### **CITY OF COCKBURN**



# ORDINARY COUNCIL

## **AGENDA PAPER**

**FOR** 

**THURSDAY, 13 NOVEMBER 2014** 

Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014

#### **CITY OF COCKBURN**

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#### CITY OF COCKBURN

# AGENDA TO BE PRESENTED TO THE ORDINARY COUNCIL MEETING TO BE HELD ON THURSDAY, 13 NOVEMBER 2014 AT 7:00 PM

- 1. DECLARATION OF MEETING
- 2. APPOINTMENT OF PRESIDING MEMBER (If required)
- 3. DISCLAIMER (To be read aloud by Presiding Member)

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.

- 4. ACKNOWLEDGEMENT OF RECEIPT OF WRITTEN DECLARATIONS OF FINANCIAL INTERESTS AND CONFLICT OF INTEREST (by Presiding Member)
- 5 (OCM 13/11/2014) APOLOGIES AND LEAVE OF ABSENCE

Clr Kevin Allen - Leave of Absence

- 6. ACTION TAKEN ON PREVIOUS PUBLIC QUESTIONS TAKEN ON NOTICE
- 7. PUBLIC QUESTION TIME
- 8. CONFIRMATION OF MINUTES
  - 8.1 (OCM 13/11/2014) ORDINARY COUNCIL MEETING 9/10/2014

#### RECOMMENDATION

That Council adopt the Minutes of the Ordinary Council Meeting held on Thursday, 9 October 2014, as a true and accurate record.

9.

10.

11.

12.

13.

	COUNCIL DECISION
WRIT	TEN REQUESTS FOR LEAVE OF ABSENCE
DEPU	ITATIONS AND PETITIONS
BUSII	NESS LEFT OVER FROM THE PREVIOUS MEETING (If adjourned)
DECL	ARATION OF COUNCILLORS WHO HAVE NOT GIVEN DUE
_	SIDERATION TO MATTERS IN THE BUSINESS PAPER
COUN	NCIL MATTERS
12.4	(OCM 42/44/2044) MINUTES OF THE CRANTS AND DONATIONS
13.1	(OCM 13/11/2014) - MINUTES OF THE GRANTS AND DONATIONS COMMITTEE MEETING - 21 OCTOBER 2014 (162/003) (R AVARD)
	(ATTACH)
	RECOMMENDATION
	That Council receive the Minutes of the Grants and Donations
	Committee Meeting held on 21 October 2014 and adopt the
	recommendations contained therein.
	COUNCIL DECISION
	Background
	The Council of the City of Cockburn established the Grants and

Donations Committee to recommend on the level and nature of grants and donations provided to external organisations and individuals. The

Committee is also empowered to recommend to Council on donations and sponsorships to specific groups.

#### **Submission**

To receive the Minutes of the Grants and Donations Committee and adopt the recommendations of the Committee.

#### Report

Council approved a budget for Grants and Donations for 2014/15 of \$1,049,591 to be distributed as grants, donations and sponsorship.

At its meeting of 15 July 2014, the Committee recommended a range of allocations which were duly adopted by Council on 14 August 2014.

The September 2014 round of grants, donations and sponsorship funding opportunities has now closed and the Committee, at its meeting of 21 October 2014, considered revised allocations for the grants and donations budget, as well as the following applications for donations and sponsorship.

A summary of the donations recommended to Council are as follows:

Returned and Services League – City of Cockburn	\$10,000
Cockburn Community and Cultural Council	\$9,000
St Vincent de Paul Society Yangebup Conference	\$5,000
Trainingship Cockburn Navy Cadets	\$2,500
Tales of Times Past Senior Storytellers Cockburn	\$750
Yangebup Family Centre	\$12,000
Cockburn Toy Library	\$4,000
Cockburn Central YouthCARE Council	\$48,100
Meerilinga Young Children's Services	\$10,000

A summary of the sponsorships recommended by the Committee is as follows:

Centrepoint Church	\$2,000
Parkrun Australia	\$5,000
The 29er Class Association of WA	\$5,000
Southern Lions Rugby Union Football Club	\$12,500
Whitefish Global Enterprises	\$0

#### Strategic Plan/Policy Implications

#### **Community & Lifestyle**

- Community environments that are socially cohesive and embrace diversity.
- Communities that take pride and aspire to a greater sense of community.

Promotion of active and healthy communities.

#### **Leading & Listening**

A responsive, accountable and sustainable organisation.

#### **Budget/Financial Implications**

Council approved a budget for Grants and Donations for 2014/15 of \$1,049,591 to be distributed as grants, donations and sponsorship.

Following is a summary of the revised grants, donations and sponsorship allocations proposed by the Committee.

Committed/Contractual Donations	\$428,100
Specific Grant Programs	\$381,491
Donations	\$160,000
Sponsorship	\$80,000
Total	\$1,049,591
Total Funds Available	\$1,049,591
Less Total of Proposed Allocations	\$1,049,591
Balance	\$0

These allocated funds are available to be drawn upon in response to grants, donations and sponsorship applications from organisations and individuals.

The next round of grants, donations and sponsorship funding will be advertised in mid-February/March and will close on 31 March 2015.

#### **Legal Implications**

Nil

#### **Community Consultation**

In the lead up to the September 2014 round, grants, donations and sponsorship funding opportunities were promoted through the local media and Council networks. The promotional campaign has comprised of:

- Three advertisements running in the Cockburn Gazette on 09/09/14, 16/09/14 and 23/09/14.
- Three advertisements running fortnightly in the City of Cockburn Email Newsletter.
- Half Page advertisement in the August 2014 Soundings.
- Promotion to community groups through the Community Development Service Unit email networks and contacts.

- All members of the Cockburn Community Development Group and Regional Parents Group have been encouraged to participate in the City's grants program.
- Additional Advertising through Community Development Promotional Channels:
  - Community Development Calendar distributed to all NFP groups in Cockburn.
  - Community Development ENews August and September 2014 editions.
- Closing dates advertised in the 2014 City of Cockburn Calendar.
- Information available on the City of Cockburn website.
- Reminder email sent to regular applicants.

#### Attachment(s)

- 1. Minutes of the Grants and Donations Committee Meeting on 21 October 2014.
- 2. Grants, Donations and Sponsorship Committee Recommended Allocations Budget 2014/15.

#### Advice to Proponent(s)/Submissioners

Applicants have been advised that they will be notified of the outcome of their applications following the November 2014 Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Nil

#### 14. PLANNING AND DEVELOPMENT DIVISION ISSUES

14.1 (OCM 13/11/2014) - REVOCATION OF PREVIOUS COUNCIL DECISION - MINUTE NO 5293 (OCM 10/4/2014) - CONSIDER SUBMISSIONS AND ADOPT TOWN PLANNING SCHEME NO 3 AMENDMENT 103 - AMENDING DEVELOPMENT CONTRIBUTION AREA 14 COCKBURN COAST: ROBB JETTY AND EMPLACEMENT PRECINCTS (109 / 027) (C CATHERWOOD) (ATTACH)

#### **RECOMMENDATION**

That Council

(1) pursuant to Regulation 10 of the Local Government (Administration) Regulations 1996 (as amended) revokes the following decision made at the Ordinary Council Meeting conducted on 10 April 2014 (Minute No 5293):

#### "That Council

- (1) endorse the Schedule of Submissions prepared in respect of Amendment 103 to City of Cockburn Town Planning Scheme No. 3 ("Scheme");
- (2) modify Scheme Amendment No. 103 as follows:
  - 1. Item 'North Coogee Foreshore Management Plan Proposals (excluding rebuilding of the groyne)' to remain as 'Subregional West' catchment as currently provided for in Development Contribution Plan 13
  - 2. Item 'Cockburn Coast Foreshore Reserve Proposals (excluding coastal protection measures)' to shift to 'Subregional West' catchment to align with current foreshore item currently provided for in Development Contribution Plan 13
  - 3. Item 'Cockburn Coast Beach Parking' to shift to 'Subregional West' catchment to align with current foreshore item currently provided for in Development Contribution Plan 13
- (3) Subject to modifications outlined in (2) above being undertaken, adopt Scheme Amendment No. 103 for final approval for the purposes of:
  - 1. Amending Schedule 12 of the Scheme text by inserting the following items in Development Contribution Area 13 Community Infrastructure, under 'Infrastructure and Administrative Items to be Funded' as follows (additional wording shown in **bold** text):

Infrastructure	Regional
and	Coogee Surf Club
administrative	Wetland Education Centre/Native Ark
items to be	Cockburn Central Recreation and Aquatic
funded	Centre
	Cockburn Central Community Facilities
	Visko Park Bowling and Recreation Club
	Coogee Golf Complex (excluding the pro
	shop and restaurant components)
	Bibra Lake Management Plan Proposals
	Atwell Oval
	Sub Regional—East
	Cockburn Central Library and Community

Facilities
Cockburn Central Playing Fields
Anning Park Tennis
Cockburn Central Heritage Park

Bicycle Network—East

Sub Regional—West

North Coogee Foreshore Management Plan Proposals (excluding rebuilding of the groyne)

Phoenix Seniors and Lifelong Learning Centre

Beale Park Sports Facilities Western Suburbs Skate Park Bicycle Network—West

Dixon Reserve/Wally Hagen Facility Development (excluding the café component)

Cockburn Coast Foreshore Reserve (excluding coastal protection measures)

Cockburn Coast Beach Parking

Local

Lakelands Reserve
Southwell Community Centre
Hammond Park Recreation Facility
Frankland Reserve Recreation and
Community Facility
Munster Recreation Facility

Cockburn Coast Sport Oval and Clubroom (including land cost)

Administrative costs including – Costs to prepare and administer the Contribution Plan during the period of operation (including legal expenses, valuation fees, cost of design and cost estimates, proportion of staff salaries, computer software or hardware required for the purpose of administering the plan).

Cost to prepare and review estimates including the costs for appropriately qualified independent persons.

Costs to prepare and update the Community Infrastructure Cost Contribution Schedule.

- (3) ensure the amendment documentation, once modified, be signed and sealed and then submitted to the Western Australian Planning Commission along with the endorsed Schedule of Submissions with a request for the endorsement of final approval by the Hon. Minister for Planning and for the Minister's consideration to take into account the preferred proposal for local government reform as it relates to the City of Cockburn should it be known at the time of their consideration;
- (4) advise those parties that made a submission of Council's decision accordingly;
- (5) request the Western Australian Planning Commission consider participation in the proposed DCP13 with a view to effectively 'seed funding' the oval proportionate to the area previously reserved for recreation (portion of Lot 2110 Bennett Ave) which were rezoned from 'Parks and Recreation' to 'Urban' under the Metropolitan Region Scheme via Amendment 1180/41;
- (6) advise the Western Australian Planning Commission and Department of Local Government and Communities that this amendment further builds upon the City's comprehensive development contribution planning framework, as it relates to both community infrastructure and to infrastructure necessary for progressing structure planning across fragmented land holdings. amendment has been carefully progressed in the full knowledge of Council in respect of its municipal funding obligations. This amendment also relates to a DCP which has an operational period until at least 30 June 2031. Both agencies therefore need to carefully consider how the City's DCP can practicably be rationalised if a reform proposal is adopted which disaggregates the City; and
- (7) request a formal response from both the Director General of the Department of Planning and the Department of Local Government and Communities following Council giving them advice as per Part (6) above".
- (2) endorses the Schedule of Submissions prepared in respect of Amendment 103 to City of Cockburn Town Planning Scheme No. 3 ("Scheme");
- (3) advises the Western Australian Planning Commission that the City of Cockburn no longer wishes to proceed with Scheme Amendment No. 103;

- (4) provides the Western Australian Planning Commission with a summary of the reasons related to this decision not to proceed with Scheme Amendment No. 103:
- (5) requests the Western Australian Planning Commission return all copies of previously signed and sealed Scheme Amendment No. 103 documents as they are signed in accordance with a rescinded decision;
- (6) advises the applicant and all submitters of this decision; and
- (7) advises the City of Fremantle of this decision.

TO BE CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL

COUNCIL DECISION		

#### **Background**

At its ordinary meeting dated 10 April 2014, Council adopted proposed Town Planning Scheme Amendment 103 ("Amendment 103") for final approval and requested the endorsement of the Minister for Planning.

Amendment 103 seeks to include additional items to the City's Development Contribution Plan 13 ("DCP13") for community infrastructure. Since that time, local government reform proposals have continued to evolve and a vastly different scenario is proposed, whereby much less of Cockburn is transferred to the adjacent City of Fremantle. The impact of this creates a vastly different reality for the Cockburn Coast project, with it now being contained fully within the City of Fremantle. In light of this, officers have had to carefully reassess planning within the Cockburn Coast project, especially as it relates to development contributions that have a significant ratepayer (municipal) liability attached. It is necessary to reassess Amendment 103 and determine particularly whether it is consistent with orderly and proper planning to be embarking on a process which will have a significant municipal liability for the future responsible authority to contemplate (City of Fremantle).

The purpose of this report is to therefore reconsider submissions and final adoption of Amendment No. 103 to the City of Cockburn Town

Planning Scheme No. 3 ("Scheme") which seeks to include additional items to Development Contribution Plan 13 ("DCP13"). It is written looking at the planning merits of the proposal, while also balancing whether it may be more suitable for the future responsible authority for the project (City of Fremantle) to be progressing their own proposal.

In starting this reassessment, Council resolved to initiate the Amendment for the purposes of advertising at the Ordinary Meeting of 12 September 2013. It was advertised for public comment for a period of 42 days from 29 October to 10 December 2013. It should be noted, this amendment was initiated prior to any local government reform proposal which sought to disaggregate the City of Cockburn being made public.

DCP13 was included in the City's Scheme via Amendment No. 81, gazetted in August 2011 and relates to community infrastructure.

Community infrastructure is the land, structures and facilities which help communities and neighbourhoods function effectively. This includes facilities such as sporting and recreational facilities, community centres, child care and after school care centres, libraries and cultural facilities. They are often highly valued by their communities and add greatly to the overall quality of life by providing opportunities for physical activity and social interaction.

It is widely accepted that the use of community facilities has a direct correlation to the number of people using them. This is clear in the intent and basis of the relevant State Planning Policy 3.6 - Development Contributions for Infrastructure ("SPP3.6") as well as the City's DCP13. It is also widely accepted that there needs to be a disciplined process of capital expenditure planning, to ensure that any items included in a development contribution plan are capable of being delivered according to their indicative timing. This is particularly important for items which carry a large (ratepayer) component, such as those within Cockburn Coast.

This report seeks Council to consider all submissions received during the advertising noting the issues raised and recommending the Amendment <u>not</u> be proceeded with. As per the Town Planning Regulations, Council will need to provide a summary of reasons for not continuing with the amendment.

#### **Submission**

Amendment 103 proposes to modify the provisions of the City's existing DCP13 to include additional items as a result of the future proposed urbanisation of the subject land to meet the requirements of future community/s in the locality.

#### Report

#### **Existing Development Contribution Plan 13**

The City through its existing DCP13 has catered for the requirements of community facilities and services at the local, subregional and regional level. While the existing DCP13 recognised there would be growth within the Cockburn Coast area, planning was not sufficiently advanced to include infrastructure items brought about by this development.

#### Proposed Additions to Development Contribution Plan 13

The community infrastructure items proposed to be included in DCP 13 are identified in the District Structure Plan and Local Structure Plans for Cockburn Coast. The community infrastructure items proposed to be included in Schedule 12 of DCP 13 are detailed below. The addition of these items is proposed via Amendment No. 103 to the City's Town Planning Scheme No. 3.

Additional enhancement is proposed to that covered by the North Coogee Foreshore Management Plan (existing Sub-Regional item) to reflect the scale and intensification of development now envisaged for the Cockburn Coast project area. The total cost of this work is estimated at \$18,000,000.

Additional beach parking is also proposed alongside the linear (east-west) public open space to accommodate visitors from the broader area. The parking area is located on the eastern side of the railway line for traffic management and rail safety reasons. The total cost of this work is estimated at \$178,799.

The Cockburn Coast district open space comprising sports oval and clubrooms have been identified as a Local community infrastructure item. This item is only intended to support the local community needs across the catchment of Coogee/North Coogee. The total cost of this work is estimated at \$13,368,090.

#### **LG Reform Impacts**

Given the developments in local government reform, it is not considered appropriate to include any of these items in DCP13. Given the magnitude of the cost burden to the future City of Fremantle (as municipal contributions for these items is more than 50%), it is instead appropriate that the expanded City of Fremantle determine how it wishes to manage its approach to funding infrastructure. It is not considered appropriate, given the knowledge that Fremantle will be

implementing the whole Cockburn Coast, that Cockburn make a decision that have implications of this magnitude associated.

#### Community Consultation Outcomes

A total of nine submissions were received on this amendment. Five of these raised concerns with various issues which are set out below.

The main themes of concern relate to the existing DCP13 and how that functions and the proposed items for inclusion.

Concern was raised about the notion of adding items to DCP13. The perception being the content of the DCP would be fixed. While it is correct that there is a degree of certainty by items being listed in the Scheme, the scheme amendment process is there to consider potential additions or deletions.

One submission proposed modifying the methodology of DCP13 from a per new lot/dwelling basis to a per hectare basis. The methodology has already been established and the DCP operational for a number of years. This amendment does not deal with the methodology and it is not considered appropriate to revise this part way through the DCP operation period.

Concern was also raised about the contribution rate and how these have changed since introduction of DCP13. The estimated contribution rate advertised for this amendment is only able to reflect the current items plus the proposed items. In terms of changes to the rates since originally advertised, the City is required to undertake an annual review. There have now been several of these since gazettal of DCP13. City officers time these with the commencement of each financial year. There is a requirement to publish these rates, but not to provide a notice period to developers they are about to change. In this time a couple of key projects have gone through major phases and this has reflected in the contribution rates increasing.

Several submissions raised the issue of local government reform, the concern being that DCP13 should be disbanded altogether in light of the Minister for Local Government's proposal to disaggregate Cockburn which would result in the Cockburn Coast area becoming part of an extended City of Fremantle. A more extensive response is contained within the Schedule of Submissions but in summary, there is no positive outcome for any local government or the community should DCP13 be abandoned. There may be a perceived benefit to developers by not being liable for contribution payments. This however would impact community infrastructure items, affecting a substantial part of the funding model which is likely to affect delivery times, project scope or whether a facility is even provided.

There is the option though, to not add additional items to DCP13 (i.e. to not proceed with the amendment). Given the recent developments in local government reform, this is now seen as a prudent approach from a good governance viewpoint. Given the magnitude of the cost burden to the City of Fremantle (new infrastructure totalling \$31,546,889), they ought to be afforded the opportunity of determining whether their own DCP is established for the above community items. It should be acknowledged this places Landcorp in a position where they would need to begin discussions with the City of Fremantle, to determine how best to affect an approach towards community facilities in the Cockburn Coast area. Officers believe this is appropriate, and is not something that the City of Cockburn (by deciding on this amendment) should seek to impose upon the future responsible local government authority in Fremantle.

As part of the original consideration of submissions, a specific resolution was made to seek advice from both the Western Australian Planning Commission and the Department of Local Government and Communities. This was due to the very practical concerns that need to be considered in a variety of matters concerning local government reform and development contribution plans. Letters were sent to both parties seeking advice on a range of matters. Given these agencies roles as the preeminent state level authorities on these matters, assistance, or at least advice, was expected which might placate some of the very real concerns held. No response was received from the WA Planning Commission. A brief letter was received from the Department of Local Government and Communities (see attachment 1). What was clear from the response is, while there is an appreciation of the issues raised, there are no solutions available at this point. There is further advice to continue to make decisions in the interests of good governance.

As part of the consideration of the scheme amendment, relevant considerations are set out in Division 3 of the Planning and Development Act, 2005. In brief, these are:

- Effect of State planning policy
- Advice from Heritage Council
- Advice from Environmental Protection Authority/Environmental review outcomes
- Consultation of persons likely to be affected.

In terms of the latter of these, several submissions have indicated their concern with the amendment as outlined above. In the original consideration of this amendment, it was tenuous to say the adjacent local governments were 'likely' to be affected. At that point, a number of local government reform proposals were before the Local

Government Advisory Board ("LGAB"). Now the situation has moved substantially. The Minister's decision has been made and there is a substantial reduction in area transferred to the City of Fremantle.

Reference should also be made to 3.18(3) of the Local Government Act (set out at the end of this report) with the obligations of good governance (as inferred by the Department of Local Government and Communities). A potential total of \$31,546,889 of new infrastructure to the area which will transfer to Fremantle and which will have a minimum municipal obligation of \$13,990,423 is substantial. With only a small area of land transferred to Fremantle this amplifies the risk that they would need to fund the total amount and may not be able to efficiently manage delivery of these items. A matter which must never be overlooked in responsibly administering a DCP is the need for municipal contribution and the commitment to provide the infrastructure in a timely manner. If those aspects cannot be guaranteed, then the DCA (or additions to it) should not be considered for inclusion in any Scheme amendment.

As the current administrator of TPS3 in its entirety, and in the knowledge this liability would transfer to the City of Fremantle, the City of Cockburn cannot assume that the future responsible local government authority will have the ability to meet the required municipal contribution. It is recommended the previous resolution to adopt with modifications be rescinded and the Western Australian Planning Commission be advised the City no longer wishes to proceed with this amendment.

Both the proposed issues raised and the progression of local government reform outcomes has led to this position.

#### Conclusion

It is recommended that Council revokes the resolution for the Scheme Amendment to proceed, endorses the Schedule of Submissions and advises the WAPC there is no longer a wish to proceed with this amendment.

#### Strategic Plan/Policy Implications

#### **Leading & Listening**

- A responsive, accountable and sustainable organisation.
- Manage our financial and infrastructure assets to provide a sustainable future.
- A culture of risk management and compliance with relevant legislation, policy and guidelines.

#### **Budget/Financial Implications**

There is no budget or financial implications for the City of Cockburn arising from the position not to proceed with the amendment.

#### **Legal Implications**

Planning and Development Act 2005
Local Government Act 1995
Town Planning Regulations 1967
Planning and Development Regulations 2009
City of Cockburn Town Planning Scheme No. 3

#### **Community Consultation**

The Amendment was advertised for public comment for a period of 42 days from 29 October 2013 to 10 December 2013.

#### Attachment(s)

- 1. Advice letter from the Department of Local Government and Communities.
- 2. Notice of Revocation
- Schedule of Submissions

#### Advice to Proponent(s)/Submissioners

Should Council choose to rescind the previous motion, both the applicant and the Department of Planning will be advised.

#### Implications of Section 3.18(3) Local Government Act, 1995

The Minister for Local Government's decision on local government reform will see less area transferred to the City of Fremantle than previously envisaged. While this is a positive for Cockburn, it potentially creates greater financial risk for Fremantle. This potentially creates difficulty in ensuring adherence to 3.18(3)(C):

#### 3.18. Performing executive functions

- (3) A local government is to satisfy itself that services and facilities that it provides.
  - integrate and coordinate, so far as practicable, with any provided by the Commonwealth, the State or any public body, i.e. (Landcorp).

14.2 (OCM 13/11/2014) - INITIATION OF PROPOSED SCHEME AMENDMENT NO. 106 - LOCATION: LOT 545 BARTRAM ROAD, SUCCESS - OWNER: JEANETTE ANN BEASLEY - APPLICANT: PLANNING SOLUTIONS (109/042) (C HOSSEN) (ATTACH)

#### RECOMMENDATION

That Council

- (1) in pursuance of Section 75 of the *Planning and Development Act 2005*, amend City of Cockburn Town Planning Scheme No. 3 ("Scheme") by:
  - 1. Rezoning parts of Lot 545 Bartram Road, Success from 'Residential R20' to comprise the zones of 'Residential R30', 'Residential R40' and 'Residential 'R60' as depicted on the Scheme Amendment Map.
  - 2. Reserving parts of Lot 545 Bartram Road, Success as 'Local Road' and 'Parks & Recreation' as depicted on the Scheme Amendment Map.
  - Remove Lot 545 Bartram Road from Development Area
     14.
  - 4. Amend the Scheme Map accordingly.
- (2) as the amendment is in the opinion of Council consistent with Regulation 25(2) of the *Town Planning Regulations* 1967 ("Regulations"), and upon the preparation of the necessary amendment documentation, the amendment be referred to the Environmental Protection Authority ("EPA") as required by Section 81 of the Act, and on receipt of a response from the EPA indicating that the amendment is not subject to formal environmental assessment, be advertised for a period of 42 days in accordance with the Regulations. In the event that the EPA determines that the amendment is to be subject to formal environmental assessment, this assessment is to be prepared by the proponent prior to advertising of the amendment.

COUNCIL DECISION		

#### Background

The subject land comprises Lot 545 (No. 77) Bartram Road, Success and is zoned 'Urban' under the Metropolitan Region Scheme ("MRS") and 'Residential R20' under City of Cockburn Town Planning Scheme No. 3 ("Scheme").

The subject site is located directly west of Wentworth Parade, north of Bartram Road and east of the Twin Bartram Structure Plan area (refer to Attachment 1 for the Locality Plan). The Twin Bartram Swamps Conservation Category Wetland is located immediately to the north of the subject site.

#### **Submission**

The Proposed Scheme Amendment has been lodged by Planning Solutions, in conjunction with John Chapman Town Planning Consultant, on behalf of the prospective purchaser of the land, Allvivid Pty Ltd.

#### Report

The Proposed Scheme Amendment seeks to amend the Scheme by rezoning the subject site from 'Residential R20' to 'Residential R30', 'Residential R40' and 'Residential R60'. The proposal also seeks to reserve portions of the site for 'Local Roads' and 'Parks and Recreation'. See Attachment 3 for a concept plan of the subject area.

The area to be rezoned for 'Parks and Recreation' is 7949m² in size and will act as an extension of the planned open space areas to the west of the site. Wetland fringe vegetation buffer forms 4620 m² of the open space area, this area will be revegetated during the development stage of the proposal. The total of the open space area is consistent with the 10% provisions within Liveable Neighbourhoods.

In recent times, areas subject to greenfields residential development have been zoned 'Development' and subject to the preparation of a comprehensive Structure Plan undertaken in accordance with Part 6 of the Scheme. This Structure Plan becomes the zoning and reserving mechanism, working in conjunction with the Scheme to regulate land use and development. Within the northern half of the locality of Success, there are a number of undeveloped land parcels that are zoned 'Residential' but are also within a Development Area. The situation is largely due to the zoning sourced from the former Town Planning Scheme No. 2 combining with the structure planning requirements introduced in Town Planning Scheme No. 3. The subject site is one of these parcels.

As the land is currently zoned 'Residential' it has been communicated to the City from the Western Australian Planning Commission ('WAPC') that support should be directed towards a Scheme amendment which seeks to put in place the pattern of zones and reserves to be ultimately reflected by the subdivision and development of the land. This is considered manageable for this site, given its discrete size and logical planning of zones and reserves to build on the surrounding pattern.

Therefore the Proposed Scheme Amendment looks to retain the 'Residential' zoning of the land, while introducing a more contemporary residential coding mix and appropriately address the Conservation Category Wetland Buffer. To facilitate this outcome the Proposed Scheme Amendment has been accompanied by a comprehensive Explanatory Report that provides the same level of detail and planning rigour as found within a Structure Plan explanatory report.

#### Directions 2031

Directions 2031 seek to establish a 50% increase in current average residential densities from the current average of 10 dwelling per gross hectare of urban zoned land. The Scheme Amendment explanatory report assumes an expected yield of 99 dwellings. Gross density of the site is therefore likely to be 25 dwellings a hectare, an amount consistent with Directions 2031 and Liveable Neighbourhoods.

The dwelling yield is also consistent with the actions/Initiatives of the Draft Cockburn Central Activity Centre Plan.

#### Traffic

The applicant has undertaken a traffic impact assessment to support the Scheme Amendment. The report has been analysed by the City's engineering department and deemed to be satisfactory in both its assumptions and recommendations. All expected traffic volumes are within standard limits expected by the City.

#### **Bushfire Risk**

The applicant has undertaken a Fire Management Plan to support the Scheme Amendment. The report has been analysed by the City and deemed to be to the City's and the WAPC's standard.

The Fire Management Plan and the proposed layout of the subject area strike an appropriate balance between reducing vulnerability to the bushfire risk and the protection and improvement of the functionality of the Twin Bartram Swamps.

#### **Conclusion**

In summary it is recommended that the City initiate the proposed Scheme Amendment No.106.

#### Strategic Plan/Policy Implications

#### **Growing City**

- To grow our City in a sustainable way by: using land efficiently, protecting the natural environment and conserving biodiversity.
- Development that is soundly balanced between new and existing areas.
- Diversity of housing to respond to changing needs and expectations.

#### **Environment & Sustainability**

• To protect, manage and enhance our natural environment, open spaces and coastal landscapes.

#### **Budget/Financial Implications**

N/A

#### **Legal Implications**

N/A

#### **Community Consultation**

In accordance with the *Town Planning Regulations 1967* consultation is to be undertaken subsequent to the local government adopting the Scheme Amendment and the Environmental Protection Authority (EPA) advising that the proposal is environmentally acceptable. This requires the amendment to be advertised for a minimum of 42 days.

#### Attachment(s)

- 1. Locality Plan
- 2. Current and Proposed Zoning Map
- Concept Plan

#### Advice to Proponent(s)/Applicant

The Proponent(s) have been advised that this matter is to be considered at the 13 November 2014 Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

14.3 (OCM 13/11/2014) - SALE OF LAND - LOT 33 DAVILAK AVENUE, HAMILTON HILL - OWNER: CITY OF COCKBURN (2201160) (K SIM) (ATTACH)

#### RECOMMENDATION

That Council

- (1) sells Lot 33 Davilak Avenue, Hamilton Hill for a consideration of \$1,370,000 (inc GST) to 51 West Pty Ltd; and
- (2) amend the 2013/14 adopted municipal budget by transferring \$1,370,000 (net of GST) to the Cockburn Central West Reserve.

TO BE CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL

COUNCIL DECISION						

#### Background

Lot 33 Davilak Road, Hamilton Hill has been in the ownership of the City of Cockburn since 1947. According to the prevailing City of Cockburn Land Management Strategy, it has been recommended for sale following a process of value adding that has involved rationalisation of drainage functions and rezoning as part of the Hamilton Hill Revitalisation Strategy. It is recommended that Council proceed with the sale of the land.

#### **Submission**

An offer to purchase the land in the form of an Offer and Acceptance Contract has been received from 51 West Pty Ltd of P O Box 1040, East Victoria Park. A valuation report has also been received from Licensed Valuer Wayne Srhoy from McGee's Property.

#### Report

The Land Management Strategy 2011-2016 draws upon an analysis of all of the City of Cockburn's freehold land. This analysis identified this particular property as being recommended for sale, subject to investigation. This investigation has been long term, and has focussed upon value adding through drainage rationalisation and rezoning.

Prior to 2012, Lot 33 contained a small drainage sump measuring 20 metres by 10 metres catering for stormwater off Davilak Avenue. This sump was located in the centre of the lot and approximately 7 metres from the front boundary. In 2012, after calculation of the storage capacity required, the open sump was replaced by a series of concrete below ground tanks. These tanks are located at the front section of the lot adjacent to the road reserve occupying an area of 18 metres by 7 metres. This process represented important value adding as envisaged through the Land Management Strategy.

The purchaser is aware of the tanks and has indicated that they do not impose any detrimental impact on their future development of the land. A future driveway can be constructed over the tanks. A condition of the sale is that these tanks will be the subject of an easement in favour of the City of Cockburn for the purpose of drainage. The easement will allow for the future maintenance of the infrastructure.

In terms of rezoning, Lot 33 was the subject of recently gazetted Amendment 100 to City of Cockburn Town Planning Scheme 3. This amendment implemented recommendations of the Hamilton Hill Revitalisation Strategy, rezoning the land R40/60.

The purchase price of \$1,370,000 (incl of GST) is acceptable, comparing this to the value determined by Licensed Valuer Wayne Srhoy who valued the land at \$1,315,000 (incl of GST). The contract allows the City to utilize the margin scheme for the purpose of accessing GST.

In accordance with provisions of the Local Government Act 1995 the proposed disposition was advertised in the West Australian newspaper. At the conclusion of the statutory advertising period there were no objections.

#### Strategic Plan/Policy Implications

#### **Demographic Planning**

 To ensure the planning of the City is based on an approach that has the potential to achieve high levels of convenience and prosperity for its citizens.

#### **Governance Excellence**

 To conduct Council business in open public forums and to manage Council affairs by employing publicly accountable practices.

#### **Budget/Financial Implications**

Proceeds of the sale totalling \$1,370,000 (net of GST) will be transferred to the Cockburn Central West Reserve.

#### **Legal Implications**

Provisions of Section 3.58 of the *Local Government Act 1995* apply.

#### **Community Consultation**

Details of the sale were advertised in a newspaper for State wide publication, as required by Section 3.58 of the *Local Government Act* 1995.

#### Attachment(s)

Location Plan

#### Advice to Proponent(s)/Sub missioners

The Proponent(s) have been advised that this matter is to be considered at the 13 November 2014 Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

14.4 (OCM 13/11/2014) - INITIATION OF PROPOSED SCHEME AMENDMENT REZONING PORTION - LOT 14 FREDERICK ROAD, PORTION LOT 34 CLARA ROAD HAMILTON HILL AND LOT 110 MARCH ROAD, SPEARWOOD - APPLICANT/OWNER: CITY OF COCKBURN (109/043) (M CAIN) (ATTACH)

#### **RECOMMENDATION**

That Council

- in pursuance of Section 75 of the Planning and Development Act 2005 ("Act"), amend City of Cockburn Town Planning Scheme No. 3 by:
  - 1. Rezoning the northern portion of Lot 14 (No. 75) Frederick Road, Hamilton Hill from 'Local Reserves –

- Lakes & Drainage' to 'Residential R40'.
- 2. Rezoning the front portion of Lot 34 (No. 27) Clara Road, Hamilton Hill from 'Local Reserves Lakes and Drainage' to 'Residential R30'.
- 3. Rezoning Lot 110 (No. 29) March Street Spearwood from Public Purpose (Pre-School) to 'Residential R40'.
- 4. Amending the Scheme Map accordingly.
- (2) as the amendment is in the opinion of Council consistent with Regulation 25(2) of the *Town Planning Regulations* 1967 ("Regulations"), the amendment be referred to the Environmental Protection Authority as required by Section 81 of the Act, and on receipt of a response from the EPA indicating that the amendment is not subject to formal environmental assessment, be advertised for a period of 42 days in accordance with the Regulations.

