Scheme by:

 Amend Schedule V – Development Contributions Plan 1, Bertram/Wellard/Parmelia (North East) / Orelia (East),

a. Replacing clause 1.3 (Administration Costs) with:

Administrative costs, that may include:

- costs to prepare and administer the plan during the period of operation (including legal expenses, valuation fees, proportion of staff salaries, computer software or hardware for purpose of administering the plan);
- ii. costs to prepare Annual Report and monitoring;
- iii. costs to prepare and review cost estimates and the cost apportionment schedule;
- iv. any other costs as itemised in State Planning Policy 3.6.
- b. Replacing clause 2.3 (Administration Costs) in the section relating to "Cost Contribution Methodology" with:

As estimated in the DCP report.

- 2. Amend Schedule V Development Contributions Plan 2 through to 7 by:
 - a. Replacing clause 5.1 under the heading "Administration costs" in the section relating to "Infrastructure and administrative items to be funded" with:
 - 5.1 Administrative costs, that may include:
 - costs to prepare and administer the plan during the period of operation (including legal expenses, valuation fees, proportion of staff salaries, computer software or hardware for purpose of administering the plan);
 - ii. costs to prepare Annual Report and monitoring;
 - iii. costs to prepare and review cost estimates and the cost apportionment schedule;
 - iv. any other costs as itemised in State Planning Policy 3.6.
 - b. Replacing text under the heading "Cost Contribution for Administration Costs" in the section relating to "Method for calculating contributions" with:

As estimated in the DCP report.

FORM 6A

COUNCIL ADOPTION

This Complex Amendment was adopted by resolution of the Council of the City of Kwinana at the Ordinary Meeting of the Council held on the 27th day of October, 2021.

CAROL	HOAMS MAYOR/SHIRE PRESIDENT
	15
NAYNE	JACK CHIEF EXECUTIVE OFFICER

COUNCIL RESOLUTION TO ADVERTISE

by resolution of the Council of the City of Kwinana at the Ordinary Meeting of the Council held on the 27th day of October, 2021, proceed to advertise this Amendment.

V

CAROL ADAMSMAYOR/SHIRE PRESIDENT

......

WAYNE JACK CHIEF EXECUTIVE OFFICER

FORM 6A - CONTINUED

COUNCIL RECOMMENDATION

This Amendment is recommended for support by resolution of the City of Kwinana at the Ordinary Meeting of the Council held on the 14th day of September, 2022 and the Common Seal of the City of Kwinana was hereunto affixed by the authority of a resolution of the Council in the presence of:

.....

MAYOR/SHIRE PRESIDENT

.....

CHIEF EXECUTIVE OFFICER

WAPC ENDORSEMENT (r.63)

DELEGATED UNDER S.16 OF THE P&D ACT 2005

DATE.....

APPROVAL GRANTED

.....

MINISTER FOR PLANNING

DATE.....

18 **REPORTS – CIVIC LEADERSHIP**

18.1 APPOINTMENT OF VOTING DELEGATES AND PROXY VOTING DELEGATES ON BEHALF OF THE CITY OF KWINANA AT THE ANNUAL GENERAL MEETING OF THE WESTERN AUSTRALIAN GOVERNMENT ASSOCIATION

SUMMARY

Western Australian Local Government Association (WALGA) have requested that two voting delegates and two proxy voting delegates be appointed to exercise voting entitlements on behalf of the City of Kwinana at their upcoming 2022 Annual General Meeting, scheduled to be held on Monday, 3 October 2022.

OFFICER RECOMMENDATION

That Council appoint Mayor Carol Adams and Councillor...... to act as voting delegates and Councillors and to act as proxy voting delegates, at the Annual General Meeting of the Western Australian Local Government Association.

VOTING REQUIREMENT

Simple majority.

DISCUSSION

The WALGA represents the interests of the Local Government sector, provides leadership on key Local Government issues, delivers products and services that provide significant benefits to its Members and promotes a positive profile for Local Government within the wider community.