COUNCIL DECISION		

#### **Background**

This amendment comprises three sites that are being proposed for rezoning. These sites are:

- The northern portion of Lot 14 (75) Fredrick Road, Hamilton Hill from 'Local Reserves Lakes & Drainage' to 'Residential R40'.
- The rear portion of Lot 34 (27) Clara Road, Hamilton Hill from 'Local Reserves Lakes & Drainage' to 'Residential R30'.
- 29 March Street Spearwood from Special Purpose 'Pre-School' to 'Residential R40'.

Attachments 1, 2 and 3 contains locality plans of the subject sites.

#### Submission

N/A

#### Report

The subject lots are zoned 'Urban' under the Metropolitan Region Scheme ("MRS") and are therefore suitable for urban (residential) development.

As per the City's Land Management Strategy, the City has the ability to rationalise land as part of creating the best utility of its land portfolio. The City's Land Management Strategy manages these land parcels, developing a strategic vision for land assets and establishing an effective framework to manage the City's land portfolio. The City owns all three sites in freehold.

The portions of land in Hamilton Hill currently zoned 'Local Reserves – Lakes & Drainage' are to be rezoned for residential development. Lot 14 Frederick Road is proposed to be rezoned 'Residential R40' and Lot 34 Clara Road is proposed to be rezoned 'Residential R30'. The remaining portions of land will keep their 'Lakes and Drainage' local reservation, given they comprise a drainage basin function still.

Investigation has revealed the ability for portions of the subject sites to be released from their current Lakes and Drainage local reservation. Importantly, the portions of land being released are not required, nor do they currently function, as any type of drainage basin. The main drainage basin for both subject sites will remain on the portion of land not covered by the proposed amendment.

#### Lot 14 (75) Frederick Road, Hamilton Hill

Located on the corner of Frederick and Forrest Road, Hamilton Hill, Lot 14 is surrounded by residential development, mixed business uses and local centres, with increased future residential development taking place as part of the Hamilton Hill Revitalisation Strategy.

Following investigation of the site in accordance with the City's Land Management Strategy, it is apparent that the northern portion can be rationalised to release a 'Residential R40' allotment for development. This is what the Scheme amendment seeks to do.

At present the site also has a Western Power easement that traverses part of it. The City has contacted Western Power, who have agreed to reduce the width of the easement to fit that which exists elsewhere along the power corridor. They advise that the current 40m easement width (across the City's lot) is only needed around the actual power towers. As there is no power tower on the City's land, it can be reduced to a width of 20 metres. The removal of this constraint significantly increases the development potential of this site.

The subject site is ideally located for future residential development as it is well situated on the corner of a main road and also has access to public transport along Forrest Road. The site is well serviced by surrounding local commercial and retail businesses, which is an important consideration when rezoning land for residential purposes.

Development of this site may see the inclusion of grouped or multiple dwellings. This is further consistent with the City's Hamilton Hill Revitalisation Strategy and the Directions 2031 Strategic Plan for Perth.

#### Lot 34 (27) Clara Road, Hamilton Hill

This site is located off Forrest Road. The rear portion of this lot is currently vacant and is not affected by the sump at the front of the lot. Surrounded by residential development, the City proposes that the rear portion of the lot be rezoned for 'Residential R30' development, in accordance with the surrounding area.

This site has no other constraints and is highly suited to residential development. It will be available to all adjoining landowners to consider purchasing.

#### 29 March Street Spearwood

The site contains a child health centre service currently operated by the City. Plans are currently underway to relocate the two Health Nurses running the operation to the City's Starling Street Centre. This will leave the premises at 29 March Street, Spearwood vacant and provide the opportunity for the City to consider disposing of the property.

This irregular shaped lot is centrally located adjacent, and to the east, of the Phoenix Shopping Centre. Land to north, east and south is zoned 'Residential R40'. While the western side of March Street is the location of the shopping centre and car park, March Street presents as a low scale suburban residential street.

The subject site is ideally located for residential development given its close proximity to services. The site is likely to present an optimal outcome for medium density development given its dual frontage to March Street and Olinda Court to the South. Medium density development in this location is consistent with the Phoenix Revitalisation Strategy.

#### Conclusion

The rationale for the proposed amendment is therefore based upon the City's endorsed Land Management Strategy, and the principles of orderly and proper planning that have been discussed in this report.

This report seeks that Council resolve to initiate the Scheme Amendment for the purposes of advertising.

#### **Strategic Plan/Policy Implications**

#### **Growing City**

- To grow our City in a sustainable way by: using land efficiently, protecting the natural environment and conserving biodiversity.
- Development that is soundly balanced between new and existing areas.

#### **Community & Lifestyle**

 Communities that are connected, inclusive and promote intergenerational opportunities.

#### **A Prosperous City**

 Investment in the local economy to achieve a broad base of services and activities.

#### **Budget/Financial Implications**

All costs associated with the Scheme Amendment will be met as part of the City's normal Strategic Planning budget allocations. The result of this Scheme amendment will be the ability to develop or sell the northern portion of Lot 14 Frederick Road, Hamilton Hill, the front portion of Lot 34 Clara Road, Hamilton Hill and Lot 110 March Street, Spearwood.

#### **Legal Implications**

Planning and Development Act 2005 Town Planning Regulations 1967 City of Cockburn Town Planning Scheme No. 3

#### **Community Consultation**

In accordance with the Town Planning Regulations 1967 consultation is to be undertaken subsequent to the Local Government adopting the Scheme Amendment and the Environmental Protection Authority advising that the proposal is environmentally acceptable. This requires the amendment to be advertised for a minimum of 42 days.

#### Attachment(s)

- 1. Location Plan Lot 14 Frederick Road, Hamilton Hill
- 2. Location Plan Lot 34 Clara Road, Hamilton Hill
- 3. Proposed rezoning plan Lot 14 Frederick Road
- 4. Proposed rezoning plan Lot 34 Clara Road
- 5. Location Plan 29 March Street, Spearwood

#### Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

14.5 (OCM 13/11/2014) - POWER STATION MASTER PLAN - CONSIDERATION OF REQUEST FOR LIFTING OF URBAN DEFERMENT (108/003) (D DI RENZO) (ATTACH)

#### RECOMMENDATION

That Council

- (1) advise the Western Australian Planning Commission ("WAPC") that the request for the lifting of urban deferment for Lot 2 Robb Road and portion of Lot 3 Robb Road, North Coogee is supported subject to the following modifications being undertaken to the Master Plan:
  - 1. The three residential buildings shown to the south of the Power Station located on 'Parks and Recreation' reserve being removed from the Master Plan, and throughout all plans in the document.
  - 2. The public car park in Figure 1.2 being shown in the correct location to the east of the rail line shown in all other maps in the Master Plan.
- (2) in accordance with Section 126 of the *Planning and Development Act 2005*, request the WAPC to concurrently zone the extent of the urban deferment land to 'Development' under City of Cockburn Town Planning Scheme No. 3.

COUNCIL DECISION		

#### Background

For a number of years the State Government has been working toward realising the vision for the Cockburn Coast development. The project is intended to see the redevelopment of the former Robb Jetty industrial area and the South Fremantle Power Station.

The Cockburn Coast District Structure Plan 2009 ("CCDSP 2009") was prepared to guide future land use and transport initiatives within the area stretching between South Beach and the Port Coogee marina.

In 2012, this was supplemented and in part refined by the Cockburn Coast District Structure Plan Part 2 ("CCDSP Part 2") prepared on behalf of LandCorp.

The Metropolitan Region Scheme ("MRS") Amendment No. 1180/41 was made effective on 16 August 2011 to rezone the majority of the Cockburn Coast industrial area from 'Industry' to 'Urban' to reflect the outcomes of the CCDSP Part 2. The South Fremantle Power Station site was rezoned to 'Urban Deferred'.

The Western Australian Planning Commission ("WAPC") identified that this site has a number of unique characteristics that would require further consideration prior to being rezoned to 'Urban'. The WAPC identified that for the Urban Deferment to be lifted a detailed Master Plan would need to be prepared for Lots 2, 3 and 2167 Robb Road, North Coogee.

To progress the planning for the Power Station site Landcorp have engaged HASSELL to prepare a Master Plan on behalf of Synergy, the landowners of Lot 2 and 3 Robb Road, North Coogee.

The Master Plan has been submitted to the City of Cockburn seeking Council's support for the lifting or 'Urban Deferment' prior to lodging the request with the WAPC. This is recommended to Council, subject to important modifications however. This is further explained in the report following.

#### **Submission**

The South Fremantle Power Station Master Plan has been submitted by Landcorp on behalf of Synergy (formerly Verve Energy), the landowners of Lot 2 and 3 Robb Road, North Coogee.

In the context of the Cockburn Coast project, a memorandum of understanding between Verve Energy (2011) and LandCorp, was signed with a view to investigating the redevelopment potential of the Power Station.

The Master Plan has also been advertised by the City of Cockburn for public comment for a period of 30 days.

#### Report

The purpose of this report is for Council to consider the proposed lifting or Urban Deferment for Lots 2 and 3 Robb Road, North Coogee, and to provide a recommendation to the WAPC accordingly.

#### **Land Ownership**

The Master Plan comprises Lots 1, 2, 3 and 2167 Robb Road, North Coogee, Lot 2161 McTaggart Cove, North Coogee and McTaggart Cove and Robb Road reserves, with a number of landowners.

Lot 1 is owned by Western Power and includes the switchyard which is still operational. The ultimate success of the Power Station Master Plan relies on the relocation of the switchyard. Western Power will in the future need to upgrade the terminal switchyard to accommodate demand. The intent is to facilitate a coordinated approach to the relocation of the switchyard and the development of the Power Station.

Lots 2 and 3 are owned by Synergy and include the Power Station structure.

Lot 2161 is the foreshore to the west of the Power Station, and it is owned by the State of Western Australia and leased by The State Electricity Commission of Western Australia. The cooling pond and groyne associated with the Power Station are located within this lot.

Lot 2167 is a public open space reserve owned by the Crown, and managed by the City of Cockburn.

#### Role of the Master Plan

It is important to note that the purpose of the Master Plan is to demonstrate that the land is appropriate for an 'Urban' zoning under the MRS. The Master Plan itself is not the plan that will be implemented, or that will facilitate or guide subdivision and development of the land. The future process for that to occur is via the integration of a Development zone on the land, which will also be located within a Development Area. These two aspects involve amendment to City of Cockburn Town Planning Scheme No. 3. Once this is done a Proposed Structure Plan will be prepared, which will be the statutory mechanism by which to guide subdivision and development.

The Master Plan has been submitted as a requirement of WAPC, set out as part of MRS Amendment No. 1180/41.

#### Power Station Structure

The Power Station is proposed to be adapted to provide for a mix of land uses. It is proposed to be the key destination within the Power Station Activity Centre.

The Turbine Hall is a vast open space designed in a cathedral architectural style. It is proposed to be a publically accessible area to accommodate a diverse number of activities. It includes an 'Urban Park' with retail, commercial and civic land uses.

The Boiler House has two structural elements. The first is proposed to be converted into an internal street 10m wide allowing the public to move through the Power Station. The second is proposed to be converted into residential apartments.

It is proposed that additional residential apartments will be added to the eastern portion of the Power Station to the height of the original chimney stacks, thus reflecting the existing structure and ensuring the Power Station remains the focal point of the Master Plan area.

In total there are 147 residential apartments proposed in and over the Power Station building.

The proposed maximum height of the residential development is to be less than the existing Power Station Structure and the height of the original chimney stacks. A local structure plan and associated design guidelines will provide guidance in this regard, and will be subject to community consultation and Council adoption.

There is approximately 6,970m<sup>2</sup> of retail/commercial floor space proposed within the Power Station.

#### Residential Land Uses

The Master Plan identifies over 900 potential residential dwellings, including the 147 residential apartments over the Power Station building.

#### Access and Car Parking

A proposed ramped bridge provides for pedestrian and vehicular access. The bridge has been designed to a 30km/hr speed environment. Currently the Master Plan does not provide for at grade access to the Power Station area from the east.

The Master Plan includes the following:

- \* Pedestrian paths connecting the Master Plan to the surrounding areas.
- \* Pedestrian bridge connecting multi storey car parking area with the Power Station.
- \* Rapid Bus Transit (RBT) is located to the east of the railway line at the intersection of the pedestrian bridge and Cockburn Road.

#### Open Space

The Master Plan includes a 'Power Station Piazza' located to the northeast of the Power Station building that will be a focal point for the community to gather. The space can facilitate farmers markets on the weekends; a program of events during the year and cafes, eateries and restaurants.

The area to the west of the Power Station structure will form the basis of a water feature showcasing the function of the cooling ponds and other heritage features, including outdoor pools.

Boardwalks are proposed to be constructed over the existing groynes to enhance the public enjoyment of the existing cooling ponds and outdoor pools.

The existing ship wrecks are proposed to be interpreted in the landscaping, ensuring terraced open space areas do not impact on the wrecks.

#### The Master Plan includes:

- \* Timber boardwalk beach access along the heritage break water.
- Grass terraces for picnics and outdoor events.
- Dunal system and native dunal vegetation.
- \* The Promenade is the length of the Master Plan area facilitating pedestrian and cycle movements. The Promenade will also provide a space for alfresco areas.
- \* Family park with shelters, BBQ and seating.
- \* Family beach.

#### Future proposed rezoning of 'Parks and Recreation' to 'Urban'

One of the most critical issues is that the Master Plan includes a portion of 'Parks and Recreation' reserve being shown as urban development, to be the subject of a future MRS Amendment (from 'Parks and Recreation' reserve to 'Urban'). That is, the Master Plan suggests that a part of the public foreshore reserve be made available for private residential development. This is not supported by the City of Cockburn.

The Master Plan shows this portion of land containing three residential apartment buildings of approximately 4-5 storeys in height, totally approximately 100 residential dwellings, as shown in Attachment 4.

This reduces this portion of 'Parks and Recreation' reserve by a width of approximately 30m from 65-70m in width, to approximately 35-40m in width.

This portion of land has always been shown as 'Parks and Recreation' in both the CCDSP (2009) and CCDSP (Part 2). The CCDSP (2009) annotated this area as a 'high amenity beach and foreshore improvements'. The suggestion to now make this available for private development is in contrast to the higher order planning that has occurred for the project. This high order planning noted that retention of the public foreshore reserve was important to:

- 1. Provide access to recreation space adjacent the beach; and
- 2. Provide a buffer between the Port Coogee residential development and what was then derelict, contaminated former industrial land and buildings to the north. Given the unknown future land-uses and redevelopment time frames for the Cockburn Coast Redevelopment Area, the buffer would provide separation between non-compatible adjacent developments.

Landcorp now assert that this area is not required because:

- \* The parks and recreation reserve is not required as a buffer to derelict or contaminated land.
- \* The functions of the parks and recreation reserve are accommodated in an alternative configuration within the revised plan.
- \* The parks and recreation reserve did not serve or provide for any special purpose or activity in that location.
- \* Parks and recreation opportunities for all users, including regional visitors are better provided for in the master plan than by the MRS Parks and Recreation reserve.
- \* The master plan better uses open space areas to support heritage enhancement and public realm integration.
- \* Pedestrian and cyclist movement is enhanced to and through the site and surrounding areas in the master plan (no loss of movement or amenity).
- \* The proposed open space areas are better integrated into a comprehensive urban renewal outcome rather than in the absence of a surrounding plan.
- \* The revised plan supports and is supported by a Place making Strategy for the Power Station as the leisure, entertainment and recreational destination of the Cockburn Coast with "summer and winter spaces for year round activation."
- \* Allowing the development of the MRS reserve area will enable the provision of funding to enhance and reinterpret the former cooling ponds and limestone revetments as a high-amenity regional open beach-front environment for regional visitors. The landscape area will include boardwalks, grassed terraces, a possible protected swimming lagoon, public art and heritage interpretation.

The City does not support these assertions. The City's position, on behalf of the community, is that rationalisation of the portion of foreshore reserve in the manner proposed by the Master Plan has not been a consideration of the higher order planning that has occurred. In respect of a coastal location like Cockburn Coast, arguably the most critical issue to secure and agree on early would be how public accessibility of the foreshore reserve is managed in conjunction with the pressure to provide for urban development either adjoining or within parts of the reserve. The public sentiment towards such an issue has

been shown in recent memory through the experiences of the Leighton beach redevelopment, and the Fremantle Harbours Master Plan.

The extent of foreshore reserve that has been secured as part of the early planning for Cockburn Coast is considered the minimum component that needs to remain. In terms of the foreshore reserve in question, rationalisation as proposed by the Master Plan would deleteriously impact on the ability to provide a useable recreation space adjoining the beach – something that the community value as part of the Cockburn Sound Foreshore Environment. Examples of Coogee Beach, Poore Grove and Woodman Point are testament to this.

In is therefore not considered appropriate for the Master Plan to foreshadow future possible changes to the MRS. Rather it is considered appropriate that the Master Plan reflect the current MRS zonings, and focus on addressing the issues relating to the lifting of 'Urban Deferment'.

Retention of this portion of land as 'Parks and Recreation' is considered essential to provide an important area of foreshore reserve available for recreation.

This portion of 'Parks and Recreation' is an expansive area of foreshore reserve that is not 'beach focused' or 'water-focused', providing the potential for a different foreshore recreational experience. It is considered important to retain flexibility in the foreshore reserve to explore a range of different beach experiences within the Power Station area, and to ensure that there is adequate space to accommodate infrastructure and facilities to make this a regionally significant coastal node.

For example, the reduced area of foreshore reserve proposed in this location is not considered adequate to accommodate a regional playground, whereas the existing area would be large enough for such a facility. At its full width this area of 'Parks and Recreation' could also provide the potential for events to be held, such as triathlons or volleyball tournaments. However the smaller area proposed would limit such potential.

The DSP Part 2 also had this portion of 'Parks and Recreation' separated from residential development by a road. This meant that the area was very 'public' in its function. The Master Plan shows the development of three residential apartment buildings directly adjacent to the reduced area of 'Parks and Recreation'. While the overlooking of this area by the residential buildings is positive from a Crime Prevention Through Environmental Design ("CPTED") perspective (by providing passive surveillance and creating a sense of ownership of the

space), this may serve to give a perception of 'privatisation' of a portion of this space, particularly directly abutting the buildings. This will further reduce the actual useable area for recreation by and for visitors. It also has the potential to reduce the range of recreational uses and events that could be held there given the impact of such events on residential amenity.

Importantly the loss of this portion of 'Parks and Recreation' would remove arguably the most important and accessible vista of the Power Station, where visitors can appreciate its scale, grandeur and prominence.

These points can be demonstrated through the CCDSP Part 2 which featured views of this foreshore reserve (see Attachment 4).

It is also noted that MRS Amendment 1180/41 rezoned 2.3 ha of 'Parks and Recreation' north of McTaggert Cove to 'Urban' to 'provide critical mass to the redevelopment of the Power Station'. However, this was subsequently incorporated into the Robb Jetty Structure Plan area. It is not considered appropriate to now rezone further areas of 'Parks and Recreation' for the same reason. This would ultimately serve to reduce the available area of foreshore reserve for the community.

It is therefore recommended that the lifting of 'Urban Deferment' be subject to removal of urban development on land reserved for 'Parks and Recreation' in the Master Plan.

#### **Community Consultation Outcomes**

The Master Plan was advertised for a period of 30 days, ending on 2 September 2014, and this included an Information Evening.

There were a total of 32 submissions received, with 19 submissions of support, 10 objections (including submissions raising concerns regarding the Master Plan), and three submissions making comments on the Master Plan.

All submissions are included and addressed at Attachment 2.

The objections that were received all related to elements of the Master Plan, rather than being objections to the lifting of 'urban deferment' itself. There were no objections received to the lifting of 'urban deferment.

There were two objections to the proposed development shown on a portion of 'Parks and Recreation'. Notwithstanding some level of public objection, the position of technical officers provided in this report is that the rationalisation of public foreshore reserve is something that should

not be supported, irrespective of whether the public were specifically aware of the proposal or not.

# Amendment to City of Cockburn Town Planning Scheme No. 3

The role of the Master Plan will be to secure the lifting of urban deferment for the subject land. In doing this however, there are still a number of steps in which to appropriately arrange the City's Town Planning Scheme No. 3 following the lifting taking place. These include:

- A Scheme amendment to secure a Development Zone over the land.
- A Scheme amendment to extend Development Area 33 over the land
- A Scheme amendment to extend a Development Contribution Area over the land.
- A Structure Plan in order to guide land use and development.

There is the opportunity under Section 126 of the Planning and Development Act 2005 to request the WAPC to concurrently amendment the City's Scheme to include the subject land within a Development Zone. This will effectively remove one of the four steps that still need to occur before realisation of land use and development potential on the subject site.

In the interest of expediency for the broader Cockburn Coast project, it is recommended that Council seek a concurrent amendment to its Town Planning Scheme No. 3.

# Conclusion

It is recommended that the lifting of 'Urban Deferment' for Lot 2 Robb Road and portion of Lot 3 Robb Road, North Coogee be supported subject to the Master Plan being amended to remove urban development shown on land reserved for 'Parks and Recreation' under the MRS. It is also recommended that Council seek the concurrent amendment under the Local Planning Scheme.

# Strategic Plan/Policy Implications

#### **Growing City**

 To grow our City in a sustainable way by: using land efficiently, protecting the natural environment and conserving biodiversity.

#### Infrastructure

 Community facilities that meet the diverse needs of the community now and into the future. Facilities that promote the identity of Cockburn and its communities.

# **Community & Lifestyle**

 Communities that take pride and aspire to a greater sense of community.

# **Budget/Financial Implications**

N/A

#### **Legal Implications**

N/A

# **Community Consultation**

The South Fremantle Power Station Master Plan was advertised for public comment for a period of 30 days, ending on 2 September 2014. This included letters to nearby landowners, advertisements in the Cockburn Gazette, and notices in City of Cockburn libraries and the administration centre. An Information Evening was also held on 4 August 2014.

# Attachment(s)

- 1. South Fremantle Power Station Master Plan
- 2. Landcorp's supporting information for 'Parks and Recreation' area
- 3. 'Parks and Recreation' area information/maps
- 4. Schedule of Submissions

#### Advice to Proponent(s)/Submissioners

The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 13 November 2014 Council Meeting.

#### Implications of Section 3.18(3) Local Government Act, 1995

Nil.

# 14.6 (OCM 13/11/2014) - DRAFT 2014 JANDAKOT AIRPORT MASTER PLAN - OWNER: JANDAKOT AIRPORT HOLDINGS (1211) (A TROSIC) (ATTACH)

#### RECOMMENDATION

That Council make a submission to Jandakot Airport Holdings on the basis of the officer's report, which recommends Council provide its support to the draft Jandakot Airport Master Plan 2014 subject to:

- A modified Deed of Agreement outlining the agreed road networks upgrades being executed between the City of Cockburn and Jandakot Airport Holdings prior to submission of the draft Master Plan to the Federal Government.
- 2. The draft Master Plan being modified to remove all references to connectivity to Solomon Road for future Precincts 6 and 6A.
- 3. The draft Master Plan being modified to re-emphasise the importance of the southern link road, as it was previously done in the 2009 Master Plan.
- 4. The draft Master Plan being modified to reconfigure Precincts 6, 6A and 2A to ensure a minimum 200m separation is retained with the interfacing rural living allotments. The modification needs to be reflected throughout the document.

COUNCIL DECISION		

#### Background

The City of Cockburn has been invited to provide comment on the preliminary version of the draft Jandakot Airport Master Plan 2014 (draft Master Plan). This is the key opportunity for the City to provide a formal response to the draft Master Plan, before it is finalised for submission to the Federal Government for approval.

Some of the issues raised in this report deal with similar issues that the City raised in providing its comments to the then 2009 draft Jandakot Airport Master Plan. These issues are particularly in respect of transport infrastructure coordination for the site, interface to rural development and future land use in the southern precinct. These issues remain a focus of this report.

As discussed in the report, it is recommended that Council provide its support to the draft Master Plan <u>subject</u> to a number of conditions which are set out in the recommendation. It should be expected that implementation of the Master Plan over the coming five years will satisfy Council's conditions as imposed in its decision. This will provide a clear basis by which to consider the next iteration of the Master Plan, which will be due in five years from now.

#### **Submission**

NA

#### Report

#### **Overview**

In terms of statutory context, the development of airports is undertaken within the regulatory framework of the *Airports Act 1996*, and the following key legislation and regulations:

- Airports Regulations 1997;
- Airports (Building Control) Regulations 1996;
- Airports (Control of On-Airport Activities) Regulations 1997;
- Airports (Protection of Airspace) Regulations 1996;
- Airports (Environment Protection) Regulations 1997;
- Environment Protection and Biodiversity Conservation Act 1999.

The Airports Act 1996 is the principal statute regulating the ownership, management and conduct of Federally leased airports. Part 5 of the Act prescribes a number of controls over land use, planning and building at airports and Part 6 details environmental management.

Under Section 70 of the Act, each Commonwealth airport is required to produce a final master plan. A final master plan is one which has been approved by the Federal Minister of Infrastructure and Regional Development. Prior to submitting a draft master plan to the Minister, the airport is required to take into account public comments. Subsequent development at the airport must be consistent with the final master plan.

Section 70 of the Act requires that the purposes of a final master plan for an airport are to:

- establish the strategic direction for efficient and economic development at the airport over the planning period of the plan;
- provide for the development of additional uses of the airport site;
- indicate to the public the intended uses of the airport site;

- reduce potential conflicts between uses of the airport site, and to ensure that the uses of the airport site are compatible with the areas surrounding the airport;
- ensure that all operations at the airport are under taken in accordance with relevant environmental legislation and standards;
- establish a framework for assessing compliance at the airport with relevant environmental legislation and standards;
- promote the continual improvement of environmental management at the airport.

A new master plan is to be developed every five years and must relate to a planning period of 20 years.

Key requirements that a master plan must satisfactorily include are listed under Section 71. Of particular relevance to Jandakot Airport:

- (b) the airport-lessee company's assessment of the future needs of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport;
- (c) the airport-lessee company's intentions for land use and related development of the airport site, where the uses and developments embrace airside, landside, surface access and land planning/zoning aspects;
- (d) an Australian Noise Exposure Forecast (in accordance with regulations, if any, made for the purpose of this paragraph) for the areas surrounding the airport;
- (e) the airport-lessee company's plans, developed following consultations with the airlines that use the airport and local government bodies in the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels;
- (f) the airport-lessee company's assessment of environmental issues that might reasonably be expected to be associated with the implementation of the plan;
- (g) the airport-lessee company's plans for dealing with the environmental issues mentioned in paragraph (f) (including plans for ameliorating or preventing environmental impacts);
- (ga) in relation to the first 5 years of the master plan—a plan for a ground transport system on the landside of the airport that details:
  - (i) a road network plan;
  - (ii) the facilities for moving people (employees, passengers and other airport users) and freight at the airport;
  - (iii) the linkages between those facilities, the road network and public transport system at the airport and the road network and public transport system outside the airport;
  - (iv) the arrangements for working with the State or local authorities or other bodies responsible for the road network and the public transport system;

- (v) the capacity of the ground transport system at the airport to support operations and other activities at the airport; and
- (vi) the likely effect of the proposed developments in the master plan on the ground transport system and traffic flows at, and surrounding, the airport;

Part 5 of the *Airports Act 1996* sets out the statutory process for preparing and consulting in relation to a draft Master Plan. In specific respect of consultation, Section 79(2) of the *Airports Act 1996* states:

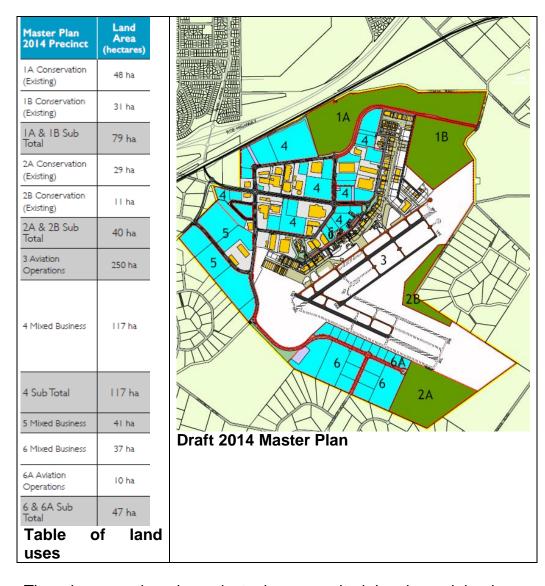
- (2) If members of the public (including persons covered by subsection (1A)) have given written comments about the preliminary version in accordance with the notice, the draft plan submitted to the Minister must be accompanied by:
  - (a) copies of those comments; and
  - (b) a written certificate signed on behalf of the company:
    - (i) listing the names of those members of the public; and
    - (ii) summarising those comments; and
    - (iii) demonstrating that the company has had due regard to those comments in preparing the draft plan; and
    - (iv) setting out such other information (if any) about those comments as is specified in the regulations.

It is unfortunate that the City of Cockburn and local government generally, do not enjoy a regulatory position in respect of approving or refusing Master Plans, and any subsequent development undertaken in accordance with Master Plans at airports. Local government is considered to be the best equipped to be able to regulate land use and development undertaken within its district, compared with the alternative of this being regulated by the Federal Government. Notwithstanding this, it is understood that Council's views are taken very seriously by the Federal Government, in considering the Master Plan. It is therefore expected that any conditions that Council imposes in its support for the Master Plan will be respected by the Federal Government in ultimately determining the Master Plan. Council and the community should therefore have a reasonable level of confidence that its issues will be taken carefully into account via the Master Plan and process of ongoing development at the airport.

In terms of advertising, the Federal Government make it clear that the responsible Federal Minister expects that consultation is undertaken with all stakeholders and that prudent consideration is given to comments received during the consultation period. Section 79(2) does require the airport company to demonstrate that it has had due regard to those comments in preparing the draft plan. This does portray then the need for the City's comments to be carefully considered by both Jandakot Airport and the Federal Minister. The consultation period for this Draft Master Plan closes on 18 November 2014.

#### **Draft 2014 Master Plan**

The draft 2014 Master Plan indicates further aviation and non-aviation development across the airport site. This has been planned on a precinct basis, with six main precincts (and additional sub-precincts) identified in the following table. Note also the accompanying graphic which shows the spatial extent of these precincts:

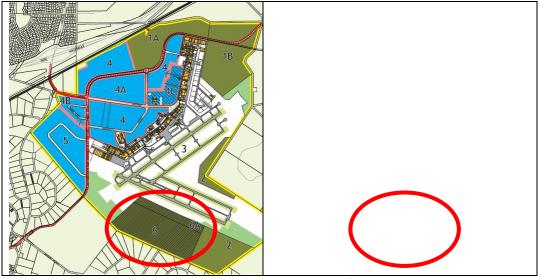


The abovementioned precincts have resulted in planned land use within the airport site as being:

- Conservation 119 hectares (19%);
- Aviation Operations (includes runways and taxiways) 260 hectares (42%);
- Non-Aviation Development 195 hectares (31%);
- Existing and Proposed Internal Roads and Services Area 48 hectares (8%).

#### **Land Use Issues**

In terms of land use, the draft Master Plan indicates some key differences to the 2009 Master Plan. The most significant difference is in the way in which Precincts 6 and 6A were presented in the 2009 Master Plan, versus how they are now presented in the Draft Master Plan. This visual comparison is provided following:

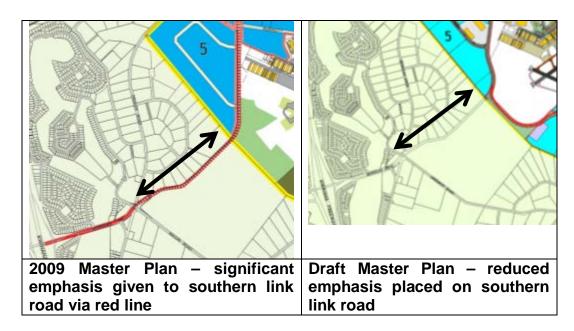


2009 Master Plan

**Draft 2014 Master Plan** 

As can be seen, the identification of Precincts 6 and 6A as being subject to future development consideration has now shifted to become a mixed business (37ha) and aviation operation (10ha) precinct, connected to a low scale rural community at the end of Solomon Road north of Jandakot Road. Two issues are associated with this – the first being the contemplation of a major road link through what is (and what was planned to remain) a quiet rural community, and the second being the contemplation of this land for a mixed business development outcome.

In terms of road connectivity, early engagement with City of Cockburn officers resulted in the City giving advice to Jandakot Airport Holdings that this would <u>not</u> be permitted. Firstly, contemplating connection of an almost 50ha mixed business park via a local rural road which has a function of servicing a small rural community is not consistent with orderly and proper planning. Configuration of the broader road network has never contemplated this road connection extending into the airport. Further to this, the way in which the draft Master Plan indicates the road priority seems to contradict the function of what the southern link road is intended to perform. This is shown by priority being indicated towards the internal road servicing the new mixed business precinct, instead of to the southern link road. This is an incorrect representation of how the road network is planned:



This needs to be corrected in all versions on plans contained within the Draft Master Plan, and also appropriately written into the draft Master Plan.

As Council are aware, Solomon Road at its intersection with Armadale Road is already experiencing significant problems, particularly at peak PM times as commuters leaving the Public Transport Authority's park and ride facility at the end of Knock Place coincide with vehicles leaving the freeway along Armadale Road and employees leaving the surrounding industrial area. To contemplate funnelling an almost 50ha new business park via Solomon Road down to its intersection with Armadale Road would create a traffic problem that could not be designed with an acceptable solution. Accordingly, the City of Cockburn will clearly advise that no connection into the airport via an extension of Solomon Road will be permitted.