The City is required to complete the Voting Delegate Information 2022 Annual General Meeting form, as at Attachment A, nominating the City's two voting delegates and two proxy voting delegates.

To ensure appropriate representation at the Annual General Meeting it is recommended that Mayor Carol Adams be appointed as a voting delegate, with a second Elected Member nominated as well as, an additional two Elected Members nominated to act as the proxy voting delegates.

STRATEGIC IMPLICATIONS

There are no strategic implications as a result of this proposal.

SOCIAL IMPLICATIONS

There are no social implications as a result of this proposal.

LEGAL/POLICY IMPLICATIONS

No legal/policy implications have been identified as a result of this report or recommendation.

FINANCIAL/BUDGET IMPLICATIONS

There are no financial implications that have been identified as a result of this report or recommendation.

The cost for attending the Annual General Meeting is free of charge to all member Local Governments.

ASSET MANAGEMENT IMPLICATIONS

No asset management implications have been identified as a result of this report or recommendation.

ENVIRONMENTAL/PUBLIC HEALTH IMPLICATIONS

No environmental or public health implications have been identified as a result of this report or recommendation.

COMMUNITY ENGAGEMENT

There are no community engagement implications as a result of this report or recommendation.

ATTACHMENTS

A. Attachment A - 2022 WALGA Annual General Meeting



Notice of Annual General Meeting

and procedural information for submission of motions

Crown Perth Monday, 3 October 2022

Deadline for submission of motions: Friday, 12 August 2022



2022 Local Government Convention and AGM general information

WALGA Annual General Meeting

The Annual General Meeting (AGM) for the Western Australian Local Government Association (WALGA) will be held from 9:00am on **Monday, 3 October 2022**. The formal Agenda will begin at 11:30am after a short morning tea break. The AGM should be attended by up to two Voting Delegates from all Member Local Governments. Lunch will be provided at the conclusion of the meeting.

Cost for attending

Attendance at the AGM is **free of charge** to all Elected Members and staff from Member Local Governments. Voting Delegates and Proxies must register their attendance in advance. Please use the registration form provided at the end of this document. Observers (non-voting) are also welcome to attend the AGM, but registration is essential via our website.

Submission of Motions

Member Local Governments are invited to submit motions for inclusion on the Agenda for consideration at the AGM. Motions should be submitted in writing to the Chief Executive Officer of WALGA. A template motion can be found on our website <u>here</u>.

The closing date for submission of motions is 5:00pm Friday, 12 August.

Please note that any motions proposing alterations or amendments to the WALGA Constitution must be received by **5:00pm Friday, 22 July** in order to satisfy the 60-day constitutional notification requirement.

The following guidelines should be followed by Members in the formulation of motions:

- Motions should focus on policy matters rather than issues which could be dealt with by the WALGA State Council with minimal delay.
- Due regard should be given to the relevance of the motion to the total membership and to Local Government in general. Some motions are of a localised or regional interest and might be better handled through other forums.
- Due regard should be given to the timeliness of the motion will it still be relevant come the Local Government Convention or would it be better handled immediately by the Association?
- The likely political impact of the motion should be carefully considered.
- Due regard should be given to the educational value to Members i.e. does awareness need to be raised on the particular matter?
- The potential media interest of the subject matter should be considered.
- Annual General Meeting motions submitted by Member Local Governments must be
 accompanied by fully researched and documented supporting comment.



Criteria for Motions

As per the Corporate Governance Charter, prior to the finalisation of the agenda, the WALGA President and Chief Executive Officer will determine whether motions abide by the following criteria:

Motions will be included in the Agenda where they:

- 1. are consistent with the objects of the Association (refer to clause 3 of the Constitution);
- demonstrate that the issue/s raised will concern or are likely to concern a substantial number of Local Governments in WA;
- Seek to advance the Local Government policy agenda of the Association and/or improve governance of the Association;
- Have a lawful purpose (a motion does not have a lawful purpose if its implementation would require or encourage non-compliance with prevailing laws); or
- 5. Are clearly worded and unambiguous in nature.