In terms of mixed business development, at the time of considering the 2009 Master Plan the officer's report raised very specific concerns in the way in which the separation to rural development that surrounds the airport needed to be respected. In this regard, as development has and continues to occur across Precinct 5, and now Precinct 6, there are growing implications for those lots which adjoin the mixed business precincts. These implications were illustrated in the report to Council in October 2014, whereby it was revealed that a major 24 hour per day operation was proposed in the western corner of the airport site, in close proximity to existing rural dwellings. This was for a major Kmart distribution centre. The officer report noted:

"Where a similar development type is proposed elsewhere within the City of Cockburn, it would be necessary for the proponent to demonstrate that potential emissions would not cause adverse impacts to the residential/rural amenity of other nearby properties. The necessity for a detailed assessment of a proposal is based by the City on the separation distances identified within the Environmental Protection Authority's Guidance Statement No 3 "Separation Distances between Industrial and Sensitive Land Uses", which recommends buffer distances between the boundary of a proposed industrial land use and the boundary of the sensitive land use. The present boundary to boundary set back of the proposed MDP from the nearest sensitive land use is approximately 40m.

A similar land use identified within the EPA Guidance Statement is 'transport vehicles depot', for which the EPA Guidance Statement identifies a 200m buffer distance from sensitive land uses, with the potential for gaseous, noise, dust and odour impacts. There are five sensitive land uses within this 200m set back from the Western boundary of the Proposed MDP..."

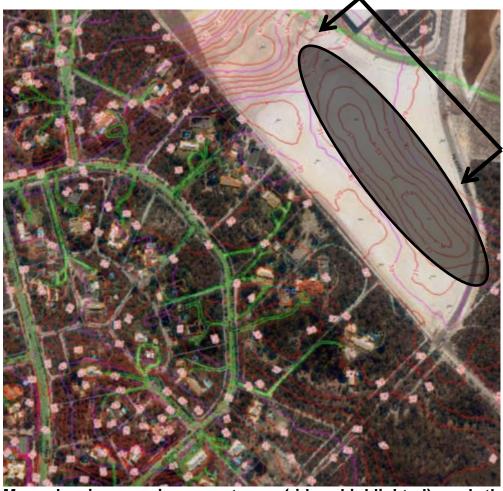
As part of dealing with the Kmart Major Development Plan (MDP), the City has indicated the desire to work with the applicant to address the proximity of development to sensitive development. Understanding that the operation is proposed as a 24/7 operation, the City should be involved in the detailed design and also the detailed consideration of noise management issues. However this does reveal the problem that occurs if arguably highly incompatible land uses do not achieve a physical separation by way of a transitional or buffer zone.

In normal circumstances, commercial type development requires planning approval from the City. Such development (like all development) needs to comply with the requirements of City of Cockburn Town Planning Scheme No. 3, of which amenity impacts form a key consideration. The City would utilise the EPA's Guidance Statement No. 3 "Separation Distances between Industrial and Sensitive Land Uses", to ensure (as the name suggests) that adequate separation is achieved between industrial type development and sensitive development (particularly residential properties). If for example the City had received the Kmart Distribution Centre as an application for planning approval, it is likely that it would not be approved without adequate separation to the nearest sensitive development. This would likely have resulted in the development shifting to a more internal location further away from the airport boundary.

At the time of considering the 2009 Master Plan, important concerns were raised by the City of Cockburn in respect of how the interface between higher intensity commercial development would be managed with the lower intensity 'Resource' zoned lots, which adjoin the airport site. In respect of Precinct 5, it was noted that in some parts a grade

separation meant that interface issues were not considered by Jandakot Airport Holdings on the whole as being unable to be managed. As further development is now proposed for the interface however, it appears that issues are increasingly becoming more difficult to manage, and that grade separation does not exist to the finished extent as initially predicted.

The following example shows how the previous 4-5m sand ridge that separated properties on Glendale Crescent from development has been removed, and how the resulting level is generally the same as adjoining rural properties.



Map showing previous contours (ridge highlighted) and the finished level beneath



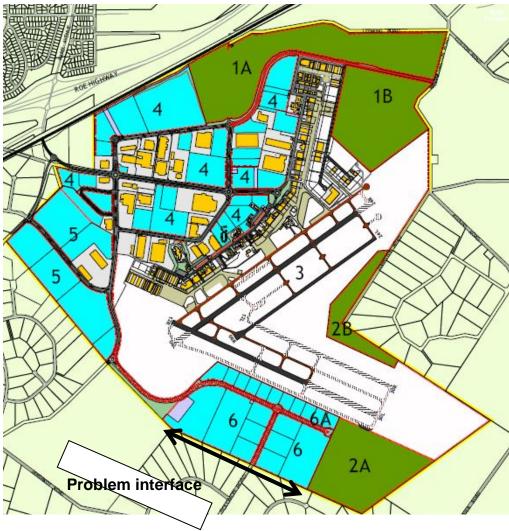
Map showing isometric view and ridge removed

In looking at what is proposed for Precinct 6, the similar sand ridge will be removed leaving future mixed business land at basically the same level as rural properties. This means that interface issues cannot be managed through separation of grade. This is shown following:

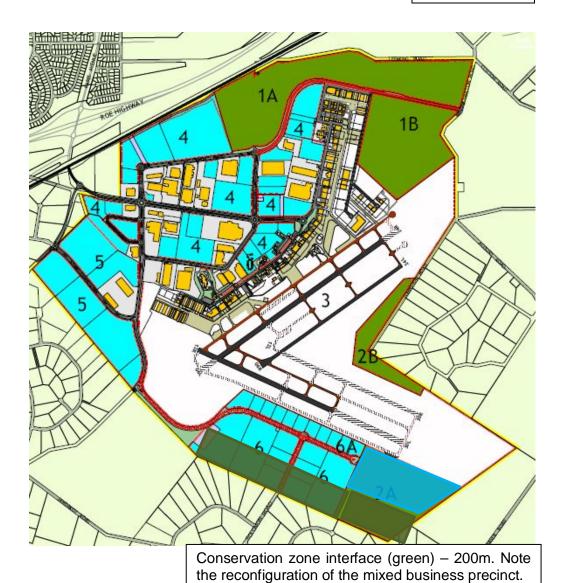


# Map showing how Precinct 6 will be earth worked to likely remove ridge, creating same level (28-30 contour) as properties adjoining

This accordingly produces a problem interface as shown:



As part of the draft Master Plan, it is recommended that Council formally require the reconfiguration of Precinct 6, 6A and 2A so as to achieve an approximate 200m conservation zone separation from rural development and future mixed business development. This will provide the community with the most effective safeguard against inappropriate development being permitted in too closer proximity to sensitive development. It also appears to be an effective solution in that net developable area is not eroded, but rather reconfigured. This is notionally shown following:



Considering that the 2005 Master Plan depicted these Precincts 5 and 6 as part of the wider conservation area which spans the southern interface of the airport site, there appears to be some potential to revisit this in the manner shown by the City of Cockburn. Having the transitional interface like that recommended is considered the most effective way to safeguard the amenity of the community adjoining and nearby the airport site.

Given the nature of the airport as a specialised centre dealing with logistical warehousing and storage functions, it is reasonable to suggest that pressure will continue for further development of land use types for commercial, warehousing and logistical purposes. These will likely have associated with them noise, traffic and light spill impacts. Given also that the hours of operation for such uses are likely to extend into the night, such impacts will likely have a higher degree of magnitude than if just restricted to daytime hours. This means that

separation is considered the best way to prevent inappropriate development occurring close to the City's residents.

# **Traffic and Transport Issues**

#### Outstanding Road Upgrades

The other significant point is that associated with traffic and transport. The October 2014 Council meeting dealt specifically with a report written by the Director Engineering, setting out the traffic situation surrounding Jandakot Airport.

As per the Director Engineering report to Council, it is made clear that the City expects road network upgrades to be completed that generally reflect the rate of development taking place. This essentially ensures that there is sufficient carrying capacity within the network to cater for traffic generated by the development.

As the City has no planning control to bring this matter to a conclusion, the City has been in lengthy negotiations to reach agreement. A Draft Deed of Agreement was prepared and presented to Council for consideration; refer Council Item 16.3 of the 9 October 2014 OCM (Minute No. 5391). Council's resolution enabled the CEO, under delegation, to complete negotiations and formalise an agreement with Jandakot Airport Holdings. On 31 October an agreement was reached between the City and Jandakot Airport Holdings which will see an increased scope of works completed. The general context of the agreement reached is as follows:

# Berrigan / Karel

- Jandakot Airport Holdings to secure any necessary land and to construct the road generally in accordance with Option 3 SK-C-0050 to SK-C-0053.
- The design will look at continuing the south bound dual carriageway to provide a better transition into the left turn pocket at Spartan Street.
- Jandakot Airport Holdings will need to secure all approvals from MRWA for the signal.
- Both the City and MRWA will need to certify the final design prior to construction commencing.
- This intersection will be substantially commenced within 12 months of execution of the Deed.

#### South Link Road (Pilatus)

 Jandakot Airport Holdings will construct South Link Road as a single carriageway road to its connection as shown on SK-C-0041.

- Jandakot Airport Holdings will secure all land necessary to construct the road and cede that land to the City. The final land requirement will be finalised through detail design.
- The necessary land above will be purchased within 12 months of executing this Deed.
- The construction of South Link Road will be completed within 12 months of completion of the Berrigan Drive Upgrade Project (stipulated below).

Berrigan Drive Upgrade Project - Berrigan Drive duplication from Freeway to commencement of South Link Road above (including Dean/Jandakot / South Link Road (Pilatus) signalised Intersection and Berrigan / South Link intersection (no signal)

- 1. Within 12 months of execution of this Deed, the City of Cockburn shall complete the design of the following Berrigan Drive duplication from Freeway to commencement of South Link Road above (including Dean / Jandakot / South Link Road (Pilatus) signalised Intersection and Berrigan / South Link intersection (no signal) which will be referred to as the Berrigan Drive Upgrade Project. The design will finalise the extent of land necessary to complete the scope of works.
- 2. Jandakot Airport Holdings and the City will secure all land necessary land to complete construction and drainage in accordance with the terms of the agreement reached.
- 3. The necessary land above will be purchased within 12 months of executing this Deed.
- 4. Within 24 months of the all land being transferred to the City, the City shall commence works to complete the Berrigan Drive Upgrade Project stipulated above.
- 5. The City shall seek all approvals from MRWA for the signalisation of the intersection at South Link / Jandakot / Dean. No signal will be established as part of this agreement at Berrigan / South Link in accordance with MRWA advice.
- 6. The construction of the Berrigan Drive Upgrade Project will be completed no later than December 2018. This does not preclude the road from being constructed prior to this date.

On the basis of the agreement reached the City of Cockburn shall:

- Support the continuation of the temporary signalmen at Berrigan/Karel until the intersection work is completed.
- 2. Support the retention of the access at Spartan Street as left in left out. The section of Berrigan Drive between Karel Avenue and Spartan Street should be reviewed to improve accessibility and transition from Karel Avenue to Spartan Street (continue dual carriageway to left turn pocket). Street lighting and other associated infrastructure will need to be reviewed as part of this upgrade works.

# OCM 13/11/2014

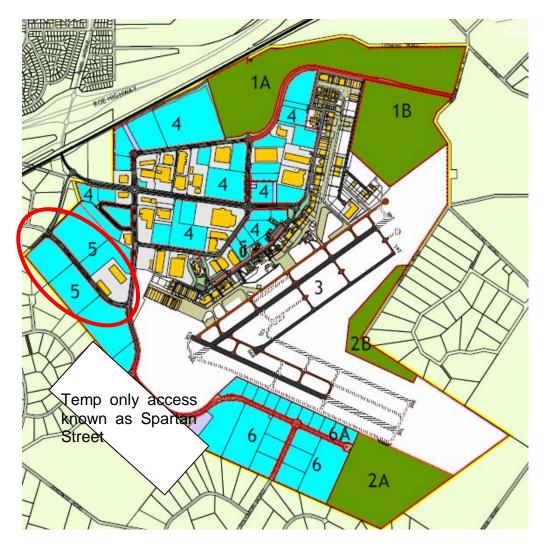
- 3. Only seek to remove the RAV classification on the section of Berrigan Drive south of the intersection of Spartan Street.
- Agree that these network upgrades resolve the immediate traffic issues identified in our consideration of the MDP for the Kmart distribution centre. The issues of noise etc will still need to be addressed.

The City's position on the Draft Master Plan is contingent on execution of the final agreement for road network upgrades and actual delivery of this works in accordance with the timeframes stipulated.

#### **Solomon Road Connection**

The 2014 Masterplan proposes a further access for the new precinct 6 at Solomon Road. If this connection is permitted through Precinct 6, it will see industrial type traffic mixing with rural residential traffic from the existing community. Officers do not believe that it is reasonable to permit this connection as it compromises the use enjoyed and expected by our existing community who purchased their lifestyle lots with little prospect of seeing substantial traffic volumes on their access road. Road upgrades to Solomon Road, the intersection with Jandakot Road and potentially improvements to Jandakot Road itself would also be necessary and the Master Plan does little to identify the upgrade requirement or commitment.

# **Spartan Street Access**



On the basis of reaching agreement with Jandakot Airport Holdings on the broader network upgrades, it is important to now contemplate the future use of Spartan Street. It has to this point been permitted as a temporary access however Jandakot Airport Holdings are now seeking approval to retain it going forward.

The intersection is currently structured as a left in left out and provides further permeability for the Jandakot development which will be important for the development as it proceeds. It will primarily provide access into the Kmart distribution centre proposed and planned for in this area, however the limited egress arrangements will tend to push exiting traffic out using the South Link Road or Karel Avenue. On that basis officers are willing to support retention of this link going forward.

# **Other Amendments to the Master Plan Text**

The Draft Master Plan will need to be amended to reflect this agreement. A schedule of further minor amendments is included below:

Page	Section	Comment
Page		
43	6.3 Traffic generation	<ul> <li>This section needs to explain why the latest forecast of 23,100 vpd is different to the 37,000 vpd forecast used in the 2009 Master Plan.</li> <li>A table detailing the trip generation calculations would be useful and help with transparency of the forecasts.</li> <li>All assumptions about the road network used in the ROM 2034 forecasts must be provided to the City for review/agreement (e.g. number of traffic lanes, connections, etc) because those assumptions will affect how the model distributes traffic. If the City's review identifies any changes are required to the model then the model should be rerun to produce updated outputs.</li> <li>Karel Avenue, east of Berrigan Drive, within the airport already has 11,355 vehicle trips per day. How can the 5-year forecast for the airport estate be for only 5,900 vehicles per day?</li> </ul>
43/44	6.5 Road Upgrades	Require redrafting to deal with updated Deed of Agreement.
44	6.7 Public Transportation	A statement could be added to the effect that development growth at the airport and improved road linkages may create opportunities to link buses servicing the airport to other destinations like Cockburn Central, any future rail station at Canning Vale etc.
Figures 6.1 to 6.4		<ul> <li>"Accourt Road" should be Acourt Road.</li> <li>Berrigan Drive (north) should be shown intersecting Pilatus Street as a T-junction.</li> <li>No connection should be shown to Solomon Street</li> </ul>
Figure 6.2	Future Traffic Flows 2034	<ul> <li>To be able to consider the traffic forecasts in some context, it would be useful to include 2014 traffic flows on Figure 6.2 or as a separate figure.</li> <li>The forecasts are said to be for 2034 but the MRWA ROM, said to have been the source of the forecasts, is typically quoted for 2031?</li> </ul>

		<ul> <li>Show traffic forecasts on Roe Highway, Kwinana Freeway, Karel Avenue (north of Roe Highway) Farrington Road and Ranford Road as well.</li> </ul>
Figure 6.3	Future Road Improvements	<ul> <li>Pilatus Street should be shown as a possible future 4-lane divided road from Marriott Road to Jandakot Road.</li> <li>It would improve the permeability of the road network if Eagle Drive was linked to either Pilatus Street or even Marriott Road. This would help distribute traffic movements better and avoid the need for all Eagle Drive traffic to have to use Karel Avenue, which would allow that road and the intersections along it to operate as efficiently as possible, particularly during peak hours. Providing more efficient access/egress to Eagle Drive would be beneficial to emergency services vehicles.</li> </ul>
Figure 6.4	Public Transport Plan	<ul> <li>Line colours/style for paths should be consistent with those used in the Department of Transport's Local TravelSmart Guides.</li> </ul>

# **Environmental Issues**

The City notes the continuation of vegetation clearing proposed by the draft Master Plan. For example, clearing associated with creating Precincts 6 and 6A will be approximately 50ha. The City holds concerns that the offsets provided by Jandakot Airport Holdings for such clearing and loss of amenity are not benefiting residents of the City of Cockburn. That is, offsets are not created in the district of the City.

Given that Precinct 6 and 6A are currently vegetated, it is recommended that (as per the earlier discussion in this report) a reconfiguration take place such that a 200m separation zone is retained between the small (generally 2ha) rural living allotments located adjoining. This will help address both interface issues and also help maintain biodiversity linkage.

There also needs to be some assessment and consideration of the bushfire risk at the interfaces between the remaining conservation areas and the adjacent industrial lots. Bushfire Protection Zones and Hazard Reduction Zones should be accommodated in the developable area and not in the remaining bushland.

#### **Noise Issues**

The proposed fourth runway is predicted to increase capacity at the airport. Air traffic movements at Jandakot Airport reached a peak of 415,284 annual movements in 2005/2006, and declined significantly after the Global Financial Crisis. While the past five years have seen flat movement growth, local training schools have indicated that the demand for pilot training is expected to increase in 2015/2016 due partly to forecast world-wide pilot shortages being attributed to the continued demand for air travel and the aging pilot base. There are currently 800 students undertaking fixed-wing pilot training, resulting in 80,000 flying hours per annum. The training schools are estimating that over the next 5-10 years student numbers will increase by 40% and their flying hours will reach 126,000 hours per annum.

At an average growth rate of 4.0% per annum for fixed-wing movements and 3.4% average growth rate for helicopter movements, the airport could expect to reach the theoretical operating capacity of 460,000 fixed wing and 66,000 helicopter movements identified in this Master Plan within the 20 year planning horizon. While the assumed average growth rate of 4% is higher than growth rates forecast at similar general aviation airports, the expected student pilot intake, aircraft fleet changes and construction of the fourth runway have been taken into consideration and it is likely that this growth can be achieved. Based on this forecast, by 2026/27 Jandakot Airport could expect similar movement volumes to what was experienced in 2005/2006.

The Australian Noise Exposure Forecast ("ANEF") system is the recognised method of predicting likely impacts of aircraft noise on the general public. This has already been prepared by Jandakot Airport Holdings, and integrated in to the draft Master Plan.

The City understands that the update to the ANEF represents a significant modernisation of the technology used to develop ANEF models. To that end it is an important addition to both the draft Master Plan as well as to help guide land use planning under its relationship back to the operative State Planning Policy No. 5.4.

The changes in the ANEF are characterised as a 'reduction' in the linear extent of the contours, and an increase in the 'burst' of contours very close to the area around the airport. This is understood to be associated with improving noise management on aircraft; aircraft numbers being significantly below their peak pre GFC; and the presence of more sophisticated techniques in understanding the impacts of helicopter training at the airport. This last element particularly, accounts for the burst of ANEF around the immediate airport.

It is noted that the ANEF (which has already been approved) is less punitive in its extent upon City of Cockburn residents surrounding the airport.

#### **Health Premises**

It should be noted that State Health legislation relating to Food Premises, Lodging Houses, Public Buildings and the installation of onsite effluent treatment and disposal systems is applicable and will continue to be administered via the City.

#### Conclusion

It is recommended that the City provide its support to the draft Master Plan subject to a number of conditions. These conditions include:

- A modified Deed of Agreement outlining the agreed road networks upgrades being executed between the City of Cockburn and Jandakot Airport Holdings prior to submission of the draft Master Plan to the Federal Government.
- 2. The draft Master Plan being modified to remove all references to connectivity to Solomon Road for future Precincts 6 and 6A.
- 3. The draft Master Plan being modified to re-emphasise the importance of the southern link road, as it was previously done in the 2009 Master Plan.
- 4. The draft Master Plan being modified to reconfigure Precincts 6, 6A and 2A to ensure a minimum 200m separation is retained with the interfacing rural living allotments. The modification needs to be reflected throughout the document.

On the basis that these conditions are agreed by Jandakot Airport Holdings, it is recommended the draft Master Plan be supported.

#### Strategic Plan/Policy Implications

#### **Growing City**

 To grow our City in a sustainable way by: using land efficiently, protecting the natural environment and conserving biodiversity.

#### **Community & Lifestyle**

Safe communities and to improve the community's sense of safety.

#### **Moving Around**

• An integrated transport system which balances environmental impacts and community needs.

# **Budget/Financial Implications**

The Deed of Agreement has outlined the various funding contributions to be made by JAH and other obligations on the City. The road network will require some degree of land acquisition and further detail on final costs will not be known until these negotiations have been completed.

# **Legal Implications**

In terms of statutory context, the development of airports is undertaken within the regulatory framework of the *Airports Act 1996*. This requires that for each airport, there is to be an approved Master Plan that indicates the airport planning for the next 20 years. A requirement of the *Airports Act 1996* is the preparation of a Master Plan every five years, and accordingly this Draft Master Plan represents a review and refinement of the approved 2009 Master Plan.

# **Community Consultation**

N/A.

# Attachment(s)

Draft 2014 Master Plan

#### Advice to Proponent(s)/Submissioners

The proponent has been advised that this matter will be considered at the Council meeting of 13 November 2014.

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

#### 15. FINANCE AND CORPORATE SERVICES DIVISION ISSUES

# 15.1 (OCM 13/11/2014) - LIST OF CREDITORS PAID - SEPTEMBER 2014 (076/001) (N MAURICIO) (ATTACH)

#### **RECOMMENDATION**

That Council adopt the List of Creditors Paid for September 2014, as attached to the Agenda.

COUNCIL DECISION		

# **Background**

It is a requirement of the Local Government (Financial Management) Regulations 1996, that a List of Creditors be compiled each month and provided to Council.

#### Submission

N/A

#### Report

The List of Accounts for September 2014 is attached to the Agenda for consideration. The list contains details of payments made by the City in relation to goods and services received by the City.

# **Strategic Plan/Policy Implications**

# **Leading & Listening**

- Effective and constructive dialogue with all City stakeholders.
- A responsive, accountable and sustainable organisation.

# **Budget/Financial Implications**

N/A

#### **Legal Implications**

N/A

# **Community Consultation**

N/A

# Attachment(s)

List of Creditors Paid – September 2014.

# Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

# 15.2 (OCM 13/11/2014) - STATEMENT OF FINANCIAL ACTIVITY AND ASSOCIATED REPORTS - SEPTEMBER 2014 (071/001) (N MAURICIO) (ATTACH)

#### **RECOMMENDATION**

That Council

- (1) adopt the Statements of Financial Activity and associated reports for September 2014, as attached to the Agenda; and
- (2) amend the 2014/15 Municipal Budget by:
  - Adding an expense budget of \$65,000 to GL 137-6600 (Customer Services – Telecommunications Expenses) in order to meet committed costs not allowed for in the 2014/15 adopted Budget.
  - 2. Adding an expense budget of \$20,687 to OP 6245-6200 (Coastal Vulnerability and Adaptation Planning) to compensate for unspent committed funds not previously carried forward from 2013/14.

TO BE CARRIED BY AN ABSOLUTE MAJORITY OF COUNCIL

COUNCIL DECISION		

# **Background**

Regulations 1996 prescribes that a local government is to prepare each month a Statement of Financial Activity.

Regulation 34(2) requires the Statement of Financial Activity to be accompanied by documents containing:—

- (a) details of the composition of the closing net current assets (less restricted and committed assets);
- (b) explanation for each material variance identified between YTD budgets and actuals; and
- (c) any other supporting information considered relevant by the local government.

Regulation 34(4)(a) prescribes that the Statement of Financial Activity and accompanying documents be presented to Council within 2 months after the end of the month to which the statement relates.

The regulations require the information reported in the statement to be shown either by nature and type, statutory program or business unit. The City chooses to report the information according to its organisational business structure, as well as by nature and type.

Local Government (Financial Management) Regulations - Regulation 34 (5) states:

(5) Each financial year, a local government is to adopt a percentage or value, calculated in accordance with the AAS, to be used in statements of financial activity for reporting material variances.

This Regulation requires Council to annually set a materiality threshold for the purpose of disclosing budget variance details. Council adopted a materiality threshold of \$200,000 for the 2014/15 financial year at its August meeting.

#### **Submission**

N/A

#### Report

#### Opening Funds

The current figure of \$13.2M (unaudited) represents the closing municipal position for 2013/14 and covers the \$3M surplus forecast in the adopted budget, \$8.9M of municipal funding attached to carried forward works & projects and a residual balance of \$1.3M in uncommitted funds to be further applied in accordance with Council's

budget policy. This matter was addressed the October Council meeting and will be adjusted in the October financial report.

# Closing Funds

The City's closing funds of \$88.1M are \$10.0M higher than the YTD budget target. This comprises net favourable cash flow variances across the operating and capital programs as detailed later in this report and the impact of the opening funds variance described earlier.

The revised budget shows end of year closing funds of \$0.02M. The previous month's position of \$0.11M has been reduced by annual telecommunication expenses of \$65k omitted from the adopted budget and a coastal planning project with an unspent balance of \$21k not included in the carried forwards listing brought to Council last month. The budgeted closing funds fluctuate throughout the year, due to the impact of Council decisions and budget recognition of additional revenue. Details on the composition of the budgeted closing funds are outlined in Note 3 to the financial summaries attached to this report

# Operating Revenue

Consolidated operating revenue of \$94.7M was ahead of the YTD budget forecast by \$0.35M. Significant variances in this result were:

Rates revenue is \$0.2M ahead of YTD budget due to higher part year rating adjustments.

Further details of budget variances are disclosed in the Agenda attachment.

#### Operating Expenditure

Reported operating expenditure (including asset depreciation) of \$27.1M was under the YTD budget by \$1.8M and comprised the following significant items:

- Material and Contracts were \$1.3M under YTD budget with most business units contributing. Software support expenses were \$0.4M under the YTD budget and the Engineering directorate contributed \$1.2M of the variance.
- Other Expenses were \$0.8M under YTD budget due to the City's grants program being \$0.75M behind the YTD budget set in the management budget. This cash flow forecast will be reviewed for next month.

A more detailed explanation of the variances within each business unit is included in the attached financial report.

The following table shows the operating expenditure budget performance at the consolidated nature and type level:

Nature or Type Classification	Actual Expenses \$M	YTD Revised Budget \$M	Variance to YTD Budget \$	FY Revised Budget \$M
Employee Costs - Direct	10.02	9.69	(0.33)	42.69
Employee Costs - Indirect	0.16	0.14	(0.02)	0.90
Materials and Contracts	7.84	9.11	1.27	35.96
Utilities	1.02	1.16	0.14	4.58
Interest Expenses	0.00	0.00	0.00	0.12
Insurances	1.15	1.12	(0.02)	2.34
Other Expenses	1.69	2.53	0.84	7.58
Depreciation (non-cash)	5.98	5.94	(0.04)	23.76

#### Capital Expenditure

The City's actual capital spend for the month of September was \$4.1M, representing an under spend of \$4.7M on the YTD budget of \$8.8M.

The following table shows the budget variance analysis by asset class:

Asset Class	YTD Actuals \$M	YTD Budget \$M	YTD Variance \$M	Annual Budget \$M	Commit Orders \$M
Roads Infrastructure	1.29	3.46	2.17	16.42	0.84
Drainage	0.06	0.10	0.04	1.60	0.03
Footpaths	0.31	0.50	0.18	1.29	0.02
Parks Hard Infrastructure	0.33	0.99	0.66	8.21	1.06
Parks Soft Infrastructure	0.13	0.15	0.03	0.92	0.14
Landfill Infrastructure	0.07	0.13	0.06	1.49	0.01
Freehold Land	0.02	0.34	0.32	1.38	0.00
Buildings	2.70	4.98	2.28	31.73	4.31
Furniture & Equipment	0.00	0.01	0.01	0.01	0.01
Computers	0.30	0.59	0.29	1.19	0.09
Plant & Machinery	0.69	1.92	1.23	5.58	1.50
Total	5.92	13.18	7.26	69.84	8.01

The major variances occur in the roads, buildings and plant & machinery asset classes. Further details on the significant spending variances by project are disclosed in the attached CW Variance analysis report.

# Capital Funding

Capital funding sources are highly correlated to capital spending, the sale of assets and the rate of development within the City (developer contributions received).

Significant variances for September include:

- Transfers from financial reserves were \$3.1M behind budget, consistent with the capital under spend.
- Developer contributions received under the Community Infrastructure plan are \$1.2M ahead of the YTD budget.
- Developer contributions totalling \$0.45M received for Success North, Munster and Yangebup East DCP areas.
- POS cash in lieu contributions of \$0.25M received. These are restricted funds and are not budgeted due to inability to estimate.
- Fremantle Football Club contributions to the CCW Cockburn Regional Physical Activity and Education Centre were ahead of the budget setting by \$0.35M
- Proceeds from the sale of land and plant assets were collectively \$0.96M behind YTD budget settings.

# Cash & Investments

Council's cash and financial investment holding at September month end totalled \$145.4M, up from \$130.9M the previous month. This was boosted by rates payments for the first instalment due at the start of the month. \$82.3M represented the balance held in the City's cash backed financial reserves. Another \$3.8M represented funds held for other restricted purposes such as deposit and bond liabilities. The remaining \$59.3M represented the cash and financial investment component of the City's working capital, available to fund current operations, capital projects, financial liabilities and other financial commitments.

The City's investment portfolio made a weighted annualised return of 3.67% in September, down from 3.73% from the previous month. Whilst this compares favourably against the BBSW 6 month annualised rate of 2.74%, the return is trending downwards due to the low official Australian cash rate of 2.50% and a general tightening of margins within the term deposit market.

The majority of investments are held in term deposit (TD) products placed with highly rated APRA (Australian Prudential Regulation Authority) regulated Australian banks. These are invested for terms ranging between three and twelve months in order to lock in the most

beneficial rate and meet the City's cash flow requirements. Factors considered when investing include maximising the value offered within the current interest rate yield curve and mitigating cash flow liquidity risks. All TD investments comply with the Council's Investment Policy and fall within the following risk rating categories:

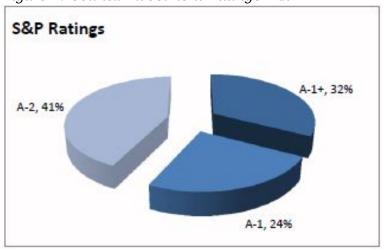


Figure 1: Council Investment Ratings Mix

Given we are now at the bottom of the current interest rate cutting cycle (consensus view of the market) the investment strategy now aims to shorten the average duration for the investment portfolio. TD investments offering value over short to medium terms (3 to 6 months) are preferred, subject to cash flow planning requirements. This will reduce risks associated with a potential increase in interest rates over the medium term. The City's investment portfolio currently has an average duration of 168 days, graphically depicted below:

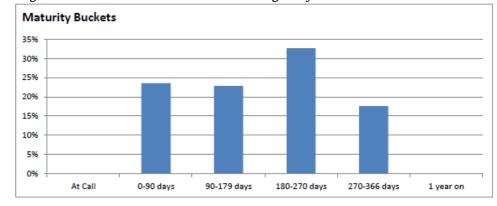


Figure 2: Council Investment Maturity Profile

#### **Budget Revisions**

A budget adjustment is necessary to fund corporate communication expenses of \$65,000 left out of the 2014/15 adopted budget. A coastal vulnerability planning project with an unspent balance of \$20,687 was

left off the carried forwards listing brought to Council last month and also needs to be funded to cover existing commitments.

These latest adjustments will decrease the City's budgeted closing funds from \$107,612 to \$21,925, offsetting the increase in Financial Assistance Grants previously adjusted.

#### **Description of Graphs and Charts**

There is a bar graph tracking Business Unit operating expenditure against budget. This provides a very quick view of how the different units are tracking and the comparative size of their budgets.

The Capital Expenditure graph tracks the YTD capital spends against the budget. It also includes an additional trend line for the total of YTD actual expenditure and committed orders. This gives a better indication of how the capital budget is being exhausted, rather than just purely actual cost alone.

A liquidity graph shows the level of Council's net current position (adjusted for restricted assets) and trends this against previous years. This gives a good indication of Council's capacity to meet its financial commitments over the course of the year. Council's overall cash and investments position is provided in a line graph with a comparison against the YTD budget and the previous year's position at the same time.

Pie charts included show the break-up of actual operating income and expenditure by nature and type and the make-up of Council's current assets and liabilities (comprising the net current position)

#### Strategic Plan/Policy Implications

#### **Leading & Listening**

- A responsive, accountable and sustainable organisation.
- Manage our financial and infrastructure assets to provide a sustainable future.
- A culture of risk management and compliance with relevant legislation, policy and guidelines

#### **Budget/Financial Implications**

Budget amendments included in the recommendation will decrease the City's closing Municipal Budget position for 30 June 2015 by \$85,687 to \$21,925.

# **Legal Implications**

N/A

# **Community Consultation**

N/A

# Attachment(s)

Statement of Financial Activity and associated reports – September 2014.

# Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

#### 16. ENGINEERING AND WORKS DIVISION ISSUES

# 16.1 (OCM 13/11/2014) - DAVILAK RUINS MANAGEMENT STRATEGY (2202283) (A LEES) (ATTACH)

#### **RECOMMENDATION**

That Council

- (1) adopt the Davilak Ruins Management Strategy;
- (2) continue to maintain the ruins in accordance with actions plan; and
- (3) consider funding in the 2015/16 for the development of a Master Plan for Manning Park.

COUNCIL DECISION		

#### **Background**

Restoration of the Davilak ruins in Manning Park has been discussed on numerous occasions with the Historical Society which seeks to retain their National Significance. To facilitate these requests two reports were compiled in order to determine the merits of protection and restoration works to ensure they remain in perpetuity. An outcome of these reports is the development of a management strategy to guide the future management of these significant ruins.