Motions will not be included where they are:

 Consistent with current Association advocacy/policy positions as per the <u>Advocacy</u> <u>Positions Manual</u> (as the matter has previously been considered and endorsed by WALGA).

Motions of similar objective:

7. Will be consolidated as a single item.

Submitters of motions will be advised of the determinations.

Enquiries relating to the preparation or submission of motions should be directed to Kathy Robertson, Executive Officer Governance on (08) 9213 2036 or <u>krobertson@walga.asn.au</u>.

Further information about the 2022 Local Government Convention can be found on our website at <u>www.walga.asn.au</u>.

Emergency Motions

No motion shall be accepted for debate at the AGM after the closing date unless the WALGA President determines that it is of an urgent nature, sufficient to warrant immediate debate, and Delegates resolve accordingly at the meeting. Please refer to the <u>AGM Standing Orders</u> for details.

aughput

President Cr Karen Chappel JP WALGA President

Nick Sloan Chief Executive Officer

EMAIL BACK

Voting Delegate Registration 2022 WALGA Annual General Meeting



All Member Councils are entitled to be represented by two voting delegates at the Annual General Meeting of the WA Local Government Association to be held on Monday, 3 October 2022 at Crown Perth.

In the event one or both of the registered Voting Delegates is unable to attend, provision is made for two Proxy Voting Delegates to be registered.

Only registered Voting Delegates or Proxies will be permitted to exercise voting entitlements on behalf of Member Councils. Delegates may be Elected Members or serving officers.

Please complete, sign and return this form before 5:00pm Friday, 23 September.

VOTING DELEGATES	PROXY VOTING DELEGATES		
Name of Voting Delegates:	Name of Proxy Voting Delegates:		
Delegate 1:	Proxy 1:		
Delegate 2:	Proxy 2:		
Local Government: Shire/Town/City of Signature of Chief Executive Officer:			

ON COMPLETION, PLEASE EMAIL TO: <u>krobertson@walga.asn.au</u> Attention: Kathy Robertson, Executive Officer Governance

Please Note:

- All Voting Delegates must present at the WALGA Delegate Service Desk prior to the AGM to collect their electronic voting device (keypad) and identification tag to gain entry to the AGM.
- Observers (non-voting) are also welcome to attend the AGM, however registration is essential.
- Registration as a Voting Delegate is <u>separate</u> to any registration as a Convention Delegate.
- For further information or to register as an AGM Observer or Convention Delegate, please visit our website at <u>www.walga.asn.au</u> or contact Kathy Robertson on (08) 9213 2036.

www.walga.asn.au

19 NOTICES OF MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

20 NOTICE OF MOTIONS FOR CONSIDERATION AT THE FOLLOWING MEETING IF GIVEN DURING THE MEETING

21 LATE AND URGENT BUSINESS

Note: In accordance with Clauses 3.13 and 3.14 of Council's Standing Orders, only items resolved by Council to be Urgent Business will be considered.

22 REPORTS OF ELECTED MEMBERS

23 ANSWERS TO QUESTIONS WHICH WERE TAKEN ON NOTICE

Nil

24 MAYORAL ANNOUNCEMENTS

25 CONFIDENTIAL ITEMS

25.1 WRITE OFF OF PENALTY INTEREST - A11091

Reason for Confidentiality

This report and its attachments are confidential in accordance with Section 5.23(2)(e) of the *Local Government Act 1995*, which permits the meeting to be closed to the public for business relating to the following:

- (e) a matter that if disclosed, would reveal
 - (i) a trade secret; or
 - (ii) information that has a commercial value; or
 - (iii) information about the business, professional, commercial or financial affairs of a person

25.2 BRIGHT FUTURES CHILDRENS SERVICES - SERVICE REVIEW

Reason for Confidentiality

This report and its attachments are confidential in accordance with Section 5.23(2)(a) and (d) of the *Local Government Act 1995*, which permits the meeting to be closed to the public for business relating to the following:

- (a) a matter affecting an employee or employees
- (d) legal advice obtained, or which may be obtained, by the local government and which relates to a matter to be discussed at the meeting

26 CLOSE OF MEETING