#### **Submission**

A Davilak Ruins Management Strategy has been prepared.

#### Report

The Davilak House and Farm Complex Ruins are recognised at State Heritage level as of National Significance, unique in WA and likened to Port Arthur. The *Davilak Ruins* are the remains of buildings constructed by members of the Manning family between the late 1850s and early twentieth century. The ruins represent the remains of a large homestead (comprising 11 rooms and a detached kitchen) and its associated outbuildings, together with farm buildings associated with the homestead such as stables, a coach house and accommodation for farm workers. The buildings on the site were destroyed by fire.

Two recent studies have identified the need to protect and restore the ruins: a *Draft Archeological Management Strategies* (DAMS) report and *Stabilisation Works: Heritage Impacts Statement.* Both studies have recommended that the site is protected, restored and managed.

The DAMS report has identified that the ruins are a part of the Manning Estate (including Azelia Ley Museum and Homestead) and because of this, have protection as an archaeological site under the *Western Australian Heritage Act 1990*. The extent of this assessment has ensured that features formerly associated with the activities that were carried out on Manning Estate are protected.

Although the ruins are older than the Homestead and their story is an important part of the significance of the Manning Estate, their historic and cultural significance has often been overlooked.

The Heritage Impact Statement Report has noted that "At present, parts of the ruins are in a vulnerable condition and are likely to collapse further if immediate stabilisation works are not undertaken. As the ruins have aged and deteriorated, the structural support system has failed or been removed from site leaving the remnant walling in a weakened and precarious state. The ruins are open to the public but works are required to both make the site safer and to prolong the longevity of the

ruins. Preliminary stabilisation works have occurred, but more work is necessary to ensure the sustainability of this important historic site.

Based on the original DAMS report, a *Davilak Ruins Management Strategy (DRMS)* has been developed, to guide the site's future maintenance, protection and enhancement.

Given the site's current protection under the Heritage Act, the management strategy has identified a series of actions to be completed over the next two years. A number of the actions contained within the Management Strategy are already underway and/or can be completed utilising council resources (existing municipal budgets and staff expertise). Individual budget requests will be raised on an as needs basis for larger scale items within the Strategy. However future considerations on full restoration will need to be determined on the overall sites future directions.

Manning Park continues to attract a significant amount of interest by various community groups/members and internal service units. Primarily these parties seek to claim ownership and implement the visions they have developed or intending to develop. Current activities that have been identified include; stairway from the car park to the lookout, Bravery Garden, Mountain Bike Trail, Davilak ruins restorations, community gardens, etc. Along with these aspirations Manning Park hosts a number of community group running activities, visitors to the ruins and historical components, general park users and active environmental enthusiasts. To ensure a comprehensive foundation, to facilitate these interacting components, a Master Plan is required. The master plan will provide the framework and mechanism to ensure Manning Park is embellished through a stage process whilst still enabling the community its rightful access to the park. It is recommended that the 2015/16 includes the provision for the development of the Manning Park Master Plan

# Strategic Plan/Policy Implications

#### **Community & Lifestyle**

Conservation of our heritage and areas of cultural significance.

# **A Prosperous City**

 Creation and promotion of opportunities for destination based leisure and tourism facilities.

#### **Environment & Sustainability**

• To protect, manage and enhance our natural environment, open spaces and coastal landscapes.

Budget/Financial Implications
N/A
Legal Implications
N/A
Community Consultation
N/A
Attachment(s)
Davilak Ruins Archaeological Management Strategy
Advice to Proponent(s)/Submissioners
N/A
Implications of Section 3.18(3) Local Government Act, 1995
Nil.
(OCM 13/11/2014) - STATE OF SUSTAINABILITY REPORT 2013/14
(064/009) (J HARRISON) (ATTACH)
(064/009) (J HARRISON) (ATTACH)  RECOMMENDATION  That Council adopt the State of Sustainability report 2013/2014.
(064/009) (J HARRISON) (ATTACH)  RECOMMENDATION
(064/009) (J HARRISON) (ATTACH)  RECOMMENDATION  That Council adopt the State of Sustainability report 2013/2014.
(064/009) (J HARRISON) (ATTACH)  RECOMMENDATION  That Council adopt the State of Sustainability report 2013/2014.
(064/009) (J HARRISON) (ATTACH)  RECOMMENDATION  That Council adopt the State of Sustainability report 2013/2014.

The State of Sustainability report is aligned to the City's Strategic Community Plan and Sustainability Policy and Strategy.

The 2013/14 report is the City's fourth annual State of Sustainability report.

#### **Submission**

N/A

#### Report

In the 2013/14 financial year, the City had 105 indicators for sustainability across the organisation. In comparison to the previous year of reporting, the number of indicators has almost doubled.

During 2013/14 Local Government reform caused a shift in priorities across the organisation with some projects deferred to 2014/15. This change in business focus and the addition of new indicators has meant that many of the Key Performance Indicators (KPIs) were still in progress.

The focus areas of Environment and Society have excelled in 2013/14 with a significant increase in the number of 'completed' KPIs in comparison to the previous year.

The report uses the traffic light symbols to provide a visual snapshot of progress towards achieving a particular KPI.

Green indicates that the City is on track in achieving its stated KPI; Amber indicates that while the City is making progress, more work is needed; and Red indicates that the City is yet to make progress in achieving a particular KPI.

A summary of the KPIs under the four key areas and main achievements are provided below.

#### Governance

The City has identified 28 KPIs that measure its current progress towards achieving Governance Excellence.

Highlights include:

- Improved safety, health and wellbeing of the workforce with a decrease in 'lost time injury' frequency rate.
- Adoption of a corporate risk register.

 Creation of new liveable, walkable and mixed use neighbourhoods by incorporating liveable neighbourhood elements into structure plans.

#### **Environment**

The City has identified 27 KPIs to measure its current progress toward achieving best practice in Environmental Management.

# Highlights include:

- 7.46 hectares of bushland rehabilitated in 2013/14.
- Increase in renewable energy generation with a 99kW PV system installed on the Success Integrated Health and Community Centre plus the development of a 'Solar PV Implementation Plan'.
- Council is on track to achieving its 2020 emissions reduction targets.

# **Society**

The City has identified 28 KPIs to measure its current progress towards achieving a more socially equitable, diverse and inclusive community.

# Highlights include:

- Council adopted the final designs for the new Regional Aquatic and Recreation Centre.
- Health promotion officer employed top deliver Healthy Lifestyle initiatives.
- Community Engagement Framework adopted by Council which compliments the diverse range of initiatives and events offered to the Cockburn community.

# **Economy**

The City has 22 identified key performance indicators (KPIs) to measure its current progress towards achieving best practice financial management.

#### Highlights include:

- Commenced development of an Economic Strategy.
- Continued support for local business operators in the municipality.
- Partnership secured with a tertiary education facility and continued support for Challenger Institute of Technology.

# **Strategic Plan/Policy Implications**

# **Growing City**

 To grow our City in a sustainable way by: using land efficiently protecting the natural environment and conserving biodiversity.

#### Infrastructure

 Community infrastructure that is well planned, managed, safe, functional, sustainable and aesthetically pleasing.

# **Community & Lifestyle**

 Community environments that are socially cohesive and embrace diversity.

# Leading & Listening

A responsive, accountable and sustainable organisation.

# **Environment & Sustainability**

 Greenhouse gas emission and energy management objectives set, achieved and reported.

# **Budget/Financial Implications**

N/A

# **Legal Implications**

N/A

# **Community Consultation**

N/A

#### Attachment(s)

State of Sustainability Report 2013/14

# Advice to Proponent(s)/Submissioners

N/A

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

# 16.3 (OCM 13/11/2014) - MATTERS TO BE NOTED FOR INVESTIGATION, WITHOUT DEBATE - COCKBURN CENTRAL TOWN CENTRE PARKING (163/006) (J MCDONALD) (ATTACH)

#### RECOMMENDATION

That Council does not proceed with the introduction of Resident Parking Permits in Cockburn Central Town Centre because that would contradict the key principles upon which the Town Centre has been planned as a Transit Orientated Development.

COUNCIL DECISION		

# **Background**

At the Ordinary Council Meeting 14 August 2014, Mayor Logan Howlett requested:

"that a report be prepared and presented to the September 2014 Ordinary Council meeting detailing car parking options for businesses, residents and visitors within the Cockburn Central Town Centre."

This request is based on a request for Council to issue residential parking permits, from a resident who has received parking infringements for parking on-street longer than permitted and parking on a footpath.

#### **Submission**

N/A

# Report

The Cockburn Central Town Centre was deliberately planned as a high density mixed-use Transit Orientated Development (TOD) because of the access to high quality and frequency public transport. This is provided by the passenger rail services connecting to major employment and entertainment centres such as the Perth CBD and destinations beyond to the north and Mandurah, kilometres away, to the south and the numerous feeder bus routes servicing the surrounding suburbs.

The Town Centre is bordered by Midgegooroo Avenue to the west, North Lake Road to the north, the Perth – Mandurah railway on the east and Beeliar Drive to the south. The Cockburn Gateways Shopping Centre is situated opposite the Town Centre, on the southern side of Beeliar Drive.

The first stage of the Town Centre subdivision was completed in 2006 and since then properties have been developed for residential and commercial purposes. The final stage of the Town Centre was completed earlier this year by Landcorp and approximately 60-70% of

the total available land in the Town Centre has been/is being built on or is being used as at-grade parking for rail commuters. It is anticipated the Town Centre will have been substantially developed within a few years' time, due to the development applications that are known to have been approved in recent times or for which approval is pending. Photographs of the Town Centre are included as Attachment 1.

TODs are planned on the principle that residents, employees, and visitors to the TOD will travel by public transport, cycling and walking at a greater rate than more low density developments. This is also deliberately influenced by reducing the parking requirements for developments in TODs, to encourage greater use of sustainable transport options like cycling, walking and public transport.

A parking strategy for the Cockburn Central Town Centre was adopted by the City in June 2007 to guide the implementation of parking for both on and off-street parking and a copy of that document is included as Attachment 2.

Two extracts from that strategy that are relevant to the desire for residential parking permits are:

#### 1. Car Parking Management

It is recommended that street signs be erected within the Town Centre to limit time with on-street parking and public carparks (e.g. 2 hours limit) which will restrict commuters from using on-street parking or public carparks for long term parking purpose. This is to ensure that on-street parking and public carparks are used for short term parking purpose by customers and visitors to businesses and residential uses within the Town Centre.

# 2. Notification of TOD Principles (from strategy)

That any developer within the Cockburn Central Town Centre provide, at point of sale, information clearly outlining the TOD principles that the development has been undertaken on (including but not limited to TravelSmart and car parking limitations).

The car parking requirements for businesses, residents, and commuters in the Town Centre are primarily accommodated off-street. For business and resident parking, the volume of car parking to be supplied for each development is determined at the Development Application stage, by referring to the parking rates specified in the Cockburn Central Town Centre Design Guidelines. Commuter parking with the Town Centre has been provided by the Public Transport Authority in two at-grade car parks on Points Way and Fettler Lane,

which have a total capacity of vehicles in the order of 200-210 bays each, which includes Disabled Access bays and motor cycle bays.

Where parking is permitted on-street in the Town Centre it is mostly catered for in parking embayments separate to the traffic lane. With the exception of Points Way, it is undesirable for motorists to park anywhere else that embayments have not been provided. These onstreet bays are typically limited to a 2 hour time limit between 8am and 5 pm on weekdays. There are a few exceptions to this such as short-term set down/drop off bays at the entrance to the bus/rail station, with a 15 minute limit; and, a few longer term (up to 6 hours) bays close to the station.

Options to address the perceived parking shortfall include:

- 1. Residential parking permits
- 2. Extend on-street parking time limits
- 3. Introduce paid parking on verge embayments
- 4. Paid multi-storey parking station

# Option 1 – Residential Parking permits

Residential Parking Permits are topical as there is a perceived lack of available parking bays for the residential complex. This issue however is one of car ownership within a TOD. In this form of development parking bays are limited to encourage greater use of the available public transport options. Increasing parking bays for residential users is actually counter intuitive and does not support the broader principles of inner city living that are being developed in this regional centre.

Ultimately however, providing residential parking permits in this precinct will not work as there will be a lack of supply. For the Town Centre to operate successfully as a TOD, it is important to consider one of the key principles of the Parking Strategy as follows:

'Ensure an appropriate balance is achieved between parking supply and demand, while taking care not to over provide and unduly encourage use of motor vehicles.'

As noted in Table 1, the Town Centre has an approximate on-street parking capacity for 208 vehicles. However, there are approximately 200 apartments already constructed in the Town Centre and approximately another 400 are under construction or have been approved for development. It is estimated there could be a further 200 apartments constructed on other lots in the Town Centre in the future.

Table 1: Cockburn Central Town Centre on-street parking capacity

Road	Capacity
Junction Boulevard	42
Linkage Avenue	49 <sup>1</sup>
Midgegooroo Avenue	28
Points Way	18 <sup>2</sup>
Signal Terrace	47 <sup>3</sup>
Stockton Bend	24
Total	208

#### Notes:

- 1. Linkage Avenue includes short-term set-down/pick-up parking bays.
- 2. Approximate capacity on Points Way allowing for clearances from intersections and driveways
- 3. Signal Terrace includes taxi parking, short term set-down/pick-up parking, permit parking, and motor cycle parking bays.

So, even if each dwelling was only permitted to have a single parking permit then demand for long-term use of on-street parking bays would potentially exceed supply by approximately 400%. That would be an undesirable situation to manage and would only create frustration for residents wanting to park on-street, and frustration and economic impacts for businesses whose visitors would have difficulty finding on-street parking.

The provision of Resident Parking Permits is strongly discouraged because:

- It is not in keeping with the TOD principles upon which the Town Centre is based:
- It is not possible to implement a system that would be equitable for the ultimate resident population in the Town Centre;
- It would negatively impact on the ability for visitors to shops/offices to find on-street parking.

# Option 2 – Extend on-street parking time limits

The implementation of the 2-hour time limit has generally been done progressively and only introduced to sections of road in the Town Centre once developments are completed and occupied. In early July this year, though, a 2-hour weekday time limit was introduced to all remaining on-street parking to coincide with the introduction of paid parking in off-street car parks operated by the Public Transport Authority. If that had not been done, the available on-street parking would have been largely occupied by commuters wanting to avoid paying for parking, at the expense of residents and businesses.

Whilst extending the 2 hour limit may minimise the inconvenience for residential residents, the current time limit increases the amount of turnover of the parking bays and improves patronage of the business that have established in the centre. Any initiative that disadvantages businesses at this point in time is not recommended.

This option is not recommended at this time.

# Option 3 – Paid on-street parking.

As development increases in the Town Centre and demand for short-term on-street parking increases it is likely that the introduction of paid on-street parking will be justifiable. If residents have permits that exempt them from paying for on-street parking then it will create inequity with other motorists wanting to use on-street parking bays and the City will receive less parking revenue that would be used to subsidise public transport facilities or even shared car services.

# Option 4 – Paid Multi-Storey Parking Station

This matter has previously been considered by Council in August 2013, (refer Minute 5107 OCM 08/08/2013 - Proposed Multi-Storey Car Park at Cockburn Central) when the Council adopted the recommendation "That Council not proceed with the construction of a paid multi-storey parking facility at Cockburn Central."

This recommendation was based on the finding that constructing and operating a multi-storey parking station was not be financially viable for the City. The report also correctly noted that building a large capacity multi-storey car park in the Town Centre is not desirable because it would generate increase in traffic in the Town Centre, particularly at peak hours, which would have significant impacts on the traffic/pedestrian safety and amenity of the area.

# Integrated Transport Plan

The Implementation Plan in the City's Integrated Transport Plan, adopted by the Council in June this year, includes actions for Parking and Travel Demand Management. The action to improve management of car parking includes the following task:

"Undertake a detailed review of parking within Cockburn Central Town Centre. Consider whether time restrictions require review to better meet demand, the role of enforcement and potential for parking charges. This should be considered in the activity centre structure plan being developed for the centre."

This means that many of the issues contained in this report will be revisited in more detail and the community would have an opportunity to comment on parking as part of any consultation for the structure plan. The City's Strategic Planning Services unit have commenced preparation of that structure plan which will include the Town Centre and surrounding areas.

# **Strategic Plan/Policy Implications**

# **A Prosperous City**

• Sustainable development that ensures Cockburn Central becomes a Strategic Regional Centre.

# **Environment & Sustainability**

• Greenhouse gas emission and energy management objectives set, achieved and reported.

# **Moving Around**

- An integrated transport system which balances environmental impacts and community needs.
- Facilitate and promote healthy transport opportunities.
- A safe and efficient transport system.
- Infrastructure that supports the uptake of public transport and pedestrian movement.

# **Budget/Financial Implications**

The administration, constant monitoring and enforcement of a Residential Parking Permit scheme for the Town Centre would add additional pressure on the City's Rangers and Parking enforcement staff. There is not enough capacity with existing resources to be able to effectively implement an intensive parking permit scheme in the Town Centre, without the need for additional staff and vehicle resources.

# **Legal Implications**

Nil.

# **Community Consultation**

Nil.

# Attachment(s)

Photographs of the Cockburn Central Town Centre

2. Cockburn Central Town Centre Parking Strategy, June 2007

# Advice to Proponent(s)/Submissioners

The Proponent(s) and those who lodged a submission on the proposal have been advised that this matter is to be considered at the 13 November 2014 Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

#### 17. COMMUNITY SERVICES DIVISION ISSUES

17.1 (OCM 13/11/2014) - CITY OF COCKBURN PROPOSED BUSHFIRE RISK MANAGEMENT PLAN 2014-2019 (027/007; 028/027) (R AVARD) (ATTACH)

#### **RECOMMENDATION**

That Council seek public comment on the:

- (1) draft Bushfire Risk Management Plan 2014-2019; and
- (2) Residents Guide Bushfire Risk Management Plan 2014-2019;

prior to formal adoption of the Plan at a future Council Meeting.

COUNCIL DECISION		

# **Background**

Council resolved at 14 August Ordinary Council Meeting to defer the release of the proposed Bushfire Risk Management Plan 2014 – 2019 (BRMP) for public comment, due to concerns about the residents' ability to understand the document.

The City's Administration has subsequently reviewed the BRMP with consideration of feedback supplied by the Banjup Residents Group and the Office of Bushfire Risk Management.

The City's Administration provided a presentation to the Elected Members to highlight the aim and objectives of the proposed BRMP.

Under the State Emergency Management Plan for bushfire (*Westplan-Fire*), Local Government has responsibility for the prevention, preparedness and response to bushfire, within their district.

Within the prevention and mitigation component of section 2.1.1 Westplan – Fire, it is a requirement for Local Government to facilitate the commencement of a Bushfire Risk Management Plan (BRMP) (attachment 1) using the AS/NZS ISO 3100:2009 risk management framework outlined by SEMP 2.9 – Management of Risk.

#### **Submission**

N/A

#### Report

Risk assessments were carried out on land tenures in the district to determine the risk of bushfire, consequence and likelihood for individual assets. All assets identified during this process were categorised into four groups:

- Human Assets (property and homes);
- Economic Assets (rail lines, gas pipelines etc);
- Environmental Assets (Council managed reserves and DPaW regional parks); and
- Cultural assets (registered aboriginal sites and assets from the Local Government Inventory as adopted by Council on 14 July 2011).

During the consultation phase of the proposed BRMP the City's officers sought extensive collaboration from the following agencies:

- Department of Fire and Emergency Services (DFES);
- Office of Bushfire Risk management (OBRM);
- Department of Parks and Wildlife (DPaW);
- Department of Lands;
- WA Planning Commission;
- LandCorp;
- Main Roads WA;
- Jandakot Airport Holdings;
- Western Power; and
- Department of Education.

Mitigation strategies assigned within the *Treatment Schedule* of the proposed BRMP are currently restricted to a recommendation on all

crown land due to the limitations of Section 33 of the Bush Fires Act 1954 (as amended).

It is anticipated that the new Emergency Services Act will require Government Agencies to proactively reduce fire risk on land managed by them. The City of Cockburn BRMP will in the first instance be a voluntary guide on what the City sees as required to reduce fire risk on crown and other government land.

The Banjup Residents Group provided a critique of the proposed BRMP prior to the document going out for formal public comment by Council decision. After analysis of this review the BRMP was amended to include;

- An executive summary;
- A documented mechanism for interaction between stakeholders;
- Increase detail on community engagement activities relevant to bushfire related matters;
- Overview of the risk terminology use within Chapter 5 and 6 of the BRMP; and
- Objectives for each tier level defined within Chapter 7 of the BRMP.

# **Strategic Plan/Policy Implications**

# **Growing City**

 To grow our City in a sustainable way by: using land efficiently, protecting the natural environment and conserving biodiversity.

# **Community & Lifestyle**

Safe communities and to improve the community's sense of safety.

# **Leading & Listening**

• A culture of risk management and compliance with relevant legislation, policy and guidelines

# **Environment & Sustainability**

• To protect, manage and enhance our natural environment, open spaces and coastal landscapes.

#### **Budget/Financial Implications**

Endorsement of a BRMP by Council will require additional bushfire mitigation works be carried out on lands managed by the City. The cost of these works will be identified on the completion of the Community Consultation period for consideration by Council.

Due to the upcoming 2014/2015 prohibited burning season, mitigation works are unlikely to be implemented prior to the start of the 2015/2016 financial year.

# **Legal Implications**

Bush Fires Act 1954 (as amended) Emergency Management Act 2005

# **Community Consultation**

Community engagement was conducted during the consultation phase of the draft BRMP. This engagement was carried out through two workshops to gain the residents views, on a range of topics relating to bushfire risk and gauging the resident's level of acceptance of risk associated with mitigation strategies. The workshops were extensively promoted within the community to ensure a diverse group of residents attended.

Residents that attended the workshops showed a strong desire to have a BRMP incorporated into the City's management of reserves and other land owned by the State. Salient findings of the community engagement workshops were added as appendix 6 within the draft BRMP.

The draft BRMP adopted by Council will be advertised for public comment in the Local newspaper, website and social media for comment.

Those groups who participated in the initial consultation process will be advised that the draft is available for review and public comment.

# Attachment(s)

- 1. Proposed Bushfire Risk Management Plan (BRMP) 2014 2019
- 2. Proposed Residents Guide Bushfire Risk Management Plan 2014 -2019

# Advice to Proponent(s)/Submissioners

The Proponent(s) have been advised that this matter is to be considered at the 13 November 2014 Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Nil.

- 18. EXECUTIVE DIVISION ISSUES
- 19. MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN
- 20. NOTICES OF MOTION GIVEN AT THE MEETING FOR CONSIDERATION AT NEXT MEETING
- 21. NEW BUSINESS OF AN URGENT NATURE INTRODUCED BY COUNCILLORS OR OFFICERS
- 22. MATTERS TO BE NOTED FOR INVESTIGATION, WITHOUT DEBATE
- 23. CONFIDENTIAL BUSINESS
- 24 (OCM 13/11/2014) RESOLUTION OF COMPLIANCE (SECTION 3.18(3), LOCAL GOVERNMENT ACT 1995)

#### RECOMMENDATION

That Council is satisfied that resolutions carried at this Meeting and applicable to items concerning Council provided services and facilities, are:-

- integrated and co-ordinated, so far as practicable, with any provided by the Commonwealth, the State or any public body;
- (2) not duplicated, to an extent Council considers inappropriate, services or facilities as provided by the Commonwealth, the State or any other body or person, whether public or private; and
- (3) managed efficiently and effectively.

COUNCIL DECISION		

25. CLOSURE OF MEETING

# CITY OF COCKBURN

# SUMMARY OF MINUTES OF THE GRANTS & DONATIONS COMMITTEE MEETING HELD ON TUESDAY. 21 OCTOBER 2014 AT 6:00 PM

Page 1. DECLARATION OF MEETING 1 2. ACKNOWLEDGEMENT OF RECEIPT OF WRITTEN DECLARATIONS OF 3. FINANCIAL INTERESTS & CONFLICT OF INTEREST (BY PRESIDING 4. 5. (MINUTE NO 80) (GAD 21/10/2014) - MINUTES OF THE GRANTS 5.1 AND DONATIONS COMMITTEE MEETING - 15/7/2014 (ATTACH) 2 6. 7. BUSINESS LEFT OVER FROM THE PREVIOUS MEETING (IF ADJOURNED)......2 DECLARATION OF COUNCILLORS WHO HAVE NOT GIVEN DUE 8. 9. (MINUTE NO 81) (GAD 21/10/2014) - GRANTS AND DONATIONS 9.1 COMMITTEE RECOMMENDED ALLOCATIONS 2014/15 (162/003) MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN......17 10. 11. NOTICES OF MOTION GIVEN AT THE MEETING FOR CONSIDERATION AT NEXT MEETING ......17 12. NEW BUSINESS OF AN URGENT NATURE INTRODUCED BY DECISION OF MEETING BY COUNCILLORS OR OFFICERS ......17 MATTERS TO BE NOTED FOR INVESTIGATION, WITHOUT DEBATE ......17 13. 14. CONFIDENTIAL BUSINESS.......18

CLOSURE OF MEETING ......18

15.

# CITY OF COCKBURN

# MINUTES OF THE GRANTS & DONATIONS COMMITTEE MEETING HELD ON TUESDAY, 21 OCTOBER 2014 AT 6:00 PM

P	R	F	S	F	N	T	

Mr L. Howlett - Mayor

Mrs C. Reeve-Fowkes - Deputy Mayor
Mr S. Pratt - Councillor
Ms L. Wetton - Councillor
Mr P. Eva - Councillor

#### IN ATTENDANCE:

Mr R. Avard - Manager, Community Services

Ms M. Bolland - Grants & Research Officer

1. DECLARATION OF MEETING

The Presiding Member declared the meeting open at 6:04pm.

2. APPOINTMENT OF PRESIDING MEMBER (If required)

Nil

3. ACKNOWLEDGEMENT OF RECEIPT OF WRITTEN DECLARATIONS OF FINANCIAL INTERESTS & CONFLICT OF INTEREST (BY PRESIDING MEMBER)

Nil

4. (GAD 21/10/2014) - APOLOGIES & LEAVE OF ABSENCE

Clr Steven Portelli - Apology
Clr Yaz Mubarakai - Apology

#### 5. CONFIRMATION OF MINUTES

5.1 (MINUTE NO 80) (GAD 21/10/2014) - MINUTES OF THE GRANTS AND DONATIONS COMMITTEE MEETING - 15/7/2014 (ATTACH)

#### RECOMMENDATION

That the minutes of the Grants and Donations Committee meeting held on 15 July 2014 be adopted as a true and accurate record.

# **COMMITTEE DECISION**

MOVED Mayor L Howlett SECONDED Deputy Mayor C Reeve-Fowkes that Council adopt the Minutes of the Grants and Donations Committee Meeting held on 15 July 2014 as a true and accurate record.

CARRIED 5/0

#### 6. DEPUTATIONS & PETITIONS

A deputation from the Cockburn Central YouthCARE Council was presented to the Committee to provide an overview of their proposal for funding for \$48,100.

7. BUSINESS LEFT OVER FROM THE PREVIOUS MEETING (IF ADJOURNED)

Nil

8. DECLARATION OF COUNCILLORS WHO HAVE NOT GIVEN DUE CONSIDERATION TO MATTERS IN THE BUSINESS PAPER

Nil

- 9. COUNCIL MATTERS
  - 9.1 (MINUTE NO 81) (GAD 21/10/2014) GRANTS AND DONATIONS COMMITTEE RECOMMENDED ALLOCATIONS 2014/15 (162/003) (R AVARD) (ATTACH)

#### RECOMMENDATION

That Council adopt the revised grants, donations, and sponsorship recommended allocations for 2014/15 as attached to the agenda.

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#### **COMMITTEE RECOMMENDATION**

MOVED Mayor L Howlett SECONDED Deputy Mayor C Reeve-Fowkes that the recommendation be adopted subject to the following amendments as shown in the attachment to the minutes:

- (1) Recommended \$2,500 Donation to Trainingship Cockburn Navy Cadets:
- (2) Recommended \$12,000 Donation to Yangebup Family Centre; and
- (3) Recommended \$48,100 Donation to Cockburn Central YouthCARE Council.

CARRIED 5/0

COUNCIL DECISION		

#### Reason for Decision

The Committee recommended increasing the donations to Trainingship Cockburn Navy Cadets, Yangebup Family Centre and Cockburn Central YouthCARE Council for the valuable support and opportunities they provide to youth, children, families and the community in Cockburn.

# Background

Council approved a budget for Grants and Donations for 2014/15 of \$1,049,591. The Grants and Donations Committee is empowered to recommend to Council how these funds are to be distributed. At its meeting of 15 July 2014 the Committee recommended a range of allocations of grants, donations and sponsorship which were duly adopted by Council on 14 August 2014.

The September 2014 round of grants, donations and sponsorship funding opportunities has now closed and the Committee is to consider the following applications for donations and sponsorship.

#### **Submission**

N/A

# Report

The September 2014 round of grants, donations and sponsorship funding opportunities was advertised to close on 30 September 2014. A total of 29 applications were received including 14 applications for Community Grants and 1 application for a Sustainable Events Grant which have been reviewed under the delegated authority of the Manager of Community Services. The remainder include 9 applications for Donations and 5 applications for Sponsorship to be considered by the Committee.

The applications for donations and sponsorship are described in brief below.

# **Committed/Contractual Donations**

As can be seen in the attachment, a number of donations are deemed to be committed by legal agreements, such as leases, or by Council Decision.

There is one new proposed commitment for the 2014/15 financial year:

# **Experiencing Nyungar Culture for Seniors Event**

Cockburn Community Care and Cockburn Seniors Centre applied for grant funding from the Council of the Ageing WA (COTA) for a Seniors Week 2014 event called "Experiencing Nyungar Culture for Seniors" to be held at Bibra Lake. Unfortunately, they were unsuccessful in this application for grant funding, but are still keen to run the event, so are requesting \$5,000 from the grants and donations budget. It is recommended to support this request.

The total for committed/contractual donations will be \$428,100.

#### **Grants**

As can be seen in the attached spread sheet, there are a number of grants for which there are established criteria and processes in place.

There are two proposed adjustments to grant allocations for the 2014/15 financial year:

Increase to the Community Grants program allocation from \$65,000 to \$100,000 based on the number of applications received in the first round, and to allow for an equitable pool of funds to be available for the second round in March 2015.

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 Increase to Security Subsidy for Seniors allocation from \$25,000 to \$30,000, based on current expenditure of \$7,000 so far this financial year.

The total proposed for grants is \$381,491.

# **Donations**

Applicant: Returned and Services League – City of Cockburn

Requested: \$10,000

Recommended: \$10,000

The Cockburn Branch of the Returned and Services League supports the welfare of the serving and ex-military service community of Cockburn. The group conducts commemorative services on special days throughout the year including the ANZAC Youth Parade. The group also promotes the ANZAC history and military service in schools.

Previous funding received from the City of Cockburn includes:

March 2007		\$7,500
October 2007		\$8,000
September 2008		\$8,000
September 2009		\$8,000
September 2010		\$8,300
September 2011		\$8,000
September 2012		\$9,000
September 2013	-	\$10,000

The Returned and Services League has requested a \$10,000 donation for its activities and operating costs. It is recommended to support this donation for \$10,000 to reflect the previous year's donation.

Applicant:	Cockburn Community and Cultural Council
Requested:	\$9,000
Recommended:	\$9,000

The Cockburn Community and Cultural Council supports, sponsors and promotes artistic, cultural and leisure activities within the City of Cockburn. This group has received an annual donation for many years to assist with operating costs.



# GAD 21/10/2014

Previous funding from the City of Cockburn includes:

October 2006		\$7,500				
October 2007	_	\$8,000				
September 2008	_	\$8,000				
September 2009		\$8,600				
September 2010	<del></del>	\$9,000				
September 2011	_	\$9,000				
September 2012	_	\$9,000				
September 2013	-	\$9,000				
March 2014	-	\$1,200	(one-off	donation	for	40th
Anniversary celebra	ations)					

The Cockburn Community and Cultural Council has requested a donation of \$9,000, which is recommended for approval this year, however future applications will need to be reviewed following amalgamations.

Applicant:	St Vincent de Paul Society Yangebup Conference
Requested:	\$5,000
Recommended:	\$5,000

St Vincent de Paul Society Yangebup Conference is a volunteer driven charitable organisation. Yangebup Conference helps out families in need in the suburbs of Atwell, Success, Aubin Grove, Jandakot, Yangebup, Spearwood and Munster. Families in need are provided with assistance in times of emergency with food; help with bills and rent, furniture and clothing on the guiding principle: "A Hand Up, not a Hand Out". In the past year, approximately 450 individuals from 200 families within the City of Cockburn received assistance from the Yangebup Conference.

St Vincent de Paul Society Yangebup Conference receives a small annual Emergency Relief grant from Lotterywest. The City of Cockburn Financial Counsellors highly recommend this organisation and the work they do.

St Vincent de Paul Society Yangebup Conference received \$5,000 from the City of Cockburn in September 2013 and has requested a \$5,000 donation towards their ongoing costs this year. It is recommended to support this application for the amount of \$5,000.

Applicant: Trainingship Cockburn Navy Cadets

Requested: \$4,000

Recommended: \$0

Trainingship Cockburn Navy Cadets are a marine based youth development group for ages 13-19 years. Trainingship Cockburn Navy Cadets offers cadets the opportunity to attain their Recreational Skippers Ticket, Bronze Medallion and Senior First Aid qualifications. Cadets attend several camps each year at other Trainingship Cadets Units with cadets from all over WA attending. At present the group currently has 19 enrolled cadets. The group is understood to receive significant Commonwealth Government funding.

Trainingship Cockburn moved into the old SES Building in Kent Street, Spearwood where there is no rent payable by this group.

The group has also received the following donations from the City:

March 2013 – \$2,000 September 2013 - \$2,000

Trainingship Cockburn Navy Cadets have requested a donation of \$4,000 towards administrative and operating costs. Due to their rental support and previous funding it is not recommended to support this application.

Applicant: Tales of Times Past Senior Storytellers Cockburn

Requested: \$750 Recommended: \$750

Tales of Times Past is an Intergenerational Intercultural Oral History Program where Senior Storytellers make themselves available to schools, community centres and residential care homes in the Cockburn area to talk about how life was lived years ago.

The Program objectives are to:

- Foster interaction, respect and understanding between generations through the medium of Heritage storytelling.
- To provide opportunities to explore the diverse cultural and ethnic heritages within our communities.
- To promote awareness of technological, social and environmental changes within recent centuries.
- To increase awareness of the value of seniors as rich social capital.

# GAD 21/10/2014

The Program was implemented in the City of Cockburn in 2011 through the Cockburn Seniors Centre and operated over 30 months with a grant from the Department for Communities and funding from the City.

Tales of Times Past Senior Storytellers Cockburn have requested a donation of \$750 for ongoing operating costs to continue presenting programs in schools and residential homes. It is recommended to support this application.

Applicant: Yangebup Family Centre

Requested: \$12,000 Recommended: \$8,500

The Yangebup Family Centre is a community managed not-for-profit organisation committed to providing a diverse range of community services for families and individuals living in Yangebup and surrounding areas.

Previous funding from the City includes:

October 2006 \$5,000 October 2007 \$5,000 \$5,000 September 2008 September 2009 \$5,000 September 2010 \$5,000 September 2011 \$5.000 September 2012 \$7,000 September 2013 \$9,500 September 2013 \$3,025 (Alcoa Project Grant for Open Day)

The group also received \$7,000 in funding from the City through the Sustainable Event Grants Program in instalments in 2008, 2009, 2010 and 2011, which has been successfully acquitted.

The Yangebup Family Centre crèche was established in 2002 to support the need for a craft group at the centre. Previous funding from the City has contributed to providing affordable crèche services to mothers that attend the craft groups. In 2014 the Centre extended the crèche program to provide an additional session so parents can attend PlayClub with children aged 2-3 years, while younger siblings attend crèche. In 2015 the Centre would like to add an additional crèche session so they can facilitate more community workshops focussing on parenting skills and wellbeing. For this reason they have requested and increased donation of \$12,000.

Each crèche session has 19 spaces available, so three sessions will provide 57 places for children aged 0-6 years on a weekly basis, and many families use the facility on a rotating basis.

It is recommended to support this application for \$8,500 to support the craft program and the community workshops, however not the session for the PlayClub, as the City's Early Years Services currently run Atwell 3 Year Old PlayClub (where parents and children attend together) and can't afford to run a crèche for the younger children for their program, so it is not justified to provide one for an external provider when the City can't provide a crèche for its own program.

Applicant: Cockburn Toy Library

Requested: \$4,000 Recommended: \$4,000

The Cockburn Toy Library is a 100% volunteer run service that encourages the sharing of resources such as toys through a loan system to the community. The library supports approximately 40 active family memberships with the ability to grow if required.

Previous funding received from the City includes:

March 2003 - \$1,283 (Community Grant – New Venue)
March 2008 - \$2,000 (Community Grant – New Toys)

 September 2011
 \$4,000 (Donation)

 September 2012
 \$4,000 (Donation)

 September 2013
 \$4,000 (Donation)

The Cockburn Toy Library has requested a \$4,000 donation to help with their rental expenses. The funding from the City allows the group to use their membership income to keep toy supplies in excellent condition and purchase new toys to meet needs within the community. The result is that they have an extensive, relevant and modern toy catalogue that will increase their membership base in the Cockburn community.

The application has the support of the Chief Executive Officer of the Meerilinga Young Children's Foundation and the City's Children's Services Officers. The requested donation of \$4,000 is recommended for approval.



# GAD 21/10/2014

Applicant: Cockburn Central YouthCARE Council

 Requested:
 \$48,100

 Recommended:
 \$34,000

The Cockburn Central YouthCARE Council has requested a donation of \$13,000 towards operating costs of its chaplaincy service (4 days per week) at Lakeland Senior High School (LSHS). This service has been supported by the City since 2006, however inflation has continued and costs of living have risen, and the donation has not been increased over time, so they are respectfully requesting a review of the amount and an increase to \$13,000.

In addition, they are requesting \$35,100 and proposing to supplement chaplaincy services expected to be funded by the Commonwealth's National School Chaplaincy Program (two days per week) with an additional day per week in each of the 4-5 needy primary schools in their district, likely: Yangebup Primary School, South Lake Primary School, Jandakot Primary School, Success Primary School, Harmony Primary School and/or Beeliar Primary School (subject to the participating schools contributing 30% of the extra funding needed in addition to the 70% Commonwealth funding).

Cockburn Central YouthCARE is prepared to work with the City's Children's Development Officers to identify which schools most need the funding for services following the announcement of National School Chaplaincy Program funding distribution in 2015.

In previous years, the City has provided the Cockburn Central YouthCARE Council (formerly known as Lakeland District Council of the Churches Commission of Education) the following funding:

October 2006 - \$9,000 (Chaplaincy for LSHS)
October 2007 - \$9,000 (Chaplaincy for LSHS)
September 2008 - \$9,000 (Chaplaincy for LSHS)

March 2010 - \$11,600 (\$9,000 for Chaplaincy LSHS and

\$2,600 towards Chaplaincy at Atwell College)

March 2011 - \$9,000 March 2012 - \$9,450

March 2013 - \$24,000 (Chaplaincy in four primary schools

in Cockburn)

September 2013 - \$9,000 (Chaplaincy for LSHS)

It is recommended to support this application for \$34,000, comprising \$13,000 for chaplaincy at Lakeland Senior High School and \$7,000 each for three needy primary schools in the area to be determined following the announcement of National School Chaplaincy Program funding and in consultation with the City's Children's Services. It is also

recommended that a condition of funding include an annual report from Cockburn Central YouthCARE on numbers of children benefitting from the chaplaincy service at each funded school.

Applicant: Meerilinga Young Children's Services

Requested: \$10,000
Recommended: \$10,000

Meerilinga is a not-for-profit organisation and registered charity that promotes the United Nations Convention on the Rights of the Child; working with children, their families, early childhood professionals, planners and the community to raise the status of children in Western Australia.

Meerilinga is seeking a donation to assist them to reach isolated and vulnerable children and families in the Cockburn community and increase services provided, including supported playgroups, parenting support and outreach services, at the Cockburn Children and Family Centre at 219 Winterfold Road, Coolbellup.

Unlike other Children and Family Centres that Meerilinga operates, the Cockburn Children and Family Centre does not receive any direct/Government funding and relies heavily on income generated from office rental and the casual hire of facilities. The donation will assist with raising awareness through print materials and advertisement of the services, purchasing equipment for groups and hire of a bus to assist families to attend groups.

The City has not previously provided funding to Meerilinga. It is recommended to support this application for \$10,000 subject to reports on the increase in people accessing services, and future funding conditional on meeting agreed targets as determined in consultation with the City's Human Services.

# **Sponsorship**

Applicant: Centrepoint Church

Requested: \$5,000
Recommended: \$2,000

Centrepoint Church is a family orientated church in the City of Cockburn that holds many free community events and programs to bring families and individuals together in a safe and friendly environment.



# GAD 21/10/2014

Centrepoint Church is planning to host a free fully cooked sit down breakfast for the community on Christmas Day, with a gift from Santa for every child under 12 years old. There are many families in the community spending Christmas alone, without extended family in Perth; therefore they would like to give those families the opportunity to spend Christmas with others in the community. By making it a free event it allows for any residents in the City of Cockburn to be able to attend, which combats isolation and promotes community connection. The 2013 event attracted over 450 residents however they are hoping to attract even more people this year and are planning to promote the event through advertising in local newspapers and distribution of flyers.

Centrepoint Church has requested a \$5,000 sponsorship from the City which will be used to help cover expenses on the day. In return for Sponsorship the City of Cockburn will receive logo inclusion on all advertising and promotional material.

The City has previously provided funding to Centrepoint Church as follows:

Community Grants:

March 2006 - \$9,000 (Frontline Youth Group)
October 2006 - \$1,000 (Carols by Candlelight)
October 2007 - \$1,000 (Carols by Candlelight)

September 2009 - \$2,178 (Pilot Christmas Day Breakfast)

March 2011 - \$3,789 (Watoto Children's Choir)

Sustainable Events Grants:

September 2010 - \$2,500 September 2011 - \$2,000 September 2012 - \$1,500 September 2013 - \$1,000

It is recommended to support this application for \$2,000, in line with maximum funding provided to other Christmas events through the Community Grants program.

Applicant: Parkrun Australia

Requested: \$5,000
Recommended: \$5,000

Parkrun is a not-for-profit organisation established in the United Kingdom and launched in Australia in 2011 to provide free, weekly, timed 5km running/walking events thereby increasing participation in running, promoting a healthy lifestyle and improving social cohesion in local communities. They now have 89 parkrun events every Saturday morning throughout Australia.

A weekly parkrun event is planned for Bibra Lake. The event would start at 8am every Saturday morning and participants would need to sign up once only, and then would be able to participate at any parkrun event anywhere in the world. Results are emailed to all participants on the same day and posted on the website. The event would close and be packed up by 9.30am.

Parkrun is seeking \$5,000 one-off sponsorship to assist with start-up costs to hold weekly events and require a waiver of any fees and charges relating to hire of the space within the Bibra Lake precinct as it is free for community members to participate. In return for Sponsorship the City of Cockburn will receive logo inclusion on the event website as well as flags at each event and would be acknowledged weekly during run briefings.

The application has the support of the City's Recreation Services officers and Health Promotion officer and would be happy to include information on the Be Active Cockburn website.

Parkrun have not received any previous funding from the City. It is recommended to support this sponsorship for the amount of \$5,000.

Applicant: The 29er Class Association of WA

Requested: \$5,000
Recommended: \$5,000

The 29er Class Association of WA supports 29er skiff sailors from a number of sailing clubs, including The Cruising Yachting Club, Royal Freshwater Bay Yacht Club, Perth Dinghy Sailing Club, and Mounts Bay Sailing Club. The association is involved in organising training camps, state championships and national championships for their members. The 29er class is a sailing youth development class that provides competitive racing for youth as well as mixed adult youth combinations.

The Australian 9er Championships 2014/15 is a national annual event and comes to Perth once every five years. It is a regatta that brings together 29er, 49erFX and 49er sailors from all over Australia and some international participants. The 49erFX and 49er are Olympic class boats and Australian sailors competing for selection at the next Olympic Games will be participating.

It is planned to hold the event in the Coogee Beach / Cockburn area on the waters referred to as 'Owen Anchorage' in Cockburn Sound from 28 December 2014 to 3 January 2015. The event is expected to attract 160 competitors, 80 volunteers and approximately 300 spectators.



The 29er Class Association of WA has requested \$5,000 sponsorship from the City, which will be used to cover costs associated with race management as well as hosting the event, including toilet/shower hire. waste removal bins, fuel to start/finish boats and support boats. In return for sponsorship, the City's logo will be printed on regatta shirts and banners will be displayed at the regatta venue. The City will receive recognition on the 29er website and facebook pages. Sponsors will also receive two tickets to the welcome function on 28 December 2014 and sponsors will be invited to view racing from the spectator boat.

This Association has not received previous funding from the City. It is recommended to support this sponsorship for the amount of \$5,000.

Applicant: Southern Lions Rugby Union Football Club

Requested: \$12,500 Recommended: \$12,500

The Southern Lions Rugby Union Football Club (SLRUFC) is a not-forprofit sporting club based at Success Regional Sports Facility. The Club has over 500 members ranging from representative teams in the Under 6's to Under 17's, Under 19's, Women's, Men's and the Golden Oldies Divisions, with the majority calling the City of Cockburn home.

The SLRUFC hosted the successful inaugural City of Cockburn 7's Rugby Tournament in 2013 which saw 18 teams from all over Perth come to Success Regional Sporting Facility along with 1,500 fans. The SLRUFC is now seeking financial support from the City of Cockburn to assist with the costs of hosting the 2015 Cockburn 7's Rugby Invitational Tournament on the weekend of 14 February 2015. SLRUFC have already received expressions of interest from a New Zealand team and Hong Kong Club and are sending official invitations to all Rugby WA Teams, including all Premier Teams, Schools, WA Police, Navy and Army, as well as all Sydney based Premier Grade Teams. SLRUFC are expecting a minimum of 20 teams including international, national and WA based teams to participate in their 2015 tournament, and are hoping to attract over 2,000 members of the public.

The SLRUFC have requested Naming Rights Sponsorship of \$12,500 from the City of Cockburn, towards their total costs of \$23,500 for their 2015 event. If successful, the City would benefit from inclusion on all event advertising including local media coverage via radio and newspapers, logo inclusion on event signage, opportunity to display signage at the event and logo inclusion and sponsor recognition on advertising and promotional material.

The Club received \$12,500 sponsorship from the City in the September 2013 funding round for the inaugural City of Cockburn 7's Rugby Tournament, as well as \$4,000 for a Minor Capital Works Grant towards floodlighting upgrades and a \$1,000 Sports Equipment Grant in 2014. It is recommended to support this Sponsorship for the amount of \$12,500.

Applicant: Whitefish Global Enterprises

Requested: \$4,500

Recommended: \$0

Whitefish Global Enterprises is a private organisation that hosts events throughout Perth. Their aim is to provide free events to the public to build stronger and better communities.

Whitefish Global Enterprises is planning to hold "Movies by the Sea at Port Coogee" a Christmas movie night on 6 December 2014 at Lucretia Park to celebrate the Christmas spirit and the joy of being together at this time of year. They would like to provide a free event that can be enjoyed by the local community as well as promote the notion of Act, Belong, Commit. The event is expected to attract 500-800 people, the target group being families and community members.

Whitefish Global Enterprises has requested \$4,500 sponsorship from the City for the \$6,500 project, which will be used to hold the movie night. In return for sponsorship the City of Cockburn will receive logo inclusion in all advertising and promotional material and receive recognition on the event facebook page as well as in a community newspaper article.

The City's officers have some concerns about the ability of the organisation to host the event without much information provided of previous events, financial history, or support from the community for the event, even when requested from the applicant. The organisation also seems to be affiliated with Bellagio Homes and mentioned having stalls at the event, so the officers are not sure what the organisation may be gaining from the event compared to the community benefit.

It is recommended that this application is not supported, however if the Committee chooses to recommend funding, then it is suggested only \$2,000 in line with the maximum funding provided to other Christmas events through the Community Grants program.



# Strategic Plan/Policy Implications

# **Community & Lifestyle**

- Community environments that are socially cohesive and embrace diversity.
- Communities that take pride and aspire to a greater sense of community.
- Promotion of active and healthy communities.

# **Leading & Listening**

• A responsive, accountable and sustainable organisation.

# **Budget/Financial Implications**

Council approved a budget for Grants and Donations for 2014/15 of \$1,049,591. Following is a summary of the proposed grants, donations and sponsorship allocations.

# **Summary of Proposed Allocations**

Committed/Contractual Donations	\$428,100
Specific Grant Programs	\$381,491
Donations	\$160,000
Sponsorship	\$80,000
Total	\$1,049,591
Total Funds Available	\$1,049,591
Less Total of Proposed Allocations	<b>\$1,049,591</b>
Balance	\$0

# Legal Implications

Nil

#### **Community Consultation**

In the lead up to the September 2014 round, grants, donations and sponsorship funding opportunities were promoted through the local media and Council networks. The promotional campaign has comprised of:

- Three advertisements running in the Cockburn Gazette on 09/09/14, 16/09/14 and 23/09/14.
- Three advertisements running fortnightly in the City of Cockburn Email Newsletter.
- Half Page advertisement in the August 2014 Soundings.

16		

- Promotion to community groups through the Community Development Service Unit email networks and contacts.
- All members of the Cockburn Community Development Group and Regional Parents Group have been encouraged to participate in the City's grants program.
- Additional Advertising through Community Development Promotional Channels:
  - Community Development Calendar distributed to all NFP groups in Cockburn.
  - o Community Development ENews August and September 2014 editions.

# Attachment(s)

1. Revised Summary of Grants, Donations and Sponsorship Recommended Allocations Budget for 2014/15.

# Advice to Proponent(s)/Submissioners

Applicants have been advised that they will be notified of the outcome of their applications following the November 2014 Council Meeting.

Implications of Section 3.18(3) Local Government Act, 1995

Nil

10. MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

11. NOTICES OF MOTION GIVEN AT THE MEETING FOR CONSIDERATION AT NEXT MEETING

Nil

12. NEW BUSINESS OF AN URGENT NATURE INTRODUCED BY DECISION OF MEETING BY COUNCILLORS OR OFFICERS

Nil

13. MATTERS TO BE NOTED FOR INVESTIGATION, WITHOUT DEBATE

Nil



# GAD 21/10/2014

14.	CONFIDENTIAL BUSINESS
	Nil
15.	CLOSURE OF MEETING
	7:14pm
CONF	FIRMATION OF MINUTES
Signe	d://

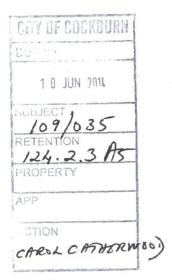
Activity OP 315		Allocated	Actual at	Proposed	
Natural Acc 6810	Description 0	2014/2015	September 2014	Adjustments 2014/15	Comments
	_				
040	Committed/Contractu				
9239	Native	25,000	0 0	25,000	Annual donation towards the Indian Ocean Australia Day Celebrations and Gracker Night (Co-ownership with City of Fremantie for 3 years) Donation to Sunoort has administration over at Abstina Apr
9310	$\neg$	86,708	0	86,708	Donatio
9242	$\neg$	3,000	3,000	3,000	Donation to cover rental costs at 8 Caffrey Place - paid as internal transfer
9317		2,000	2,000	3,000	Annual contribution to water and electricity transfer studies Cultural & Welfare Centre) included in the lease agreement as to Council Decision 8 October 2009  Annual contribution for water and electricity transfer including Portuguese Cultural & Welfare Centre) included in the lease agreement as to Council Decision 8 October 2009  Annual contribution for water and electricity transfer and the contribution for the contribution of the council Decision 8 October 2009
9322	$\Box$	110,000	34,862	110,000	Annual Continuous and Union State Continuous and During Directors States Continuous Cont
9398		9,213	0	9,21	Assists with maintenance costs as per agreement (plus CPI)
9559	Cockburn Cricket Club Insurance	1,500	1,500	1,500	Commitment included in the lease agreement (flat fee)
7812		11,000	00	11,000	Remburser and 05% of the annual rates payable by Spearwood Dalmatinac Club for 41 Azelia Road. Spearwood as to Council Decision on 14 May 2009
9123		1 200	1 200	1 200	Keducka 8 24 80 for cransipal for installation of Solar Panels. Council agreed to 50% contribution, as to Council Decision 8 May 2014  Banuset for 43 20 for cransipal for 40 for American Collaboration and The Solar Contribution.
New	100	0	0	5.000	rocquest on a star on careing on a current Careins and the Education of the Education o
	Future Allocations	87,304	0	50,813	(To be allocated throughout the year)
	Committed/Contractual Sub Total	459,591	51,075	428,100	
	:				
9196	- 18	160,000	0	58,650	Remainder of Donations funding allocated for March 2015 funding round
9196	9 95			10,00	Perfect to \$10,000 bonation towards their activities and operating costs
9196				5,000	Particles Tot 5-gUU Donaton flowards their general operating costs Request For 5-gUU Donaton flowards their general operating costs
9196			SHEET STREET	2.500	requests for 34, 2000 Denation towards their order.
9196				750	750 Request for \$750 Donation towards administrative costs to operate the program in Cockburn schools and residential facilities
9196				12,000	Request for \$12,000 Donation towards operating three creche sessions a week to support craftemoons, PlayClub and community parenting workshops
9196	Cockhum Central YouthCARE Council			4,000	Request for \$4,000 Donation towards their rental expenses
9196				10 000	Penulest In 24,000 Donation towards chaptainty service at Lakeful S13,000 and 4-5 needy primary schools in the district for an extra day a week (\$35,100) Request for \$4,000 Donation towards chapter and the service of
	1	160,000	0	160,000	ANA MARKET OF A LANGE OF THE PROPERTY OF THE P
	Sponsorships				
9197	Sponsorships	80,000	0	51,500	Remainder of Sponsorship funding allocated for March 2015 funding round
9197	Individual Sponsorships			4,000	Formal Spoisoship program for individuals as per DA ACS2
9197	parkrun Australia			5.000	KREQUESTION SOURCESTIP (DWARDS THE TITE OF LITTING TO THE
9197	The 29er Class Association of WA			5,000	request for \$5,000 Sponsorship of the Australian 9er Championships 2014/15
9197	Southern Lions Rugby Union Football Club			12,500	12,500 [Request for § 12,500 Naming Rights Sponsorship of the City of Cockburn 7s Rugby Tournament
1616	Sponsorships Sub Total	80.000	0	80.000	Request for 84,500 Sponsorship of Movies by the Sea at Port Coogee Event
				0000	
	Grants	-			
8040		35,000	0	35,000	Financial and natural resource management training sumport mooran for Conkhurn landowurses to conseque the patural bushland and washa on their seconds.
9004	۳,	15,000	540	15,000	For one off emergency and dissaster situations (revised as per Council Decision 10 February 2018).
9015	$\neg$	200	0	200	Assists young people to attend academic programs as per DA ACS11
9240	Sustainability Grants Program	33 900	3,635	45,000	Assists young people in Cockburn representing WA or Australia in interstate or international team or individual sports by providing assistance for travel to competitions
9241		5,000	50		Statish program to Fall and Statish and Cockhur Comittee access funds to assist with ball bits south for beaution for a statish program of the statish and infinite and multi-rifurd force with Committee to assist with ball bits south for the statish and stati
9312	600	65,000	0		Formal grant process for local organisations as per DA ACS2.
9314	$\neg$	1,000	0	1,000	Provide bins to schools for sports carnivals etc
9327	$\neg$	000'L	212	1,500	Assists community groups to conduct monthly meetings and events
9331	Bus Hire Subsidy	1,000	260	1.000	Friovides shall all alloration have keine for community organisations. Provides shall alloration havande the kine for community organisations.
9335	П	3,000	1,132	3,000	Transition of an article and donations are the community organisations.  Miscellandous features for small donations.
9341		4,000	280	4,000	Assists community groups to disseminate information
93/3	Sustainable Events Grants Program	3,000	0	3,000	Grants for community organisations to have events on the understanding that the event will become financially self sustainable over four years
9330		1,000		1,000	Small grants up to \$600 to cultural/arts initiatives and events
9475		9,091	0	9,091	A partnership find with Alcoad relivents community-driven mainers fallocation described alcoad under a control of the control
9490	T	10,000	0	10,000	<u>Dependent on the properties of the properties o</u>
9517		8,000	0	8,000	Cockburn Community Group Insurance Program
9535	SLLC Subsidy for Emergency Services Volunteers	4,000	1,023	4,000	Counties to match staff fund restore grown beginning to the Counties of the Co
9649		1.000	0	1,000	<u>Journal Mark Lebsular Centine type Transaction Loodee Birls Hand Dels Vollnifeers</u> Summer the stephon for careful was not the chool and to although debetted in Careful University and Careful University of the Careful Universi
9673		35,000	991	35,000	Grants matched by local sporting clubs to engage in minor capital works on Council owned facilities and our current enumerin
9674	- 8	5,000	340	5,000	For small donations to schools for minor items as per DA ACS7
9495	9	28,000	000,7	30,000	Subsidy for security devices for seniors. Recommendations to the control devices to be controlled to the control devices to be controlled to the controlled
	Grants Programs Sub Total	350,000	29,520	381,491	Invarianter of year anocator is up a anocator based on experibilitie produced in the year)
	Totals				
	Totals	1,049,591	80,595	1,049,591	
	Balance	1,043,331		1,049,09	



## Government of Western Australia Department of Local Government and Communities

Your Ref: 109/035 Our Ref: E1417021

Carol Catherwood
Coordinator Strategic Planning
City of Cockburn
PO Box 1215
BIBRA LAKE DC WA 6965



Dear Ms Catherwood

Thank you for your letter of 27 May 2014 concerning Developers Contribution Plans.

The issues you raise have been the subject of discussion with the Department of Planning for some time. I am aware that the Department is giving consideration to ways in which these issues could be managed.

If it eventuates that the recommendation of the Local Government Advisory Board impact on Developers Contributions areas, further information will made available as required.

In the period up until announcement, the City of Cockburn should continue to make decision in the interests of the good government of the existing district. This includes the consideration of Developers Contribution Plans.

Please let know if I can be of further assistance.

Kind regards

Scott Hollingworth

Executive Director Metropolitan Reform

Department of Local Government and Communities

CC: Sue Burrows, Department of Planning

Gordon Stephenson House 140 William Street Perth WA 6000 GPO Box R1250 Perth WA 6844 ecall: 1800 620 511 (Country only)

Tel: (08) 6551 8700 Fax: (08) 6552 1555 Freecall: 1800 620 511 (Country only) Email: info@dlgc.wa.gov.au Website: www.dlgc.wa.gov.au

Date:		
Dale.		

Our File: 109/027

Mr Stephen Cain Chief Executive Officer City of Cockburn PO Box 1215 BIBRA LAKE WA 6965

Dear Stephen

## Notice to Revoke Previous Council Decision 10 April 2014 (Minute No 5293)

We, the undersigned, hereby give notice to revoke the following decision of Council carried on 10 April 2014, pursuant to Regulation 10 of the Local Government (Administration) Regulations, 1996.

## Item 21.1 (Minute No 5293) (OCM 10/04/2014) – Consider Submissions and Adopt Town Planning Scheme No 3 Amendment 103 – Amending Development Contribution Area 14 Cockburn Coast: Robb Jetty and Emplacement Precincts

"That Council

- (1) endorse the Schedule of Submissions prepared in respect of Amendment 103 to City of Cockburn Town Planning Scheme No. 3 ("Scheme");
- (2) modify Scheme Amendment No. 103 as follows:
  - 1. Item 'North Coogee Foreshore Management Plan Proposals (excluding rebuilding of the groyne)' to remain as 'Subregional West' catchment as currently provided for in Development Contribution Plan 13
  - 2. Item 'Cockburn Coast Foreshore Reserve Proposals (excluding coastal protection measures)' to shift to 'Subregional West' catchment to align with current foreshore item currently provided for in Development Contribution Plan 13
  - 3. Item 'Cockburn Coast Beach Parking' to shift to 'Subregional West' catchment to align with current foreshore item currently provided for in Development Contribution Plan 13
- (3) Subject to modifications outlined in (2) above being undertaken, adopt Scheme Amendment No. 103 for final approval for the purposes of:
  - 1. Amending Schedule 12 of the Scheme text by inserting the following items in Development Contribution Area 13 Community Infrastructure, under 'Infrastructure and Administrative Items to be Funded' as follows (additional wording shown in **bold** text):

Infrastructure and administrative items to be funded Regional

Coogee Surf Club

Wetland Education Centre/Native Ark

Cockburn Central Recreation and Aquatic Centre

Cockburn Central Community Facilities Visko Park Bowling and Recreation Club

Coogee Golf Complex (excluding the pro shop and

restaurant components)

Bibra Lake Management Plan Proposals

Atwell Oval

Sub Regional—East

Cockburn Central Library and Community Facilities

Cockburn Central Playing Fields

Anning Park Tennis

Cockburn Central Heritage Park

Bicycle Network—East

Sub Regional—West

North Coogee Foreshore Management Plan Proposals

(excluding rebuilding of the groyne)

Phoenix Seniors and Lifelong Learning Centre

Beale Park Sports Facilities

Western Suburbs Skate Park

Bicycle Network—West

Dixon Reserve/Wally Hagen Facility Development

(excluding the café component)

Cockburn Coast Foreshore Reserve (excluding

coastal protection measures)

Cockburn Coast Beach Parking

Local

Lakelands Reserve

Southwell Community Centre

Hammond Park Recreation Facility

Frankland Reserve Recreation and Community Facility

Munster Recreation Facility

Cockburn Coast Sport Oval and Clubroom

(including land cost)

Administrative costs including -

Costs to prepare and administer the Contribution Plan during the period of operation (including legal expenses, valuation fees, cost of design and cost estimates, proportion of staff salaries, computer software or hardware required for the purpose of administering the plan).

Cost to prepare and review estimates including the costs for appropriately qualified independent persons.

Costs to prepare and update the Community Infrastructure Cost Contribution Schedule.

(3) ensure the amendment documentation, once modified, be signed and sealed and then submitted to the Western Australian Planning Commission along with the endorsed Schedule of Submissions with a request for the endorsement of final approval by the Hon. Minister for Planning and for the Minister's consideration to take into account the preferred proposal for local government reform as it relates to the City of Cockburn should it be known at the time of their consideration;

- (4) advise those parties that made a submission of Council's decision accordingly;
- (5) request the Western Australian Planning Commission consider participation in the proposed DCP13 with a view to effectively 'seed funding' the oval proportionate to the area previously reserved for recreation (portion of Lot 2110 Bennett Ave) which were rezoned from 'Parks and Recreation' to 'Urban' under the Metropolitan Region Scheme via Amendment 1180/41;
- (6) advise the Western Australian Planning Commission and Department of Local Government and Communities that this amendment further builds upon the City's comprehensive development contribution planning framework, as it relates to both community infrastructure and to infrastructure necessary for progressing structure planning across fragmented land holdings. This amendment has been carefully progressed in the full knowledge of Council in respect of its municipal funding obligations. This amendment also relates to a DCP which has an operational period until at least 30 June 2031. Both agencies therefore need to carefully consider how the City's DCP can practicably be rationalised if a reform proposal is adopted which disaggregates the City; and
- (7) request a formal response from both the Director General of the Department of Planning and the Department of Local Government and Communities following Council giving them advice as per Part (6) above".

If successful, an alternative motion will be considered at the Ordinary Meeting on 13 November 2014, proposing as follows:

"That Council:

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- endorses the Schedule of Submissions prepared in respect of Amendment 103 to City of Cockburn Town Planning Scheme No. 3 ("Scheme");
- advises the Western Australian Planning Commission that the City of Cockburn no longer wishes to proceed with Scheme Amendment No. 103;
- provides the Western Australian Planning Commission with a summary of the reasons related to this decision not to proceed with Scheme Amendment No. 103;
- requests the Western Australian Planning Commission return all copies of previously signed and sealed Scheme Amendment No. 103 documents as they are signed in accordance with a rescinded decision;
- advises the applicant and all submitters of this decision; and
- advises the City of Fremantle of this decision.

Todio sinociciy	
	Sign:
	Sign:
	Sign:
	Sign:

## SCHEDULE OF SUBMISSIONS PROPOSED SCHEME AMENDMENT NO 103 TO CITY OF COCKBURN TOWN PLANNING SCHEME NO 3 – ADDITIONAL ITEMS TO DEVELOPMENT CONTRIBUTION PLAN 13 (COMMUNITY INFRASTRUCTURE)

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
1	Western Power 363 Wellington Street PERTH WA 6000	Western Power does not have any specific comments at this time to the above proposal, however we would appreciate being kept informed of developments. As there are overhead power lines and/or underground cables, adjacent to or traversing the property the following should be considered, prior to any works commencing at the above site/development/property or if any alignments, easements or clearances are encroached or breached.	Noted — this is a scheme amendment to introduce additional items to an existing development contribution plan, not to undertake works. These are subject to separate approval processes.  No changes are recommended (or requested) based on the content of this submission.
		Working in proximity to Western Power Distribution Lines All work must comply with Worksafe Regulation 3.64 Guidelines for Work in the Vicinity of Overhead Power Lines.	The recommendation is to not proceed with this amendment.
		If any work is to breach the minimum safe working distances a Request to Work in Vicinity of Powerlines form must be submitted. For more information on this please visit the Western Power Website links below:	
		http://www.westernpower.com.au/safety/WorkingAroundPowerlines/working near electricity.html	
		http://www.westernpower.com.au/safety/DialBeforeYouDig.html or www.1100.com.au	
		http://www.commerce.wa.gov.au/WorkSafe/	
		If you require further information on our infrastructure including plans, please complete a request for Digital Data If you require relocation or removal of our infrastructure, please complete the below application.	
	,	Please note: Western Power must be contacted on 13 10 87, or complete the attached DQA form, if your proposed works involve:	

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		A) Any changes to existing ground levels around poles and structures. B) Working under overhead powerlines and/or over underground cables.  Western Power is obliged to point out that any change to the existing (power) system; if required, is the responsibility of the individual developer.	
2	Australand Holdings Ltd (AHL) Level 2, 115 Cambridge Street West Leederville WA 6007 Address of Property Affected by Scheme: Cockburn Central development	I write on behalf of Australand Property Group's Cockburn Central project in making this submission on proposed Scheme Amendment No. 103.  As the City of Cockburn would be aware, Australand Property Group has made considerable commitments within the City, in particular in major developments in Port Coogee and Cockburn Central.  Australand Property Group has a number of concerns regarding Development Contribution Plan 13 (Community Infrastructure) and the proposed modification.  The main concern is not the payment of contributions for community facilities, but the method of calculating the contributions and the unforseen significant increases in the contribution rates.  State Planning Policy 3.6 (Development Contributions for Infrastructure) states that "development contributions must be levied in accordance with the following principles —  1. Need and the nexus 2. Transparency 3. Equity 4. Certainty 5. Efficiency 6. Consistency 7. Right of consultation and arbitration 8. Accountable".  Development Contribution Plan 13 has led to a lack of certainty in	Noted – the advertised proposal was to introduce additional items to an existing development contribution plan, not to change the methodology of DCP13.  Amendment 81 which introduced DCP13 was considered by Council, the WA Planning Commission and ultimately, the Minister for Planning against these principles.

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		respect to development costs and project feasibility, especially for large projects, due to the recent substantial variations to the contribution rates. The lack of notice given to developers of the significant variations to the contribution rates also makes it difficult for developers to plan ahead for these.	Scheme (consistent with the SPP) to be reviewed at least annually. City officers try to ensure the review coincides with the financial year. It should be noted developers are able to pay their contribution liability in advance if they want certainty from the outset of a project.
		Earlier this year, the contribution rate under Development Contribution Plan 13 for Cockburn Central increased by 36%. The inclusion of Cockburn Coast development has added to this increase by a further \$231/dwelling, which is concerning given the increase in yield (as a result of the inclusion of Cockburn Coast). This has all occurred within a 6 month period which adds to the uncertainty of future developments within the City.	As part of the annual review (at the commencement of the financial year) the contribution rate for the Cockburn Central locality reduced by \$116.06. It is noted one of Australand's developments is in the nearby locality of Success and there was an increase in that locality of 31% as part of the annual review. This is attributed to the fact that total costs increased by \$336,809.71 and
		These contribution increases significantly impact on development costs for large projects and consequently on housing affordability. As we previously advised the City, Australand has concern about the equity in applying contribution rates on a per lot/dwelling basis. Calculating contribution rates on a per lot/dwelling basis, rather than on a per hectare basis, as in other Development Contribution Areas, is a disincentive to undertaking high density development in infill areas and activity centres to achieve the housing targets of the City and the WA Planning Commission (WAPC), as opposed to greenfield subdivision/development. A more equitable method to calculate the contribution rate would be on a per hectare basis. This calculation methodology would not adversely impact on the Council's collection, but equitably distribute the need/nexus.	only 50 lots were created in the 2011-12 year.  Noted – this proposal was to introduce additional items to an existing development contribution plan, not to change the methodology of DCP13. This issue was raised/considered when Amendment 81 sought to introduce DCP13 originally.
		This inequity is exacerbated by the diminished household sizes in higher density accommodation, and again, when amenity is provided in apartment developments (gyms, swimming pools etc). In both cases, this lessens the burden on Council Community Infrastructure by virtue of less demand/dwelling and less patronage/usage of community infrastructure respectively.	Noted – this is a proposal to introduce additional items to an existing development contribution plan, not to change the methodology of DCP13. This issue was raised/considered when Amendment 81 sought to introduce DCP13 originally.
		A further omission in the amendment is the inclusion of the Cockburn West and Banjup development which it is understood are both at significant stages of planning. In correspondence from the City dated 17	The City is only able to advertise the items proposed by this amendment to add to the current version of DCP13. The recommendation is to not proceed with this

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		June 2013, it was advised that these developments would 'probably start to reduce some of the 'per dwelling/lot' rates". It is requested that these developments be included at this time to provide certainty and definition to future development within the City.	amendment. There is another amendment now gazetted (related to the Stockland's Banjup proposal – Amendment 98) which also sought to add items to DCP13. Importantly, with that amendment comes additional population not previously able to be accounted for within DCP13. It has only recently become reasonable to factor in additional population from the Cockburn Central West (CCW) proposal and the Banjup development. The residential development envisaged by both proposals had not been contemplated at the time of DCP13's introduction. With the CCW proposal soon to be forwarded to the DoP for their consideration, and the recent rezoning of the Banjup land to 'Urban' under the MRS, population figures will soon be updated. The City recently engaged its demographers to undertake a population review (ahead of the 5 year scheme requirement) and this has now been completed.
		Further to correspondence from the City, we wish to undertake a review of the calculations of contribution rates under Development Contribution Plan 13. We therefore request the relevant information used to inform the contribution rates is forwarded prior to formal Council endorsement of this Scheme Amendment and forwarding to the WAPC.	City officers have met with and written to the submitter separately to explain the review process afforded by the Town Planning Scheme. The process is entirely at the applicant's cost and therefore it is important to ensure they understand and accepted this. Officers have now responded to several documentation requests this submitter has made regarding infrastructure costs.  No changes to the amendment are recommended based on the content of this submission.  The recommendation is to not proceed with this amendment.
3	Australand Holdings Ltd (AHL) c/- Taylor Burrell Barnett PO Box 8186 Subiaco East WA 6008 Address of Property Affected	This submission has been prepared by Taylor Burrell Barnett on behalf of Australand Holdings Ltd (AHL), developers of Port Coogee, in response to proposed Amendment 103 to City of Cockburn Town Planning Scheme No. 3 which seeks to introduce additional items to be funded via development contributions for community infrastructure.	

NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
	by Scheme: Port Coogee development	Port Coogee is a developing project that has already delivered approximately 370 lots, and has invested a substantial amount in the provision of community infrastructure. A review of proposed Amendment 103 has led to serious concern about the proposed contribution amount per dwelling which is proposed to jump from \$3636.23 (2013/2014) to \$5,321.85 for the same year under the proposed amendment according to Schedule 6 of the Development Contribution Plan Report accompanying the proposed Amendment and the validity, equity and consistency of the proposed additional infrastructure items.	During advertising of this proposal, the current (2013/14) contribution rate under Development Contribution Plan 13 (DCP13) was \$3,636.23 per new lot/dwelling for the Coogee/North Coogee locality.  The estimated rate (with the proposed additions considered by this amendment) has been advertised as \$5,321.85 per new lot/dwelling for the Coogee/North Coogee locality.  The City is only able to advertise the items proposed by this amendment to add to the current version of DCP13. It is noted, the recommendation is to not proceed with this amendment.
		In addition there is also concern about the level of detail provided to gauge the accuracy of the estimated costs and the lack of recognition for the substantial investment in community-based facilities and initiatives that would appear to be similar to the proposed additional 'Regional' items.	As per State Planning Policy 3.6 (SPP3.6), the City's Town Planning Scheme requires the costs to be based on the best and latest available estimates. The applicant has appended cost estimates for each infrastructure item. These have been prepared by valuers, engineers and landscape architects and considered to be sufficiently detailed.
		<ul><li>The purpose of this submission is to:</li><li>1. Register a submission on the proposed amendment to hold the right to make a more detailed submission in due course.</li></ul>	This was the only submission received from this submitter within the advertising period. Email advice from this submitter indicates they are planning to lodge a more detailed late submission elaborating on these issues raised but not raising new issues. At the time of finalising this Schedule of Submissions and associated Council Report, no additional feedback had been received. However, this submitter did take time to meet

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			with the assessing officer and Director to elaborate on their concerns. The Council Report includes discussion on this meeting.
		<ol> <li>Strongly object to the proposed increased contribution amount per dwelling which would appear to jump 46.35% for the current year under the proposed Amendment.</li> </ol>	As noted above, there was another amendment now gazetted (related to the Stockland's Banjup proposal – Amendment 98) which also sought to add items to DCP13. City officers have modelled the impact on DCP13 if both Amendment 98 and this proposed Amendment were to be gazetted. The estimated rate would then be \$4,137.70 per new lot/dwelling for the Coogee/North Coogee locality. This is an increase of \$501.47 (or 13.79%) on the current rate. However, the recommendation is to not proceed with this amendment.
		3. Strongly object to the seemingly inequitable \$5,321.85 contribution for Coogee/North Coogee which is considerably higher than any other area, particularly when three of the four items proposed to be added are for regional benefit.	As noted above, there is another amendment now gazetted (related to the Stockland's Banjup proposal – Amendment 98) which also sought to add items to DCP13. City officers have modelled the impact on DCP13 if both Amendment 98 and this proposed Amendment were to be gazetted. This would see the rate for the Coogee/North Coogee locality drop to lowest of all localities in the City of Cockburn (due to the high number of future dwellings to share the infrastructure demand amongst). However, the recommendation is to not proceed with this amendment.
		4. Question the validity, equity and consistency of the additional items to be included.	The rationale for each item was documented in the Infrastructure Sheets contained in Appendix 2 of the DCP13 Development Contribution Plan Report. The items are also discussed in the District and Local Structure Plans undertaken to date.
		At the 'Regional' level the proposed additional foreshore related items are similar to those provided at Port Coogee which are not included as contribution items. The proposed additional items should be removed or	The notion of adding the Port Coogee infrastructure was raised during consideration of Amendment 81 (which introduced DCP13 several years ago). City officers still

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	the Port Coogee community infrastructure should also be included within Amendment 103 for consistency.	believe the same response is appropriate, which was:  "As noted in the Port Coogee Revised Local Structure Plan, in March 1996, the WA Planning Commission and CMD and Australand entered into a Heads of Agreement. In May 1997, the State Government and Australand signed a Project Agreement, which was revised and endorsed again by Cabinet in February 2000.  The State Government made a significant investment which was given over to the developer to facilitate this development with the State's contribution of approximately 40% of the land holding plus the seabed area.  The structure plan also notes the following key issues of community concern:  The loss of the northern section of Coogee beach and associated dune system;  Impact on an area of seagrass meadows in the south western corner of the development site;  Public accessibility to the waterfront; and  The removal of the Omeo wreck.  As a result of these issues being raised and to try and resolve some of these concerns, a variety of elements were incorporated in the structure plan approved. Many of these elements are now put forth by the developer further in this submission as contributions which the broader Cockburn
		community should pay for".  Addition of the Port Coogee items is not considered appropriate given the above.
	At the 'Local' level the extent of land and improvements relating to the proposed Cockburn Coast Sport Oval and Clubroom included as	This oval will service an area slightly larger than just the Cockburn Coast development. It will cater for the whole

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	contribution items requires clarification. The DCP report refers to the oval being jointly used by an adjoining local primary school, which is to be accommodated on only 1.2ha of land, significantly less than the current standard primary school site size requirement of 4ha or 3.5ha where a shared oval scenario is intended.	suburb of North Coogee and Coogee. Therefore it is more appropriate to distribute the cost for this oval beyond this development to be a local item for Coogee and North Coogee.
		In terms of the sizing of the school site and the adjacent district open space (oval) the standards for provision have effectively been 'overruled' by the introduction of the 2009 District Structure Plan by the WAPC.
		Ordinary planning requirements for primary schools The ordinary requirements (which don't apply here) would have been a 4ha min school site (if oval on site) or 3.5ha min school site (if oval on adjacent POS). Primary schools are also normally provided for 1 per 1500 dwellings. Cockburn Coast provides for 5193 dwellings (i.e. 3.4 primary schools). Given the capacity of adjacent schools and the assumption there would be less demand as most dwellings were apartments, only one school was required.
		Cockburn Coast requirement for primary school Via the DSP/MRS rezoning process, the WAPC annotated a reduced (~1.5ha) size school site (2 storey) to be collocated with the (~3ha) District Open Space which would provide their playing field.
		The mechanism to secure the playing field is given by the DSP as development contributions. It also mentions the school site as being via development contributions. However, WAPC has a standard condition for primary school sites that it includes in areas of multiple ownership for pro-rata contributions to the school site. This can cover the school site itself, but the City is still left with the need to collect for the oval site which serves the catchment of Coogee/North Coogee.
	It is unclear as to whether the portion of land and facilitates for use by the primary school are included in the cost to the DCP area - i.e.	Both the DSP and the LSP indicate the oval as City land, not DET land. This is quite important given the

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		whether the cost per dwelling in the Coogee/North Coogee area includes or excludes the appropriate amount equating to the benefit received by the school. The oval and clubroom and associated land component relevant to the primary school should not be a cost within the DCP.	oval site also contains a row of Moreton Bay fig trees (included in the City's Local Government inventory). It also provides the City with control over matters like fencing of the reserve as well as access after school hours and weekends. The site does not form part of the local public open space requirement, it is in addition. Use of the site for sport (cricket and AFL) will be outside of school hours regardless.
		5. Request Amendment 103 be modified to acknowledge the additional community based contributions and agreements made by AHL in relation to the project and AHL be credited accordingly, these include:	As outlined further above, it is not considered appropriate to include the Port Coogee items in DCP13. Furthermore, the recommendation is to not proceed with this amendment.
		Port Coogee Foreshore Areas	
		Port Coogee Regional Dual Use Path	
		Port Coogee Marina Boardwalks & Fishing Platforms	
		Port Coogee Community Centre Facility	
***************************************		Boat Launching Facilities	
***************************************		Cockburn Road Reconstruction	
		Groundwater Interception Drain	
		CONCLUSION	
		As stated above, we intend to make further comment in relation to Amendment 103 in due course. In the meantime, we trust the above comments will be of assistance in your consideration of the proposed. We would be pleased to meet with you to discuss these matters further if you require.	No changes are recommended based on the content of this submission.
4	Paino and Associates C/- MGA Town Planners 26 Mayfair Street West Perth WA 6872	This submission responds to Amendments 94 and 103 to the City of Cockburn Town Planning Scheme No 3.	Noted. As this report deals with Amendment 103, only the relevant sections of this submission are responded to. For responses on matters concerning Amendment
	Address of Property Affected by Scheme:	Amendment 94 proposes to include a Developer Contribution Plan (DCP) specific to the Robb Jetty and Emplacements precincts of the Cockburn Coast Development Area. While Amendment No 103	94, see the Schedule of Submissions regarding that amendment.

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	Lot 70 Bennett Avenue and Lot 66 & 67 Garston Way/Darkan Avenue	proposes additional items be included within DCP 13, making provision for contributions from the Cockburn Coast Development towards infrastructure within the greater City of Cockburn area.  The DCPs are inter-related because both apply to the Cockburn Coast Development. This submission therefore relates to both amendments 94 and 103, combining comments rather than making two separate submissions.  EXECUTIVE SUMMARY	
		<b>Ground 1</b> The State Government has announced a programme of Local Government Amalgamation which will result in the Cockburn Coast area being transferred to the City of Fremantle. As a consequence, Amendment 103 and the proposed changes to DCP13 will become redundant in their present form.	(see comments further below)
		<b>Ground 2</b> Overall, the combined DCP costs are excessive amounting to nearly \$100,000 per 500m2 parcel of land VERSUS LESS THAN \$30,000 for most other DCP's. This cost per area of land vastly exceeds any other DCP within the State.	(see comments further below)
		<b>Ground 3</b> This is essentially a "Builtform Project", not a normal single lot residential subdivision, that all previous DCP's have been based on. The developer gets paid when units are settled, not upon subdivision of land, as in a residential subdivision. DCP contributions should be collected at the time of the completion of apartment buildings or at the very least contributions should be able to be staged at the subdividing of large lots, over say 3,000m2 ( with caveats protecting Council's right to contributions from later stages of subdivision).	(see comments further below)
		<b>Ground 4</b> Existing Open Spaces should be relocated rather than alienated and replaced by developer contributions.	(see Schedule of Submissions for Amendment 94)
		<b>Ground 5</b> The additional costs of creating the Main Street in terms of land and construction components should not be a DCP cost. The cost of providing this infrastructure should remain with the landowners in whose land the Main Street falls due to the added development potential.	(see Schedule of Submissions for Amendment 94)

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		1. Amendment 103 to be Redundant  The State Government has announced a programme of Local Government rationalisation and amalgamation within the Perth Metropolitan Region. These announcements include separating that area generally north of the Roe Highway alignment from the balance of the City of Cockburn and amalgamating those northern portions with the City of Fremantle and City of Melville respectively. The Town of Kwinana to the south is then to be amalgamated with the balance of the City of Cockburn.  The result of these changes is that the Cockburn Coast Development Area is to be excluded from the City of Cockburn and included within the City of Fremantle. Figure 1 attached to this submission shows how the Cockburn Coast area is excluded from the City of Cockburn LGA and included within the City of Fremantle. Against this background, it makes little sense to proceed with Amendment 103 as proposed and the inclusion of the Cockburn Coast Development Area within DCP13. To continue with the amendment would ultimately result in a development within the City of Fremantle contributing to infrastructure within the City of Cockburn, a situation which would need to be redressed retrospectively.  Indeed, when infrastructure items within DCP 13 are examined, they include such elements as a public golf course and an aquatic centre. The City of Fremantle within which the Cockburn Coast Development Area is to be located already has these facilities plus a range of other infrastructure items. To progress Amendment No 103 and include the Cockburn Coast Development Area within DCP 13 with an expanded range of infrastructure items will lead to this arrangement having to be un-picked once the Local Government reform process has been completed.  It makes far greater sense to discontinue Amendment 103 and to adjust DCP 13 by deleting the Cockburn Coast Area as a development area from which contributions are to be obtained.	This submission focusses on one proposal only.  In July 2013 the State Government released its model for new local government boundaries in metropolitan Perth. The Minister for Local Government invited local governments to submit proposals to the Local Government Advisory Board (the Board) by 4 October 2013.  The Board advertised number of proposals affecting the City of Cockburn in early 2014 and more recently two other proposals. Based on those recently advertised proposals, it is considered an unreasonable position to place such a DCP burden on the adjacent local government of Fremantle. The recommendation is to not proceed with this amendment

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		2. DCP Costs Excessive  DCP 13 results in a per dwelling unit contribution exceeding \$5000 while DCP 14 shows a contribution exceeding \$13,000 for each dwelling unit. The DCPs therefore impose a cost of over \$18,000 for each apartment to be developed within the Cockburn Coast Area.  Overall, the average density of residential development within the Cockburn Coast Development is around RI00. Therefore, for a 500m2 parcel of land, the developer contributions are approaching \$100,000. 500m2 is an average lot size for most bulk urban projects within Metropolitan Perth. As far as can be reasonably ascertained, developer contributions in other areas of the Metropolitan Region generally do not exceed \$30,000 per residential lot of approx 500m2. Based on this comparison it is apparent that the Cockburn Coast Development is subject to infrastructure contributions approximately 3 times those experienced in other areas. It is submitted that these contributions are excessive. They will have the impact of delaying development, making accommodation in the Cockburn Coast area less affordable and generally, they are unreasonable.	is an assumption with this argument the development, its location and the DCP items themselves are similar across Perth, which they are not. As per TPS3 and the State Planning Policy 3.6 (SPP3.6), estimated costs have been based on the best available information. Costs in this DCP are expressed as an amount per new lot or dwelling. With the higher densities in this area it is
		3. Timing of Contributions Under DCP 14, contributions are to be made upon the subdivision of land. In the circumstances of the Cockburn Coast Development, it is submitted that this arrangement is unreasonable, as it is a "Builtform" Development.	Timing of contribution payments is already determined by the Town Planning Scheme (within section 6.3). The provisions mirror those suggested by State Planning Policy 3.6. To seek to deviate from the SPP would have required the WA Planning Commission's (WAPC)
		It is accepted that SPP 3.6 specifies contributions at the time of subdivision. However, it is suggested that this requirement reflects the	consent to advertise. Without justification, the WAPC would expect the model provisions to remain. However,

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		standard approach in Western Australia to the provision of housing and that is, the subdivision of single housing lots for sale to third parties who subsequently construct and occupy a dwelling on the lot of land. In this circumstance, the developer contributions are paid when the developer effectively produces the final product, that is, the building lot.	the recommendation is to not proceed with this amendment.
		In the case of the Cockburn Coast Development, the final product will overwhelmingly be the production and sale of apartments. Accordingly, sites for apartments will be created after which there will be a lag of approximately 2 years to cover construction and marketing. As such, the developer contributions will have to be carried by the developer for a period of approximately 2 years before that money can be recouped through the sale of the respective apartments.	
		In the present economic circumstances, financing projects is difficult. Arranging more finance in order to cover DCP contributions will simply make that process more difficult and more expensive with interest accruing on the DCP contributions during construction and marketing of apartments.	·
		Accordingly, it is submitted that DCP contributions should only be made at the stage of apartment completion. At the very least, there should be a recognised ability to stage DCP payments. For example, a landowner with a 2 Ha site may wish to create an apartment site of 5000m2 for initial development with further development of the remaining 1.5Ha to occur in the future. In these circumstances, that developer should only have to pay DCP contributions at creation of the 5000m2 first stage site ie. say 50 units x \$20k = \$lm versus 200 units x \$20k = \$4m, for the whole 2 Ha. There needs to be an understanding that there will not be a contribution required of the balance 1.5 Ha parcel of land at the time of that initial subdivision, but only paid when the land is ready for development. Should this require Council's registration of a Caveat over that 1.5 Ha site, then that should be enabled by the DCP.	
		4. Existing POS should be relocated rather than replaced	
		Reserve 44273 is a Reserve for Public Recreation. Some 2668m2 of Reserve 44273 is shown within the Structure Plan to be alienated and developed for residential purposes. Public Open Space is then to be	(see Schedule of Submissions for Amendment 94)

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		provided elsewhere within the Emplacement Local Structure Plan Area.  It is submitted that this approach amounts to "double dipping". It results in existing Public Open Space being alienated and sold and land owners generally within the DCP area having to buy other land to replace that alienated Open Space. Rather, that Open Space which is to be alienated should simply be relocated. In other words, funds received from the sale of that alienated Open Space should be used to acquire the replacement land rather than contributions collected from the other landowners.	
		5. Main Street The inclusion of the additional costs of creating the Main Street as an item within DCP 14 is not accepted.	(see Schedule of Submissions for Amendment 94)
		The objection to the inclusion of the Main Street as an infrastructure item is based on the fact that the development potential of the land fronting and near to the Main Street is enhanced by this proximity. Land fronting or near the Main Street is provided with the potential for commercial development at lower levels plus residential development to a density of R160 above. This results in land influenced by the Main Street having nearly doubled the development potential of most other land within the DCP area.	No changes are recommended based on the content of this submission.  The recommendation is to not proceed with this amendment.
		Valuations carried out to support the DCP show that land set aside for Public Open Space adjacent to the proposed Main Street is valued at around \$600/m2 and is significantly higher than the valuations put on other areas of Public Open Space elsewhere within the joint Structure Plan Area. Figure 2 is a map showing the Open Spaces with the per m2 values provided against each area of Open Space. The figure shows that the most highly valued land is that land adjacent to the proposed Main Street.	
		Valuations have also been carried out for land earmarked for Scheme Roads and again, these valuations which are shown in terms of per m2 values on Figure 3 indicate that the most highly valued land is that land required for the extra width of the Main Street. Clearly, the extra development potential bestowed on that land within the vicinity of the Main Street results in this area being the most highly valued area of the combined Structure Plans. It accordingly makes little sense for	

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		developers in other parts of the Structure Plan to subsidise the provision of the Main Street when the providers of the Main Street benefit so significantly from the increased development potential.	
		Diagrams enclosed in original submission	
5	Basilia Nominees Pty Ltd C/- MGA Town Planners 26 Mayfair Street West Perth WA 6872	This submission responds to Amendments 94 and 103 to the City of Cockburn Town Planning Scheme No 3.	See response to Submission 4
	Address of Property Affected by Scheme:  Lot 65 Corner of Darkan Avenue and Rollinson Road, Lot 69 Corner of Bennett	Amendment 94 proposes to include a Developer Contribution Plan (DCP) specific to the Robb Jetty and Emplacements precincts of the Cockburn Coast Development Area. While Amendment No 103 proposes additional items be included within DCP 13, making provision for contributions from the Cockburn Coast Development towards infrastructure within the greater City of Cockburn area.	
	Avenue and Rollinson Road & Lot 68 Garston Way	The DCPs are inter-related because both apply to the Cockburn Coast Development. This submission therefore relates to both amendments 94 and 103, combining comments rather than making two separate submissions.	
		EXECUTIVE SUMMARY	
		<b>Ground 1</b> The State Government has announced a programme of Local Government Amalgamation which will result in the Cockburn Coast area being transferred to the City of Fremantle. As a consequence, Amendment 103 and the proposed changes to DCP13 will become redundant in their present form.	
		<b>Ground 2</b> Overall, the combined DCP costs are excessive amounting to nearly \$100,000 per 500m2 parcel of land VERSUS LESS THAN \$30,000 for most other DCP's. This cost per area of land vastly exceeds any other DCP within the State.	
:		<b>Ground 3</b> This is essentially a "Builtform Project", not a normal single lot residential subdivision, that all previous DCP's have been based on. The developer gets paid when units are settled, not upon subdivision of land, as in a residential subdivision. DCP contributions should be collected at the time of the completion of apartment buildings or at the very least	

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		contributions should be able to be staged at the subdividing of large lots, over say 3,000m2 ( with caveats protecting Council's right to contributions from later stages of subdivision).	
		<b>Ground 4</b> Existing Open Spaces should be relocated rather than alienated and replaced by developer contributions.	
		<b>Ground 5</b> The additional costs of creating the Main Street in terms of land and construction components should not be a DCP cost. The cost of providing this infrastructure should remain with the landowners in whose land the Main Street falls due to the added development potential.	
		GROUNDS OF SUBMISSION	
		1. Amendment 103 to be Redundant The State Government has announced a programme of Local Government rationalisation and amalgamation within the Perth Metropolitan Region. These announcements include separating that area generally north of the Roe Highway alignment from the balance of the City of Cockburn and amalgamating those northern portions with the City of Fremantle and City of Melville respectively. The Town of Kwinana to the south is then to be amalgamated with the balance of the City of Cockburn.	
		The result of these changes is that the Cockburn Coast Development Area is to be excluded from the City of Cockburn and included within the City of Fremantle. Figure 1 attached to this submission shows how the Cockburn Coast area is excluded from the City of Cockburn LGA and included within the City of Fremantle. Against this background, it makes little sense to proceed with Amendment 103 as proposed and the inclusion of the Cockburn Coast Development Area within DCP13. To continue with the amendment would ultimately result in a development within the City of Fremantle contributing to infrastructure within the City of Cockburn, a situation which would need to be redressed retrospectively.	
		Indeed, when infrastructure items within DCP 13 are examined, they include such elements as a public golf course and an aquatic centre.	

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		The City of Fremantle within which the Cockburn Coast Development Area is to be located already has these facilities plus a range of other infrastructure items. To progress Amendment No 103 and include the Cockburn Coast Development Area within DCP 13 with an expanded range of infrastructure items will lead to this arrangement having to be un-picked once the Local Government reform process has been completed.	
		It makes far greater sense to discontinue Amendment 103 and to adjust DCP 13 by deleting the Cockburn Coast Area as a development area from which contributions are to be obtained.	
		2. DCP Costs Excessive DCP 13 results in a per dwelling unit contribution exceeding \$5000 while DCP 14 shows a contribution exceeding \$13,000 for each dwelling unit. The DCPs therefore impose a cost of over \$18,000 for each apartment to be developed within the Cockburn Coast Area.	
		Overall, the average density of residential development within the Cockburn Coast Development is around RI00. Therefore, for a 500m2 parcel of land, the developer contributions are approaching \$100,000. 500m2 is an average lot size for most bulk urban projects within Metropolitan Perth. As far as can be reasonably ascertained, developer contributions in other areas of the Metropolitan Region generally do not exceed \$30,000 per residential lot of approx 500m2. Based on this comparison it is apparent that the Cockburn Coast Development is subject to infrastructure contributions approximately 3 times those experienced in other areas. It is submitted that these contributions are excessive. They will have the impact of delaying development, making accommodation in the Cockburn Coast area less affordable and generally, they are unreasonable.	
		3. Timing of Contributions Under DCP 14, contributions are to be made upon the subdivision of land. In the circumstances of the Cockburn Coast Development, it is submitted that this arrangement is unreasonable, as it is a "Builtform" Development.	
		It is accepted that SPP 3.6 specifies contributions at the time of	

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		subdivision. However, it is suggested that this requirement reflects the standard approach in Western Australia to the provision of housing and that is, the subdivision of single housing lots for sale to third parties who subsequently construct and occupy a dwelling on the lot of land. In this circumstance, the developer contributions are paid when the developer effectively produces the final product, that is, the building lot.	
		In the case of the Cockburn Coast Development, the final product will overwhelmingly be the production and sale of apartments. Accordingly, sites for apartments will be created after which there will be a lag of approximately 2 years to cover construction and marketing. As such, the developer contributions will have to be carried by the developer for a period of approximately 2 years before that money can be recouped through the sale of the respective apartments.	
		In the present economic circumstances, financing projects is difficult. Arranging more finance in order to cover DCP contributions will simply make that process more difficult and more expensive with interest accruing on the DCP contributions during construction and marketing of apartments.	
		Accordingly, it is submitted that DCP contributions should only be made at the stage of apartment completion. At the very least, there should be a recognised ability to stage DCP payments. For example, a landowner with a 2 Ha site may wish to create an apartment site of 5000m2 for initial development with further development of the remaining 1.5Ha to occur in the future. In these circumstances, that developer should only have to pay DCP contributions at creation of the 5000m2 first stage site ie. say 50 units x \$20k = \$lm versus 200 units x \$20k = \$4m, for the whole 2 Ha. There needs to be an understanding that there will not be a contribution required of the balance 1.5 Ha parcel of land at the time of that initial subdivision, but only paid when the land is ready for development. Should this require Council's registration of a Caveat over that 1.5 Ha site, then that should be enabled by the DCP.	
	,	4. Existing POS should be relocated rather than replaced. Reserve 44273 is a Reserve for Public Recreation. Some 2668m2 of Reserve 44273 is shown within the Structure Plan to be alienated and developed for residential purposes. Public Open Space is then to be	

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		provided elsewhere within the Emplacement Local Structure Plan Area.	
		It is submitted that this approach amounts to "double dipping". It results in existing Public Open Space being alienated and sold and land owners generally within the DCP area having to buy other land to replace that alienated Open Space. Rather, that Open Space which is to be alienated should simply be relocated. In other words, funds received from the sale of that alienated Open Space should be used to acquire the replacement land rather than contributions collected from the other landowners.	
		5. Main Street The inclusion of the additional costs of creating the Main Street as an item within DCP 14 is not accepted.	
		The objection to the inclusion of the Main Street as an infrastructure item is based on the fact that the development potential of the land fronting and near to the Main Street is enhanced by this proximity. Land fronting or near the Main Street is provided with the potential for commercial development at lower levels plus residential development to a density of R160 above. This results in land influenced by the Main Street having nearly double the development potential of most other land within the DCP area.	
		Valuations carried out to support the DCP show that land set aside for Public Open Space adjacent to the proposed Main Street is valued at around \$600/m2 and is significantly higher than the valuations put on other areas of Public Open Space elsewhere within the joint Structure Plan Area. Figure 2 is a map showing the Open Spaces with the per m2 values provided against each area of Open Space. The figure shows that the most highly valued land is that land adjacent to the proposed Main Street.	
		Valuations have also been carried out for land earmarked for Scheme Roads and again, these valuations which are shown in terms of per m2 values on Figure 3 indicate that the most highly valued land is that land required for the extra width of the Main Street. Clearly, the extra development potential bestowed on that land within the vicinity of the Main Street results in this area being the most highly valued area of the combined Structure Plans. It accordingly makes little sense for	

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	developers in other parts of the Structure Plan to subsidise the provision of the Main Street when the providers of the Main Street benefit so significantly from the increased development potential.	
Gosh Leather Pty Ltd C/- MGA Town Planners 26 Mayfair Street West Perth WA 6872  Address of Property Affected by Scheme:  Lot 62 Bennett Avenue North, Coogee	This submission responds to Amendments 94 and 103 to the City of Cockburn Town Planning Scheme N0 3.  Amendment 94 proposes to include a Developer Contribution Plan (DCP) specific to the Robb Jetty and Emplacements precincts of the Cockburn Coast Development Area. While Amendment No 103 proposes additional items be included within DCP 13, making provision for contributions from the Cockburn Coast Development towards infrastructure within the greater City of Cockburn area.  The DCPs are inter-related because both apply to the Cockburn Coast Development. This submission therefore relates to both amendments 94 and 103, combining comments rather than making two separate submissions.  EXECUTIVE SUMMARY  Ground 1 The State Government has announced a programme of Local Government Amalgamation which will result in the Cockburn Coast area being transferred to the City of Fremantle. As a consequence, Amendment 103 and the proposed changes to DCP13 will become redundant in their present form.  Ground 2 Overall, the combined DCP costs are excessive amounting to nearly \$100,000 per 500m2 parcel of land VERSUS LESS THAN \$30,000 for most other DCP's. This cost per area of land vastly exceeds any other DCP within the State.  Ground 3 This is essentially a "Builtform Project", not a normal single lot residential subdivision, that all previous DCP's have been based on. The developer gets paid when units are settled, not upon subdivision of land,	See response to Submission 4
	Gosh Leather Pty Ltd C/- MGA Town Planners 26 Mayfair Street West Perth WA 6872  Address of Property Affected by Scheme:  Lot 62 Bennett Avenue	developers in other parts of the Structure Plan to subsidise the provision of the Main Street when the providers of the Main Street benefit so significantly from the increased development potential.  Gosh Leather Pty Ltd C/-MGA Town Planners 26 Mayfair Street West Perth WA 6872  Address of Property Affected by Scheme:  Morth, Coogee  This submission responds to Amendments 94 and 103 to the City of Cockburn Town Planning Scheme N0 3.  Amendment 94 proposes to include a Developer Contribution Plan (DCP) specific to the Robb Jetty and Emplacements precincts of the Cockburn Coast Development Area. While Amendment No 103 proposes additional items be included within DCP 13, making provision for contributions from the Cockburn Coast Development towards infrastructure within the greater City of Cockburn area.  The DCPs are inter-related because both apply to the Cockburn Coast Development. This submission therefore relates to both amendments 94 and 103, combining comments rather than making two separate submissions.  EXECUTIVE SUMMARY  Ground 1 The State Government has announced a programme of Local Government Amalgamation which will result in the Cockburn Coast area being transferred to the City of Fremantle. As a consequence, Amendment 103 and the proposed changes to DCP13 will become redundant in their present form.  Ground 2 Overall, the combined DCP costs are excessive amounting to nearly \$100,000 per 500m2 parcel of land VERSUS LESS THAN \$30,000 for most other DCP's. This cost per area of land vastly exceeds any other DCP within the State.  Ground 3 This is essentially a "Builtform Project", not a normal single lot residential subdivision, that all previous DCP's have been based on. The

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		over say 3,000m2 ( with caveats protecting Council's right to contributions from later stages of subdivision).	
		<b>Ground 4</b> Existing Open Spaces should be relocated rather than alienated and replaced by developer contributions.	
		<b>Ground 5</b> The additional costs of creating the Main Street in terms of land and construction components should not be a DCP cost. The cost of providing this infrastructure should remain with the landowners in whose land the Main Street falls due to the added development potential.	
		GROUNDS OF SUBMISSION	
		1. Amendment 103 to be Redundant  The State Government has announced a programme of Local Government rationalisation and amalgamation within the Perth Metropolitan Region. These announcements include separating that area generally north of the Roe Highway alignment from the balance of the City of Cockburn and amalgamating those northern portions with the City of Fremantle and City of Melville respectively. The Town of Kwinana to the south is then to be amalgamated with the balance of the City of Cockburn.	
		The result of these changes is that the Cockburn Coast Development Area is to be excluded from the City of Cockburn and included within the City of Fremantle. Figure 1 attached to this submission shows how the Cockburn Coast area is excluded from the City of Cockburn LGA and included within the City of Fremantle. Against this background, it makes little sense to proceed with Amendment 103 as proposed and the inclusion of the Cockburn Coast Development Area within DCP13. To continue with the amendment would ultimately result in a development within the City of Fremantle contributing to infrastructure within the City of Cockburn, a situation which would need to be redressed retrospectively.	
		Indeed, when infrastructure items within DCP 13 are examined, they include such elements as a public golf course and an aquatic centre. The City of Fremantle within which the Cockburn Coast Development	

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	Area is to be located already has these facilities plus a range of other infrastructure items. To progress Amendment No 103 and include the Cockburn Coast Development Area within DCP 13 with an expanded range of infrastructure items will lead to this arrangement having to be un-picked once the Local Government reform process has been completed.	
	It makes far greater sense to discontinue Amendment 103 and to adjust DCP 13 by deleting the Cockburn Coast Area as a development area from which contributions are to be obtained.	
	2. DCP Costs Excessive DCP 13 results in a per dwelling unit contribution exceeding \$5000 while DCP 14 shows a contribution exceeding \$13,000 for each dwelling unit. The DCPs therefore impose a cost of over \$18,000 for each apartment to be developed within the Cockburn Coast Area.	
	Overall, the average density of residential development within the Cockburn Coast Development is around RI00. Therefore, for a 500m2 parcel of land, the developer contributions are approaching \$100,000. 500m2 is an average lot size for most bulk urban projects within Metropolitan Perth. As far as can be reasonably ascertained, developer contributions in other areas of the Metropolitan Region generally do not exceed \$30,000 per residential lot of approx 500m2. Based on this comparison it is apparent that the Cockburn Coast Development is subject to infrastructure contributions approximately 3 times those experienced in other areas. It is submitted that these contributions are excessive. They will have the impact of delaying development, making accommodation in the Cockburn Coast area less affordable and generally, they are unreasonable.	
	3. Timing of Contributions Under DCP 14, contributions are to be made upon the subdivision of land. In the circumstances of the Cockburn Coast Development, it is submitted that this arrangement is unreasonable, as it is a "Builtform" Development.	
	It is accepted that SPP 3.6 specifies contributions at the time of subdivision. However, it is suggested that this requirement reflects the	

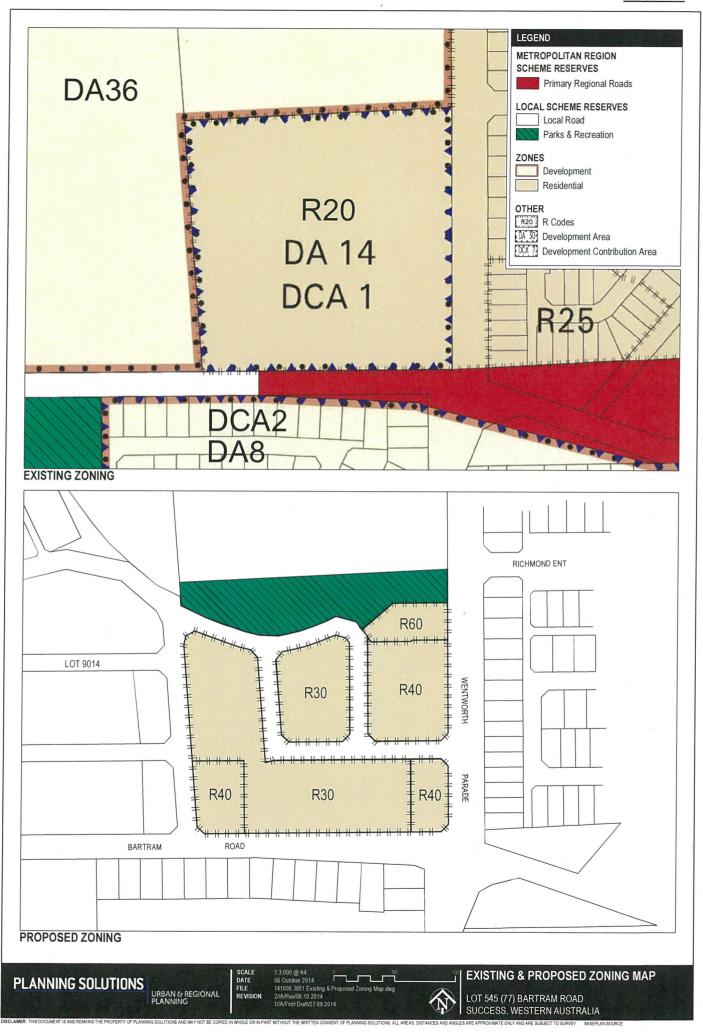
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	standard approach in Western Australia to the provision of housing and that is, the subdivision of single housing lots for sale to third parties who subsequently construct and occupy a dwelling on the lot of land. In this circumstance, the developer contributions are paid when the developer effectively produces the final product, that is, the building lot.	
	In the case of the Cockburn Coast Development, the final product will overwhelmingly be the production and sale of apartments. Accordingly, sites for apartments will be created after which there will be a lag of approximately 2 years to cover construction and marketing. As such, the developer contributions will have to be carried by the developer for a period of approximately 2 years before that money can be recouped through the sale of the respective apartments.	
	In the present economic circumstances, financing projects is difficult. Arranging more finance in order to cover DCP contributions will simply make that process more difficult and more expensive with interest accruing on the DCP contributions during construction and marketing of apartments.	
	Accordingly, it is submitted that DCP contributions should only be made at the stage of apartment completion. At the very least, there should be a recognised ability to stage DCP payments. For example, a landowner with a 2 Ha site may wish to create an apartment site of 5000m2 for initial development with further development of the remaining 1.5Ha to occur in the future. In these circumstances, that developer should only have to pay DCP contributions at creation of the 5000m2 first stage site ie. say 50 units x \$20k = \$lm versus 200 units x \$20k = \$4m, for the whole 2 Ha. There needs to be an understanding that there will not be a contribution required of the balance 1.5 Ha parcel of land at the time of that initial subdivision, but only paid when the land is ready for development. Should this require Council's registration of a Caveat over that 1.5 Ha site, then that should be enabled by the DCP.	
	4. Existing POS should be relocated rather than replaced. Reserve 44273 is a Reserve for Public Recreation. Some 2668m2 of Reserve 44273 is shown within the Structure Plan to be alienated and developed for residential purposes. Public Open Space is then to be provided elsewhere within the Emplacement Local Structure Plan Area.	

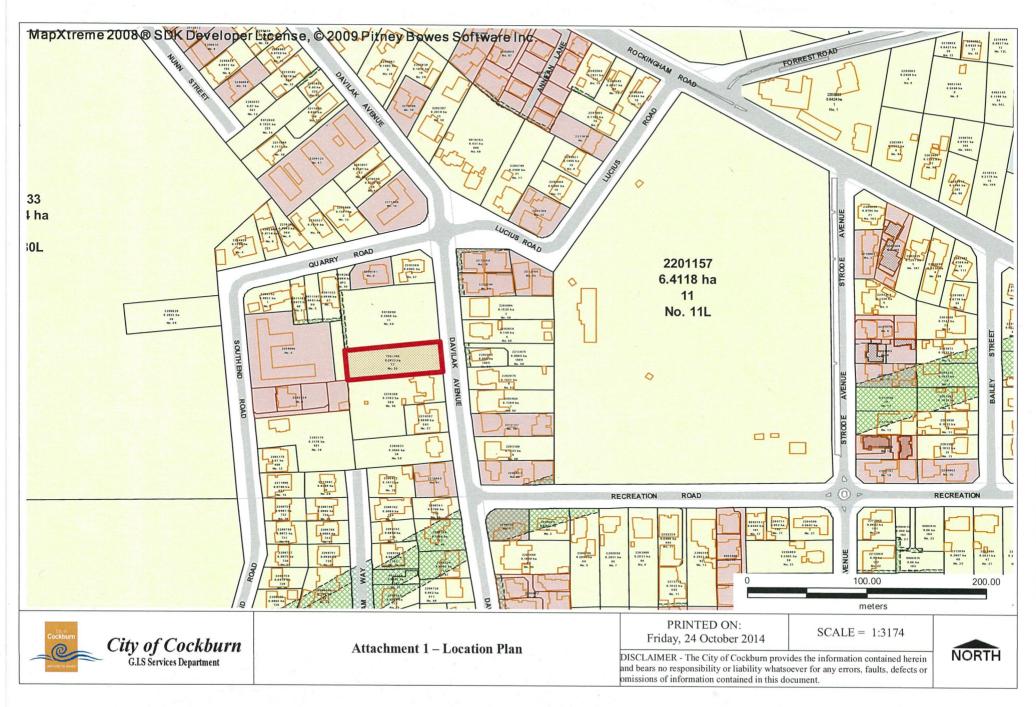
NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
	•	It is submitted that this approach amounts to "double dipping". It results in existing Public Open Space being alienated and sold and land owners generally within the DCP area having to buy other land to replace that alienated Open Space. Rather, that Open Space which is to be alienated should simply be relocated. In other words, funds received from the sale of that alienated Open Space should be used to acquire the replacement land rather than contributions collected from the other landowners.	
		5. Main Street The inclusion of the additional costs of creating the Main Street as an item within DCP 14 is not accepted.	
		The objection to the inclusion of the Main Street as an infrastructure item is based on the fact that the development potential of the land fronting and near to the Main Street is enhanced by this proximity. Land fronting or near the Main Street is provided with the potential for commercial development at lower levels plus residential development to a density of R160 above. This results in land influenced by the Main Street having nearly doubled the development potential of most other land within the DCP area.	
		Valuations carried out to support the DCP show that land set aside for Public Open Space adjacent to the proposed Main Street is valued at around \$600/m2 and is significantly higher than the valuations put on other areas of Public Open Space elsewhere within the joint Structure Plan Area. Figure 2 is a map showing the Open Spaces with the per m2 values provided against each area of Open Space. The figure shows that the most highly valued land is that land adjacent to the proposed Main Street.	
		Valuations have also been carried out for land earmarked for Scheme Roads and again, these valuations which are shown in terms of per m2 values on Figure 3 indicate that the most highly valued land is that land required for the extra width of the Main Street. Clearly, the extra development potential bestowed on that land within the vicinity of the Main Street results in this area being the most highly valued area of the combined Structure Plans. It accordingly makes little sense for developers in other parts of the Structure Plan to subsidise the provision	

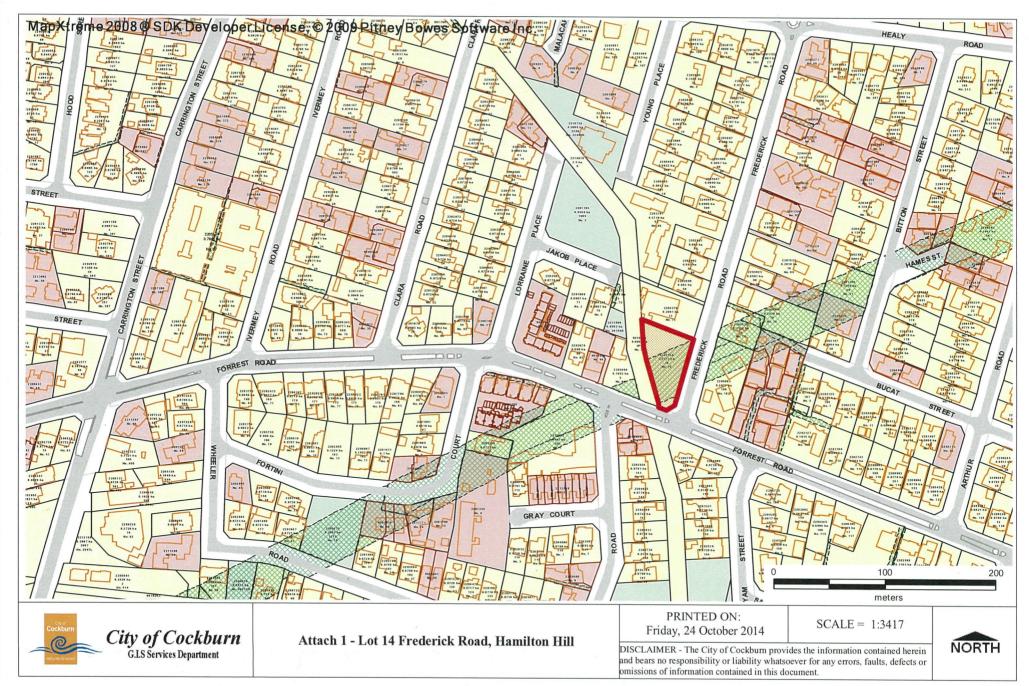
NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		of the Main Street when the providers of the Main Street benefit so significantly from the increased development potential.	
7	Water Corporation PO Box 100 Leederville WA 6902	Thank you for your letters of 29 October 2013 inviting comments from the Water Corporation regarding the proposed Cockburn Coast Developer Contributions Plan (DCP).	Noted
		While the Water Corporation is referred to as a landowner in the vicinity of the DCP, the Corporation does not own or control any private properties listed in the contributions schedule and is not liable for any cost contributions under the schedule.	Noted
		The Corporation manages Crown Reserve 5239 (Lot 1946) containing the Bennett Avenue Wastewater Pump Station and associated infrastructure. The Corporation also has several easements traversing private properties that accommodate and protect access to existing water and wastewater pipes traversing the former industrial area. In response to structure planning for the Cockburn Coast land, the Corporation has advised Landcorp and the consulting engineers about the location of these water and wastewater pipes and the need for them to be accurately reflected in the relevant reports.	Noted
		The WGE Infrastructure Servicing Report (May 2011) and the '15+ Years Infrastructure Plan' (Infrastructure Master Plan, Page 101) included some information about the existing and proposed alignment of water and wastewater pipes. However, the location of some of the existing pipes was not clear and some alignments were at odds with the proposed road layout shown on the structure plan.	Noted – this is a scheme amendment to introduce additional items to an existing development contribution plan (DCP), not to undertake works. These are subject to separate approval processes. The works covered by the proposed DCP would not include Water Corporation infrastructure.
		Wherever possible, these pipes should be retained in situ. Any pressure mains, notably the existing DN500 steel wastewater pressure main from the Bennett Avenue pump station heading southwards within easements on the alignment of the former Abattoir Loop road, must be protected within road reserves and/or or public open space.	
		It may be possible to relocate some parts of the water and wastewater pipe systems traversing the area. The feasibility of relocating this infrastructure must be established by detailed engineering investigations	As noted above, the works covered by the proposed DCP would not include Water Corporation infrastructure. No changes are recommended based on the content of

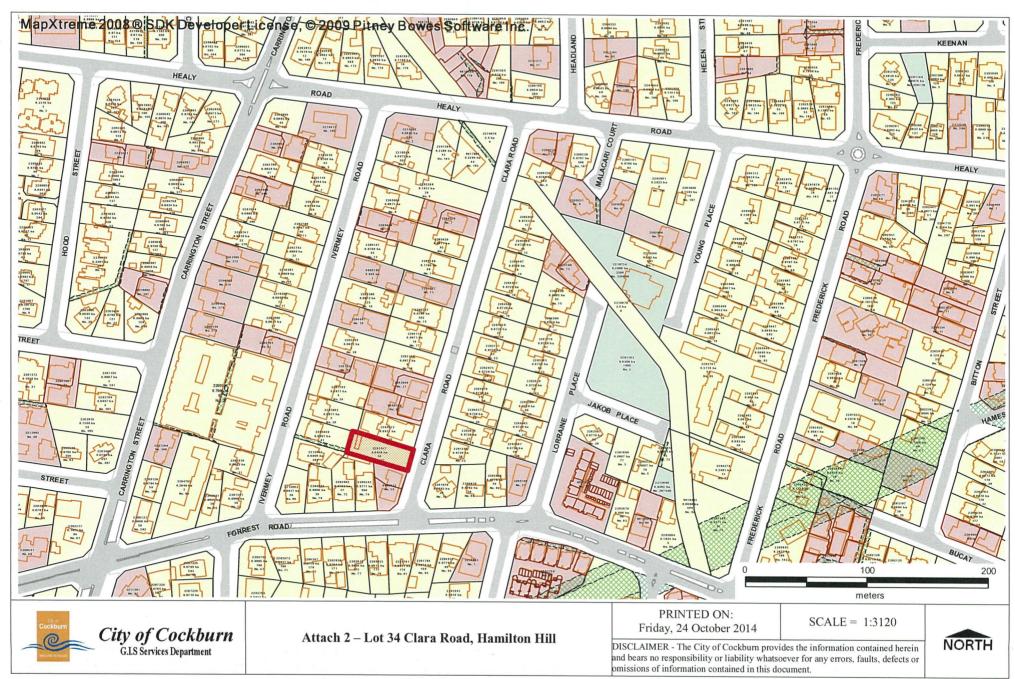
NO.	NAME/ADDRESS	SUBMISSION	RECOMMENDATION
		at the proponent's cost. The cost of relocating and protecting these pipes will also need to be borne by the land developers in the area.  The Development Contributions Schedule does not appear to include an estimation of the cost of relocating this infrastructure, or any details of which pipes if any will be relocated. It is acknowledged that it may not be practicable or feasible for the pipes to be relocated in a staged or piecemeal manner by individual subdividers. It is recommended that this matter should be clarified within the DCP and the Structure Plan reports.  If the matter is deemed to be outside the scope of the DCP, then the	
		costs associated with moving the pipes may need to be covered by private cost-sharing arrangements between the various land developers.  Diagram enclosed with submission	The recommendation is to not proceed with this amendment.
8	Main Roads WA PO Box 6202 EAST PERTH WA 6892	Main Roads has no objection to the proposed amendment.	Noted  No changes are recommended (or requested) based on the content of this submission.  The recommendation is to not proceed with this
9	Department of Education 151 Royal Street East Perth WA 6004	The Department of Education has reviewed the document and advises that it has no objection to the proposed amendment.	amendment.  Noted  No changes are recommended (or requested) based on the content of this submission.  The recommendation is to not proceed with this amendment.















Attach 3 – Approx rezone of Lot 14 Frederick Road

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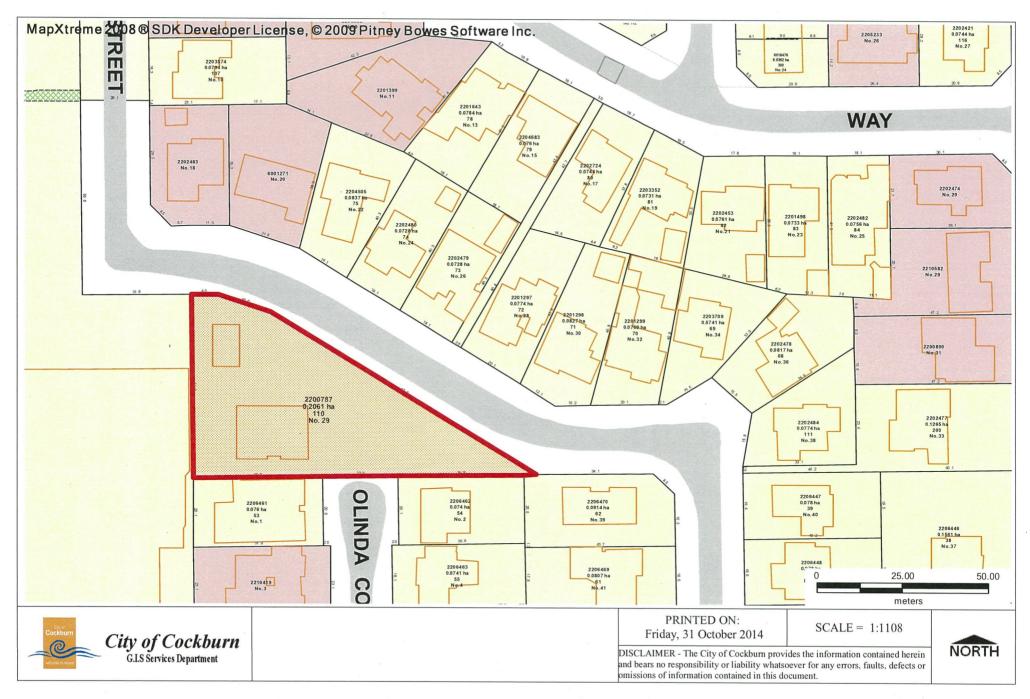
Attach 4 – Approximate rezone portion for Lot 34 Clara Rd

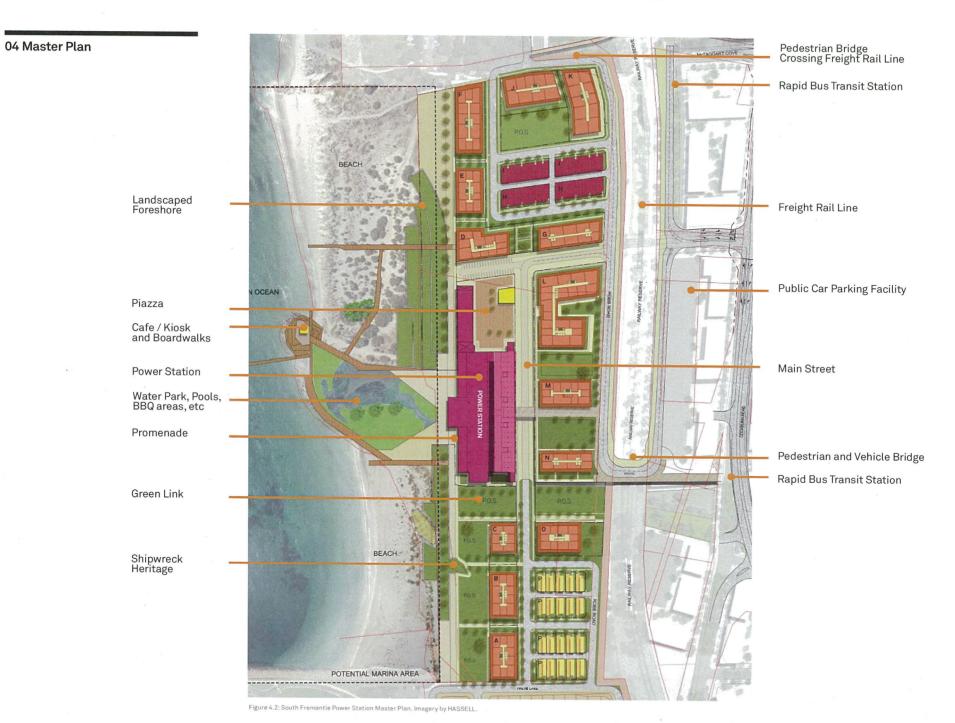
PRINTED ON: Thursday, 30 October 2014

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# South Fremantle Power Station Master Plan

### **Regional Open Space**

The Metropolitan Region Scheme Amendment 1180/41 for the Cockburn Coast District Structure Plan Area reserves a small parcel of regional open space (ROS) for Parks and Recreation between the southern end of the South Fremantle Power Station (Power Station) and to the north of the Port Coogee residential development.

The South Fremantle Power Station Redevelopment Master Plan (the Master Plan) proposes that the reserve in its current form be removed and replaced with an alternative configuration of open space and amenities in the vicinity of the Power Station and the beach. The following comments are provided in support of this proposal.

#### **Basis for Provision**

In revising the Cockburn Coast District Structure Plan (DSP) and preparing the Power Station Master Plan, LandCorp sought to gain a clear understanding of the purpose for the reserve being created in the location and whether or not any specific function was intended for the site.

Other than for the general provision of open space for regional users, two primary matters were raised in discussions with the Department for Planning and the City of Cockburn, namely:

- 1. Access to recreation space adjacent the beach; and
- 2. To provide a buffer between the Port Coogee residential development and what was then derelict contaminated former industrial land and buildings to the north. Given the unknown future land-uses and redevelopment time frames for the Cockburn Coast Redevelopment Area, the buffer would provide separation between non-compatible adjacent developments.

#### **Cockburn Coast District Structure Plan**

The Cockburn Coast District Structure Plan was prepared by the Department of Planning in conjunction with the City of Cockburn, City of Fremantle, LandCorp and a stakeholder reference group. "During this process, consideration was given to:

- responding to the regional context ensuring that the redevelopment of this exciting coastal
  area has an appropriate interface with the surrounding area, in terms of development and
  employment opportunities and transport links;
- establishing a robust framework for the delivery of sustainability objectives, including the establishment of performance targets;
- transitioning arrangements for existing industrial operations; and
- developing a plan to deliver an intensive mixed use development, which responds to Government targets for infill development and will enable the remediation of industrial land."

(http://www.planning.wa.gov.au/642.asp)

The DSP sets out to create an exceptional urban environment between Port Coogee and South Fremantle, in the context of Manning Park (part of the Beeliar regional parklands) to the east and the enhanced coastal beachfront to the west. The DSP proposes an enhanced, high amenity public realm for local, district and regional users with a range of recreational activities being accommodated in a hierarchy of open space types.

In being given responsibility to deliver the redevelopment of land within the Redevelopment Area, LandCorp initiated a review of the DSP to ensure the plan could be delivered in logical order and accordance with State Policy and best urban design practice.

The review of the DSP undertaken by LandCorp was then adopted as the Cockburn Coast District Structure Plan (II). The revised DSP retained the key provisions and objectives outlined in the DSP for the Power Station precinct.

#### **Power Station Master Plan**

Subsequent to the approval of DSP (II), LandCorp has prepared Local Structure Plans (LSP) for Robb Jetty and Emplacement, two of the three precincts provided for in the DSP. These LSPs have articulated the hierarchy of open spaces and elements of the public realm, including a number of public purpose reserves for the benefit of the local, district and regional communities. The LSPs enhance the connection and integration of adjacent streets, pathways and open space network across the precincts consistent with intent of the DSP (II).

The South Fremantle Power Station Precinct Master Plan now provides the framework for the preparation of a Local Structure plan for the Power Station and surrounding land to create an exceptional public destination and open space environment in the context of the beach and the enhanced, heritage listed Power Station buildings.

The Master plan retains a focus on providing public access for visitors to the site. Part of this will be the provision of an improved public realm for the enjoyment of regional users the foreshore, the regional pathways that traverse the site and the former Power Station itself. The function of open space as provided in the MRS parks and recreation reserve is retained, with the specific location shifted to be better integrated in the context of the master plan.

As noted above in 'Basis for provision', the open space reserve was provided in part as a buffer to the unknown future use of contaminated land and derelict buildings. The Power Station Master Plan is intended to clearly outline intended land-uses for the precinct in a manner that is both compatible with and complementary to the adjacent Port Coogee development. The interface is created with 'like for like' uses and built form that transitions to higher density development within Cockburn Coast to the north of the interface.

As such, the need for a buffer between the two sites no longer exists. The Master Plan provides a positive interface across contiguous land and uses the east-west open space adjacent the Power Station buildings as a more natural separation between precincts.

#### **Retained Heritage**

As proposed in the Power Station Master Plan, the revise open space configuration retains access to and the protection of heritage assets in the precinct. In particular, the Master plan allows for open spaces to be created and utilised around the redeveloped Power Station. This will enable to building to be integrated into the Place Management Strategy adopted for Cockburn Coast and for the provision of more sheltered open space areas to the north-east corner of the power station buildings.

South of the Power Station itself, the widened open space area provides for the retention and interpretation of known ship-wrecks in the area. These heritage assets form a small part of the grater heritage inventory that will be integrated across the Cockburn Coast project.

#### **Pedestrian Access**

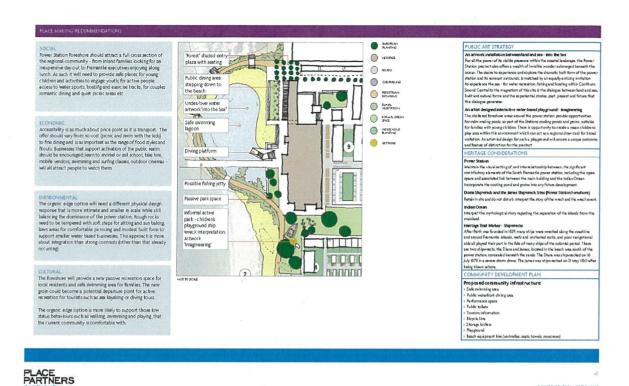
A key attribute of the DSP, DSP (II), the Local Structure Plans and the Power Station Master Plan has been the continuity of pedestrian and cyclist movement pathways throughout and across the redevelopment area. In particular and in relation to the parks and recreation reserves, the Master plan provides improved east-west accessibility from Manning Park through to the foreshore via an open space alignment. The removal of the MRS reserved area does not diminish this aspect and its relocation allows for better integration of open space for pedestrian movement and recreation amenities in the beach environment.

#### Cockburn Coast Place Making Strategy and Implementation Plan

Key to the success of Cockburn Coast as a visitor destination will be the management and maintenance of the public realm. To that end, the Cockburn Coast Place Making Strategy has been adopted to ensure a full range of opportunities is provided for all users of and visitors to the site.

As noted in the Strategy, the "Power Station is the leisure, entertainment and recreational destination of the Cockburn Coast..." The Strategy recommends that the precinct "should take advantage of the iconic nature of the power station architecture and create summer and winter spaces for year round activation."

- Power Station should be a place where anyone from Perth or beyond can feel comfortable visiting. The character needs to remain public and civic to avoid perceptions of privatisation.
- Open spaces should be used as a linking tool, not just as the paths themselves but a string of
  destinations along the paths Consider destinations e.g. bus stop and foreshore and how
  people will move between i.e. what will they see, how will they cross roads, what retail will
  they pass?
- Ensure core public spaces, particularly the foreshore, are activated by retail, food and beverage offer and public amenity to provide for all price points.
- Create activity zones based around play, food, performance/ entertainment and retail to ensure enough diverse activity for all day visitation.



The above recommendations have been addressed and provided for in the Power Station Master Plan. The series of open spaces provided accommodates a wide range of visitors to the site and a range of activities from informal promenading and 'beach-going' recreation, to more formal social and recreation activities, from shopping and dining to the enjoyment of public art, sculpture, impromptu and organised events. As such, it is considered that the Parks and Recreation reserve as proposed in the MRS is not only superfluous in this context, but does not support the optimum enjoyment of the foreshore environment, the Power Station environs or the foreshore pedestrian and cyclist networks.

#### Summary

- The parks and recreation reserve is not required as a buffer to derelict or contaminated land.
- The functions of the parks and recreation reserve are accommodated in an alternative configuration within in the revised plan.
- The parks and recreation reserve did not serve or provide for any special purpose or activity in that location.
- Parks and recreation opportunities for all users, including regional visitors are better provided for in the master plan than by the MRS Parks and Recreation reserve.
- The master plan better uses open space areas to support heritage enhancement and public realm integration.
- Pedestrian and cyclist movement is enhanced to and through the site and surrounding areas in the master plan (no loss of movement or amenity).

- The proposed open space areas are better integrated into a comprehensive urban renewal outcome rather than in the absence of a surrounding plan.
- The revised plan supports and is supported by a Place making Strategy for the Power Station as the leisure, entertainment and recreational destination of the Cockburn Coast with "summer and winter spaces for year round activation."
- Allowing the development of the MRS reserve area will enable the provision of funding to
  enhance and reinterpret the former cooling ponds and limestone revetments as a highamenity regional open beach-front environment for regional visitors. The landscape area will
  include boardwalks, grassed terraces, a possible protected swimming lagoon, public art and
  heritage interpretation.
- The district structure plan contains a number of key components, including:
  - improved beach access, via new pedestrian and vehicle connections over the freight rail line;
  - linear open space corridors, connecting the key natural features of Beeliar Regional Park. and the coastal foreshore;
  - tourism, employment and recreational opportunities provided.

These components are fully supported and accommodated in the revised plan.



Imagery of the southern area of Parks and Recreation reserve shown in the District Structure Plan Part 2 (2012), now shown in the Master Plan to be partially developed.





Residential development shown on land currently reserved 'Parks and Recreation' under the Metropolitan Region Scheme (highlighted in red)



Area as shown in the Cockburn Coast District Structure Plan Part 2 (2012) (highlighted in red)

## SCHEDULE OF SUBMISSIONS

# PROPOSED SOUTH FREMANTLE POWER STATION MASTER PLAN FOR LIFTING OF URBAN DEFERMENT

NO.	NAME/ADDRESS	SUBMISSION	COUNCIL'S RECOMMENDATION
1	City of Cockburn Landowner/Resident	Support  I definitely support the master plan for the South Fremantle Power Station. I have been living in the Coogee Area for over 21 years and I feel as many others do, that it is about time this site is developed.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
		I'm presently building a new home on Caledonia Loop in North Coogee which is very close to the power station so I will be directly affected I think the master plan has great potential. It will retain the beaches which is paramount because the local beaches are in short supply due to The Jervoise Bay industrial development.	
		It is wonderful to see that they are proposing cafés and shops overlooking the beaches. There is a definitely lack of places in WA where you can go to the beach and then enjoy a meal and/or shop. I think this will be a real winner as in the eastern states and overseas. I love the idea of a piazza for people to gather together, something that is missing in our area. I feel this master plan will be fully supported by most of the people I live next to and it will be a wonderful place for local people to meet and socialise.	
2	Christina Capalihna 1 Hershell Way Coogee WA 6166	Support  I strongly support the master plan for the South a Fremantle Power Station.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning
		I have been living in the Cockburn area all my life. Cockburn has some of the best family beaches but they tend to be overcrowded over the summer months, particularly with shortage of parking. It's great to see that the surrounding beaches will be developed as well as play areas for children. As I have a child, it will be an ideal place to go to. My son can play at the beach and play areas while I can sit at the same time, relax, have a coffee and still watch over him. There are not many places in WA where you can do this. I feel it will enhance community spirit with the piazza area. There is nothing like this in the Cockburn area. A big screen, concerts and markets could be part of this. This would also enhance culture and the arts in our community.	Commission accordingly.

Attach '

NO.	NAME/ADDRESS	SUBMISSION	COUNCIL'S RECOMMENDATION
		It would be great if protected pools for the children to swim in could be considered as many people are frightened with the threat of a shark attack. It would be an ideal place for them and would be a major tourist attraction. It's time this dilapidated building was developed.	
3	City of Cockburn Landowner/Resident	I have lived in the Cockburn area for over 30 years and I have one child and another on the way so I think it's about time that this abandoned building is finally being developed.  Also finally the residents south of the river are being given some tourist attractions and not just industrial sites. The master plan retains the beaches which is a must as well as providing play areas for children.  It appeals to me because it's a place where families can go and it will cater for appeals to the provided of the large of the l	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
4	City of Cockburn Landowner/Resident	everyone. How wonderful to have cafés and shopping so close to beaches.  Support  I've grown up in the Cockburn Area and I'm very familiar with the abandoned site of the South Fremantle Power Station.  I have had a look at the master plan for the South Fremantle Power Station and I'm happy to see there is finally a plan for the site to be developed. The plan will cater for all people and will provide a place for young families to go to. It will enhance	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
5	City of Cockburn Landowner/Resident	community spirit as it will provide a place for people to meet socially.  Support  This is an excellent plan for this unused facility. The concept of the futuristic European style piazza and mixed use subdivision gives the public a fantastic place to meet - while enjoying the adjacent beach area. It is a credit to the planners and designers. Hope it doesn't take 10 years to get off the ground.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
6	Alison Dilena 7 Fairview Street Coogee WA 6166	Support  The site is currently a dumping ground that attracts crime and anti-social behaviour.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning

NO.	NAME/ADDRESS	SUBMISSION	COUNCIL'S RECOMMENDATION
		The sooner this project is done the better.	Commission accordingly.
7	City of Cockburn Landowner/Resident	Support It is about time something is done with the old building that is just rotting away	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
8	Mark and Rosemarie Brinkhuizen 16 Woolnough Heights KARDINYA WA 6163	Support  We attended the information evening held at the City of Cockburn last night as we are building in Port Coogee. The redevelopment of this area has been a long time coming and note that the ideas for this redevelopment are both innovative and impressive.  We particularly noted the heights of the residential dwellings being restricted to a maximum of 9 storeys (of which most will be 3 to 5) is ensuring the development does not become a high rise condo type of area and feel this works with the aesthetic feeling of the coast and is mindful of other areas currently being developed. The idea of restaurants, bars, an entertainment complex, retail outlets, commercial and residential along with public open space/beaches has a great community feeling about it and will only compliment the area.  Public transport and easy access must be provided to make this project work and the idea of light rail is fantastic concept. We strongly support the Master Plan and look forward to watching it grow over the next decade or so.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
9	City of Cockburn Landowner/Resident	Support I support.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
10	Carla Patterson 11 Luscombe Way COOGEE WA 6163	Support I support this proposal. I would support connected bike paths and walkways from Port Coogee to the proposed Power Station.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
11	Sam Jones Windsor Street PERTH WA 6000	Support First off let me say that this development looks fantastic, finally something that the people of Perth can be proud of, they have got the right balance of having well needed accommodation, and being the first that I've seen in Perth to combine it with recreational space and social facilities.	Noted. The Master Plan does include the possibility of an ocean pond, as suggested. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission

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		Far too much emphasis is put on just building 'cost effective' houses and making a profit, which makes walking around some areas in Perth seem cold and hostile at times. But with a busy, bustling precinct like this, it will be incredible. Coming from London, as one would expect I'm particularly fond of preserving older buildings.  Perth won't need a 'gold coast' style beachfront as many argue for; instead this development will bring in tourists, as the Tate modern does in London. One thing I would recommend, is to have a pool actually in the ocean, I think having that alone would overtake the bell tower for the number one position on trip advisor.	accordingly.
12	Ken Ferguson 17 Rose Street South Fremantle WA 6162	Comment Really I didn't want to support or Object just comment! PLEASE don't destroy all the artwork/(or graffitti in some people's eyes). Some of it is fantastic and is part of the cultural fabric of the old power station. PLEASE consider this perspective.	Noted. The Master Plan does acknowledge the value of the urban art.
13	Jordan McLaren 52 Sussex Street Spearwood WA 6163	I would like to make a short comment to communicate my absolute support regarding the retention and regeneration of the South Fremantle Power Station. What an amazing opportunity to revitalise, while having such a tangible link to the rich history of the area. Such a wonderful opportunity to establish a world class development, tourism hub, and community asset. Perth city centre has attempted to construct iconic landmarks through the bell tower, convention centre and now potentially buildings on Elizabeth Quay and I'm sure would love to have such a unique and genuine opportunity. Hopefully it comes together and over the next 10 years or so an iconic landmark can be developed with substance and a genuine historical link with the community.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
14	Freight and Logistics Council 1 Essex Street, Marine House FREMANTLE WA 6160	policy advice to the WA Minister for Transport. Its membership comprises senior decision-makers from both industry and Government.  A key focus of the Council since its establishment is the protection of freight corridors and precincts from encroachment by incompatible land uses. We have	In Figure 1.2 referenced here, the public car park arrow has been incorrectly marked, it should be shown to the east of the rail line as it is shown in all other maps. It is recommended that this be corrected.  It is considered that the rail reserve is clearly
		made a number of submissions to the City in that respect, discussing various aspects of the overall Cockburn Coast development. Of particular concern is the impact of the development on the rail line carrying freight trains to and from Fremantle Port. This service plays a vital role in the future of the State's most	denoted in all maps, and there is no need for it to be coloured in a contrasting colour.

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		important general cargo port that should not be jeopardised by changing land uses in its immediate vicinity.	Disagree. It is not considered that the Master Plan suggests 'at-grade
		There is strong support for the Council's general position in related Government planning policy. For example, Directions 2031 and Beyond states:	crossings. It is clear that there is no atgrade crossing in this area. It is no considered necessary for all maps to annotate the pedestrian bridge, as it is
		"local planning structures and related strategic plans should factor in infrastructure sites and freight corridor needs, land use compatibility and buffer requirements as part of long term planning"	made clear throughout the document and mapping where necessary.
		Furthermore, State Planning Policy 1 notes:	This is incorrect. The RBT is an integral part of the Cockburn Coast Distriction     Structure Plan and the Integrated
		"planning should ensure that physical and community infrastructure is coordinated and provided in a way that is efficient, equitable, accessible and timely. This means protecting key infrastructure, including ports, airports, roads, railways and service	Transport Plan, and consequently this Master Plan.
		corridors from inappropriate development"  Turning to the specific focus of this letter, I would like to pass comment on behalf of	Disagree. The Master Plan is not required to provide this level of detail.  The purpose of the Master Plan is to the master.
		the Freight and Logistics Council on the South Fremantle Power Station Master Plan. The comment would include:	support the lifting of urban deferment. It in itself will not guide subdivision and development.
		1. The imagery in the Master Plan is considered unrealistic and the language unhelpful when it comes to properly representing the operation of the freight rail line. The visual representations in the document would not alert the uninformed reader to the presence of the line as the imagery on page 2 of the Executive Summary does not seem to acknowledge the existing rail freight line and appears to have a 'Public Car Parking Facility' assigned to the rail reserve., This oversight is reinforced by the paucity of text referring to freight rail operations, there being just a brief reference on pages 9-10. This is	'
		unhelpful given that the service will continue into the future with ever increasing numbers of trains.	6. Specification of these matters is premature, as this area still requires a local structure plan, subdivision and
		<ul> <li>All maps and diagrams should distinctly show the freight rail line in a colour that contrasts with the background and the line should be clearly labelled in the imagery. Misleading labels should be amended or removed.</li> </ul>	ultimately development approval. These issues will be addressed at the appropriate stage of planning.
	110000	2. The vehicle and pedestrian access arrangements over the freight rail line portrayed in the Master Plan suggest 'at grade crossings' rather than a	

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		grade-separated approach.	
		<ul> <li>Access arrangements should be clearly shown and included in elevation representations. In particular, the proposed 'horse-shoe' road design should be included as it will be a significant structure within the Master Plan area.</li> </ul>	
		3. A Rapid Bus Transit Station is shown as being part of the development. However, the PTA advises that this is not planned and the reference should be removed or amended to refer to a bus stop for local buses. Moreover, while apparently there has been some discussion about a light rail or bus priority system along the regional road system, there are no commitments from the Government in respect of funding, alignment or nature of the system.	/
		<ul> <li>Unless the developer is intending to fund this development directly, the Master Plan should not raise related expectations.</li> </ul>	
		4. The Master Plan does not identify the forecasts for freight rail operations on which planning for the concept is based. It would assist understanding of the proposal to know what forecasts have been used. The discussion on the hours of operation within the Master Plan could also be construed as misleading. While it is apparent that train movements will be during off-peak periods, it is not made clear that increasing activity will be during night-time hours.	
		<ul> <li>The forecasts for freight train movements should be quantified as predicted movements per day within selected time horizons (2020, 2030, etc) and the text should clearly indicate that a significant proportion of train movements will be during night time hours.</li> </ul>	·
		5. While State Planning Policy 5.4 lays out the Government's policy on freight impacts on the community, aspects of this Policy are presently under review with the Department of Planning. In light of this review, the methodology and approach used in the Master Plan to measure and assess noise and vibration impacts on future residents from freight rail movements should be more comprehensively explained.	
		- The Master Plan should summarise the methodology and assumptions	

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		used to support the claims about noise and vibration impacts, including predicted indoor and outdoor noise levels, with adequate information to allow the layperson to estimate the impacts that will be experienced.  6. Requiring memorials on titles consistent with State Planning Policy 5.4 is a useful and appropriate initiative to be reinforced in the Master Plan.  - Similar disclosure should be required on all advertising material and on the contract of sale for all prospective purchasers within 150 metres of the freight rail line.  The Council is not opposed to the development of the South Fremantle Power Station. However, in the interests of a sustainable balance being achieved between community amenity and freight efficiency, I believe that the points made here need to be taken account of as the Master Plan is developed.  I would be happy to elaborate on any aspect of this correspondence.	
15	Energy West Retirees	Comments	Noted This information William
	GPO Box L291 Perth WA 6842	The revealing vision to transform the Old South Fremantle Power Station including a gallery and museum has prompted the Energy West Retired Members Association to suggest the reestablishment of an Energy Museum for Western Australia in the development proposal.	Noted. This information will be passed on to Synergy, the owners of the Power Station, and LandCorp.
		There was a 'World of Energy' facility in Fremantle that was established in 1989 and closed in 2008. This served the public and added to the education of a large numbers of W A students during this time.	
	·	At the time of the closure a heritage report was prepared by Cathleen Day of Heritage Today, showing the importance of the Energy collection and the desirability of re-establishing an Energy Museum in Western Australia. (A copy of this report can be made available on request).	
		While the South West Development Commission was gifted the collection of the artefacts they have not been successful in finding a location to display this collection. It seems more appropriate that the development of the Old South Fremantle Power Station should house the future Western Australian Energy Museum.	

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		The vision of a Western Australia Energy Museum must show-explain and display the development of electricity in Western Australia from the 1800s to present day, including hydro, solar, wind, and wave power. A Western Australian Energy Museum must be extended to show the importance of petroleum and gas energy industries in Western Australia.	
		A world class energy museum would have considerable benefits for South Fremantle and Western Australia.	
		The energy industry in Western Australia could support a Western Australian Energy Museum and this could be provided by enlisting the support of, at least, the following companies:	
		<ul> <li>Museum Australia (W A)</li> <li>Western Power</li> <li>Synergy</li> <li>Gas producers and retailers</li> </ul>	
		<ul><li>Iron ore producers</li><li>Petroleum producers</li><li>Supporting electrical industry</li></ul>	
		We would be happy to provide further information and ongoing support and suggest it is timely to collect information from people involved in the energy industry development for past 50 years in Western Australia, for future generations.	
16	Australand Holdings	Objections raised.	1. Noted.
	Limited Level2, 115 Cambridge Street West Leederville WA 6007	The submission is prepared in response to the proposed South Fremantle Power Station Master Plan (the Master Plan) currently being advertised until 2 September 2014. Australand is the developer of the land directly to the south of the Power Station Precinct known as the Port Coogee estate. Port Coogee is a substantial development comprising a marina, approximately 810 residential lots, potential for approximately 1,603 residential apartments and retail and commercial floor space in the order of 10,0002 and 2000m2 respectively.	2. Noted. It is recommended that the Master Plan be modified to remove the residential development shown land reserved for 'Parks and Recreation' because it is considered important this area is retained for future recreational uses, and to provide an optimal viewing area for the Power Station.
		Whilst Australand generally supports the vision to develop the power station precinct for urban use, the purpose of this submission is to object to:  The proposed rezoning of existing Parks and Recreation land	Disagree. The Power Station site is isolated by its location between the ocean and the freight rail line, and this

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	The connection of Main Street to Caledonia Loop, and The inclusion of a possible Marina  1. Planning Framework for Power Station Master Plan Precinct  The power station master plan area is a precinct within the wider development area known as 'Cockburn Coast'. There has been a significant amount of planning and investigation of the land within the Cockburn Coast area which is subject to an extensive strategic and statutory planning framework including; the Metropolitan Region Scheme, the City of Cockburn Town Planning Scheme No.3, the draft Outer Metropolitan Perth and Peel Subregional Strategy, the original Cockburn Coast District Structure Plan and the Cockburn Coast District Structure Plan 2 (DSP2).  The proposed power station master plan area directly abuts the northern boundary of the Port Coogee development. A small portion of the power station master plan area abutting Port Coogee is zoned 'Urban Deferred'. However the majority of the land abutting Port Coogee is part of the ocean foreshore reserve and is reserved under the Metropolitan Region Scheme for 'Parks and Recreation'. This land is identified as 'Parks and Recreation in all of the above current strategic and statutory planning documents.  2. Proposed Rezoning of Parks and Recreation Reserve  All of the land within the proposed master plan area abutting Port Coogee was originally designated 'Parks and Recreation' under the MRS. In 2011 an amendment to the MRS was gazetted to rezone most of this land from 'Parks and Recreation' to 'Urban Deferred'. Significantly, the Amendment did not include the westernmost land on the boundary of Port Coogee abutting the beach and ocean beyond, which was retained as Parks and Recreation reserve in accordance with the various planning framework documents (refer to Figure 1 below).  Image included in original submission  The proposed South Fremantle Power Station Master Plan now proposes to develop a significant portion of the remaining Parks and Recreation reserve for five storey mixed use development (refer to	considerably restricts traffic permeability. It is therefore considered important that as much permeability as possible is facilitated to the north and south. There has been no specific reason given for the requested termination of 'Main Street'.  4. Disagree. The way that the 'potential marina area' is depicted' is considered to be appropriate. It has been included in this way for transparency, to flag that there is a possibility it will be investigated in the future. However, it does not form part of the Master Plan, and is unrelated to the current request for the lifting of urban deferment. It would not be appropriate to include detailed information regarding a potential marina, because it is unrelated to the lifting of Urban Deferment. Comments regarding the design of the potential marina are not relevant as the Master Plan is only showing an indicative marina area. At this time the City is seeking comments that relate to the request for the lifting of urban deferment. It addition, this is not a planning instrument introducing the possibility of a marina – this was shown in the Council endorsed District Structure Plan Part 2.

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		As mentioned above, this portion of land has been identified for Parks and Recreation in all strategic and statutory planning documents to date.	A contract to the first of the
		The retention of this land for parks and recreation as a major public space has been a centrepiece of the previous planning and vision for the area and features prominently in the images within the Cockburn Coast District Structure Plan. The District Structure Plan shows the Cockburn Coast foreshore as an open and green space for the public (refer to <b>Figure 3</b> below). The Cockburn Coast District Structure Plan also states the importance of preserving existing foreshore elements as they play a vital role in defining the character of Cockburn Coast.	
		Image included in original submission	
		Figure 3 - Cockburn Coast DSP2 (extract, 2012)	
		It is the reasonable expectation of the wider community that this land will be retained as a reserve given the designation of this land as 'Parks and Recreation' in recent planning documents which set the future vision for Cockburn Coast. It is also the reasonable expectation of the residents of Port Coogee that the area to the north will be a significant open space adjoining the beach. Those residents in undertaking due diligence regarding the future plans for the area would have relied on the existing zoning and District Structure Plan which designate this land for foreshore open space. The proposed removal of the Parks and Recreation reserve would have a considerable impact on their expected amenity. We also believe that a better urban planning outcome is to consolidate the public open space in a significant usable area on the beach as has been illustrated until now rather than the current proposal of a series of smaller parks that that do not provide the same scale, vastness, usability or benefit to the greater community.	
		Image included in original submission	
		Extract of Cockburn Coast DSP2	
		Any future proposal to amend the MRS to remove existing 'Parks and Recreation' land on the foreshore would be a serious departure from the existing planning and is not supported.	
		We appreciate that there is a need for the power station master plan to be designed to obtain the most value out of the land as possible, however we do not believe this	

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		should be to the detriment of the regional Parks and Recreation space for the wider public.	
		We believe there is an opportunity to increase the density of the proposed lower density development (outside the existing Parks and Recreation reserve) shown on the master plan at the interface with Port Coogee. Australand would support development to six stories in this location to provide the opportunity for a reasonable density and return. We believe this would be highly valuable land future development would enjoy uninterrupted views of the ocean with the land in front to the west retained for Parks and Recreation.	
		3. Proposed Road Connection to Caledonia Loop	
		It is noted the proposed master plan shows a north-south connection between Port Coogee and Cockburn Coast via the proposed master plan 'Main Street' (identified as a 'local street'). The Port Coogee Local Structure Plan shows the connection with the master plan area via Robb Road. We believe the provision of two road connections between Port Coogee and the master plan area is not necessary.	
		It is understood that traffic between Port Coogee and Cockburn Coast along the relevant portion of the Main Street is very low and there would be no significant impact on the surrounding road network should the connection through to Caledonia Loop not be provided.	
		Given there is a north-south connection via Robb Road (which ultimately links with the Main Street) we request that the extension of Main Street to Port Coogee (Caledonia Loop) be removed from the master plan and that Main Street terminates before the southern boundary of the Power Station Precinct.	
		The below sketch illustrates our requests for revisions to the southern portion of the master plan area at the Port Coogee interface - to retain the existing Parks and Recreation reserve and remove the proposed second road connection of Main Street to Caledonia Loop.	
THE PROPERTY OF THE PROPERTY O		Image included in original submission	
		4. Proposed Marina	
,,,,,,		The Master Plan addresses the potential for marina within the Power Station	

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		Precinct. It is made clear in the document that preliminary investigations have been undertaken with, and without a marina and that for the purposes of the Master Plan the marina has been excluded.	
		However, it is noted that this should not exclude the inclusion of a marina within the future. Significant environmental investigation and public consultation would be required as well as a future MRS amendment.	
		Until it has been suitably investigated, analysed, discussed and consulted on, its inclusion on the plan at this stage would not be appropriate. Notwithstanding, information is required regarding the likely physical extent of any future marina, its purpose (for example, does it include boat ramps and associated car parking, is there dedicated boat pen infrastructure, or is it a residential marina) the associated land uses (marina services, residential, retail, etc), and its operational management. Definition of these aspects is required in order for the appropriateness of such a facility to be assessed by those potentially affected.	
		Given there are now existing residents immediately adjacent the indicative marina, it is not reasonable to expect them to wait for further information after a marina is introduced into the planning framework (indicative or otherwise). This information must be provided at the time the marina is shown on the plan (now) so that proper assessment of the impact can be undertaken.	
		Australand has not been consulted regarding the indicative marina design, and whether there is existing Port Coogee marina infrastructure or other features that would influence the suitability of an additional marina to the immediate north. For example, there is existing infrastructure in place for sand bypassing, which operates generally in the location of the proposed marina. It will be necessary for any investigations to model and resolve any future impacts on sand movement on Port Coogee which formed part of an environmental regulation.	
		The indicative marina appears to 'use' the northern breakwater of the existing Port Coogee marina as its southern breakwater. This area is existing Public Open Space (POS), which is an important component of the required POS contribution for Port Coogee and valued by adjacent residents and the wider public. The northern breakwater POS also provides a clear definition to the northern extremity of the Port Coogee area and, as such, is a vital physical component of the urban design and place-making.	

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		We continue to reiterate our opposition to the inclusion of a marina within the Power Station Precinct and further information is required regarding the specifics of the marina proposal and extensive consultation direct with adjacent landowners before more detailed investigations are undertaken.	
		CONCLUSION	
		We trust our comments will be taken into consideration during the City of Cockburn's and Department of Planning's consideration of the proposed Master Plan. Should you require any clarification regarding the above, please do not hesitate to contact the undersigned.	
17	City of Cockburn Landowner/Resident	Support  I fully support this and believe it would be great for the area.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
18	Francis Kotai 14 Oswald Street Coolbellup WA 6163	Support  Yet another heroic urban design layout that will spread too thin on the ground once the project managers move in. But that's business.	The 'Cockburn Coast Drive' road reservation falls outside the subject area.
		My concern is with manning park getting hammered at the back by Cockburn coast drive. It looks like the road is taking up half the ridgeline. That park is the legacy that should be conserved. Same as bold park and Buckland hill in the north. It's the last of the limestone ridge and the park space should be maximised. This means putting money in so the ridge gets conserved with well-designed retaining and not flattened by another 1:3 cut civil operation for a road. Negotiate this with MRD so the park doesn't get trashed or better still just run the road through the development. We could bang on about the significance of history etc in the park but the simple fact is the destruction of the most picturesque urban park in Perth for a road will make us all poorer for the trouble.	·
19	Linda Demarco 23 Acacia Way YANGEBUP WA 6164	Support  I think it is a fantastic idea and should have happened before now but better late than never - don't see why it needs to take two decades though!?!? I've lived here over 25 years and it has always seemed such a waste to me and also an ugly eyesore!!! Let's get this happening ASAP.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.

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20	City of Cockburn Landowner/Resident	Objection  All of the coast from Coogee to Freo is already being developed, and I know the Islands apartments is struggling to sell along with other complexes along that run of coast.  The beach is currently a beautiful quite little area, great for families and relaxing without the hustle and bustle of people. Please do not take away one of the last little bays people can use to get away from people. You do not need to redevelop every bit of land.  The power station has a lot of history and is beautiful how it is.	The Master Plan is consistent with the vision for the Cockburn Coast area set out in the Cockburn Coast District Structure Plan (2009) and District Structure Plan Part 2.  The Power Station precinct has been identified as a major recreational, retail and cultural node. However, the intention is that the beach in Cockburn Coast will still be useable for families.
21	No details provided	Objection  Port Coogee is devoid of any of the promised features and you will ruin the existing artists paradise that is the power station an internationally recognised graffiti space so I can see that you are a joke of a concept based on maximum profit and no opportunity except profit for you where will you ride the coattails next?	The Power Station is owned by Synergy and is not currently accessible to the public, and therefore the public cannot enjoy the urban art or the building itself to any extent.  The proposal includes opportunities to retain urban art and will provide the opportunity for the building to be enjoyed by the public.
22	City of Cockburn Landowner	Support  I support the proposed redevelopment however I would like to see more residential blocks for people to build houses over apartments.	The Master Plan is consistent with the vision for the Cockburn Coast area set out in the Cockburn Coast District Structure Plan (2009) and District Structure Plan Part 2.
23	Chris Toon 12 Enderby Close NORTH COOGEE WA 6163	Objection  I generally support development, but feel there is far too many apartments, rather than single dwellings this causes a ghetto over time. I understand that obviously apartments make more money but I feel the council should be making the right decision for the long term, not short term Overtime all buildings require replacement or significant refurbishment With large apartments buildings it is often impossible to have agreement with owners to renovate and the type of renovation - Sale or replacement is almost impossible due to wide ownership. Therefore over time the area will become tired and worn-out.  Older apartment building evidence: Apartment buildings in East Fremantle on East	The Master Plan is consistent with the vision for the Cockburn Coast area set out in the Cockburn Coast District Structure Plan (2009) and District Structure Plan Part 2.  The Power Station precinct has been identified as a major recreational, retail and cultural node. However, the intention is that the beach in Cockburn Coast will still be useable for families.

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		Street. Various Spearwood apartment buildings on/around Rockingham Road. Where in Perth is there a 20+ year old large apartment complex which is considered nicer than the houses around it? Hope my comments are considered.	
24	Andrew McDonald 15 Howe Street Beeliar WA 6164	Support  This is something I have thought has needed to be done for a long time and think it is great that there is support for it. I believe Whatever format is chosen there needs to be inclusion for a marina and public access berths.	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.
25	Michael Barnett 85a Paget Street Hilton WA 6163	Objection  I wish to object to the addition of apartments ABOVE the existing power station boiler house roof line. The huge existing structure is an architectural gem reflecting the style and proportions of another era that I feel should be retained for its architectural heritage value.  Because this building is directly on the seashore if more height is added this will further obstruct the views of the ocean and horizon for everyone behind, effectively curtaining the greatest asset of our city from those of us who appreciate it so.  The master plan also suggests imitating two smoke stacks of a bygone era which I feel is so unnecessary bringing an industrial feel to a totally new use. This would really have made a fabulous new Dockers/sports stadium! Perhaps the most iconic in Australia	The additional development above the Power Station is not considered by the Office of Heritage to detrimentally impact the heritage values of the Power Station.
26	Carmel Capone 7/24 Belgrave Street	Objection  The plans completely override the natural beauty and history of the power station. I grew up on Christine Crescent in Coogee and this building is not getting the respect it deserves. If you allow the planned developments to take place it will mask the beautiful hulk that the power station is. I would love to see it become an urban art space. The building has soaring ceilings, beautiful staircases, and could be a real drawcard in the area. It just needs someone with vision. If these plans go ahead you may as well just knock the power station down.	The Master Plan is consistent with the vision for the Cockburn Coast area set out in the Cockburn Coast District Structure Plan (2009) and District Structure Plan Part 2.  The Power Station precinct has been identified as a major recreational, retail and cultural node.
27	Jeffrey Cottrell 154 Clontarf Road HAMILTON HILL 6163	Objection  1. I have lived in the Cockburn area for almost 50 years. My great grandparents	Noted.  The issue of contamination has been dealt.

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	operated tea rooms in South Terrace Fremantle in the 1910s and my grandfather and his siblings used to swim at Robbs Jetty in the 1910s. During the early 1970s my father used to take me fishing to the jetty at Robbs. It was a rickety thing, with gaping holes due to missing planks in the jetty walkway and had an old shed structure made of timber and iron sitting on top of it where people took shelter in the shade. Even so the jetty was well	with in detail at the  3. The Master Plan is consistent with the vision for the Cockburn Coast area set ou in the Cockburn Coast District Structure
	patronised with dozens of people fishing on it.  I used to play on the wreck of the Wyola of which there was substantially more of than there is today. It had 44 gallon drums onboard filled with concrete and the waves would hit it and flood the hull. Next to it the old barge was intact and had a rope with an old tyre on its side which you could climb and then jump off into the water. By the late 70s the jetty and barge was gone.	Plan (2009) and District Structure Plan Par 2.  The Power Station precinct has been identified as a major recreational, retail and cultural node. However, the intention is that the beach ir Cockburn Coast will still be useable for families.
	In the early 1980s we used to go swimming there and my friends used to go fishing there. There was a man who was employed by the abattoir, who used to travel from Coogee beach to South beach every day collecting lumps of fat which was part of the waste process of their operations and mixed with the sea water formed round rock sized balls on the beach sand.	The City will investigate the Lands Department Survey mark as part of the next review of the Local Government Inventory.
	It was during the early 80s I used to find on the beach south of the Wyola wreck and north of the power station cooling pond dozens of broken pieces of crockery with ornate patterns from old china and tiny white, water weathered porcelain figurines such as a child might play with in the 19th century. They could have been artefacts from the wrecks. I agree with the idea that the power station is to be given a new life as the strength with which it was constructed it would be difficult to demolish.	
	In 1996 I was an engineering surveyor working for the City of Cockburn and we had the task of rehabilitating the area north of the power station and west of the railway track up to Rollinson road. We built McTaggart and Robb road north and several car parks and an area for the horse floats to park so trainers could continue to exercise their horses in the water. The area was to be developed as a recreation reserve for the use of beach goers, walkers and fishermen. The job went beyond the creation of roads and carparks, as the soil material was contaminated from previous industries and had to be removed and replaced for over a few hundred metres north of the power station. This meant the earthworks for the road formation was standing a	

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		couple of metres proud of the ground until clean soil was brought in. The area was then revegetated and fenced. One day during construction one of the machines unearthed a live 50 calibre round, with a date on it from the 1940s. This was the type used by the army in their heavy machine guns and fighter planes of the era. It may have been evidence of army activity in the past or a remnant of scrap metal recycling from the 1940s and 50s. I don't know if there are any more present in the soil. It is the area roughly due west of where the proposed primary school is going, near Robb road north.	
		2. Where my friends used to fish in the 80s, the power station used to dump drums of PCBs into the cooling pond immediately west of the station building. These oils were used as a coolant in transformers and as an insulating dielectric fluid in industrial sized capacitors. This material would penetrate the water and surrounding soil. The use of PCBs is now banned as it does not break down and gets into the food chain depositing in humans and animals, including fish. It affects the nervous system and is a carcinogen. During 1995, I met up with a work colleague at the site on a day in which the temperatures were in the mid to high 30s. He was wearing a sanding mask. I asked him what he was doing and he told me he was doing a survey pickup of the power station site and he was required to wear the mask because of the risk of asbestos particles in the air. I think the asbestos risk should be addressed. The PCBs in the cooling pond area and surrounding soil, should be addressed and any other hazards in the soil looked at.	
		The project shows a proposed marina immediately west of the power station. I don't think this is necessary as the development south of the station already has a marina. There has been talk of placing the marina further north if they cannot have one there. Along with the proposed buildings immediately west of the railway track, just north of McTaggart road, they both should not be there as this dune area was developed to be public open space for the benefit of the Western Australian public and the flora and fauna of the area and a restriction should be placed on significant structures west of the railway track.	
		If the developers argue it is not economically feasible to complete the development without those buildings in the dune and the marina constructed, then maybe they shouldn't be in business as there are plenty of subdivisions built further inland in the metropolitan area which don't rely on a marina being present and they succeed. I like the idea of a kiosk cafe near the northwest carpark as this area is fairly isolated. There was a suggestion that because of the height of the power station, part of it	

SUBMISSION	COUNCIL'S RECOMMENDATION
would make a good maritime sailing museum. I like the multiple uses of the Power Station and the introduction of the public transport area.	
3. I would hate to see the reserve north of the power station and west of the railway line built up. I would like to see affordable housing. It would be a shame for non-resident foreign investment to take the pick of apartments and homes, only to have them occupied about 3 weeks of the year and empty for the rest.	
4. I would like reassurances over the PCBs in the cooling pond and the asbestos issue and would hate to have the horse trainers, fishermen and traditional beachgoers discouraged from further use of the area, because they no longer fit in with the tone of the area.	
5. It must also be remembered that CY O'Connor killed himself in the area. Someone drowned from one shipwreck and someone else was killed from another shipwreck when gunpowder exploded during a salvaging exercise during the 19th century. Both of the latter are buried in the area somewhere. The aboriginals had a continuous presence camping in the area during and before white settlement and so it would be respectful to keep any more alteration to the northern reserve to a minimum.	
6. The Emplacement Crescent area east of Robbs Jetty and the ridgline is proposed for residential development. When we were children we used to play in the gun emplacements. One gun emplacement we used to be able to crawl around inside, they demolished and the second was preserved. This occurred about 1997, when the industrial estate was built. To the east of the factory units in the bush was another concrete blockhouse which must have been the ammunition storage bunker or accommodation for the defence personnel who were to man the guns. This was demolished. On the hill south of Emplacement Crescent behind Lazco Engineering there appears to be evidence of small revetments which may have been constructed by military personnel in the second world war. This hill would have been an ideal location for army observers or sentries keeping watch seaward for any enemy approach. This was the obvious location for the construction of the gun emplacements. Also on the hill is the presence of a Lands Department Survey mark. This Survey marker was established by the Army Survey Corps	
	<ul> <li>would make a good maritime sailing museum. I like the multiple uses of the Power Station and the introduction of the public transport area.</li> <li>3. I would hate to see the reserve north of the power station and west of the railway line built up. I would like to see affordable housing. It would be a shame for non-resident foreign investment to take the pick of apartments and homes, only to have them occupied about 3 weeks of the year and empty for the rest.</li> <li>4. I would like reassurances over the PCBs in the cooling pond and the asbestos issue and would hate to have the horse trainers, fishermen and traditional beachgoers discouraged from further use of the area, because they no longer fit in with the tone of the area.</li> <li>5. It must also be remembered that CY O'Connor killed himself in the area. Someone drowned from one shipwreck and someone else was killed from another shipwreck when gunpowder exploded during a salvaging exercise during the 19th century. Both of the latter are buried in the area somewhere. The aboriginals had a continuous presence camping in the area during and before white settlement and so it would be respectful to keep any more alteration to the northern reserve to a minimum.</li> <li>6. The Emplacement Crescent area east of Robbs Jetty and the ridgline is proposed for residential development. When we were children we used to play in the gun emplacements. One gun emplacement we used to be able to crawl around inside, they demolished and the second was preserved. This occurred about 1997, when the industrial estate was built. To the east of the factory units in the bush was another concrete blockhouse which must have been the ammunition storage bunker or accommodation for the defence personnel who were to man the guns. This was demolished. On the hill south of Emplacement Crescent behind Lazco Engineering there appears to be evidence of small revetments which may have been constructed by military personnel in the second world war. This hill would have been an ideal l</li></ul>

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		usually used in the observation of state boundaries. This survey mark apart from being historical is currently used in the network. I have used it in the past. It was established by the army surveyors through accurate and meticulous terrestrial and astronomical observations to establish its position. The mark has ties through line of sight to lesser survey marks throughout Hamilton Hill, Coolbellup and Spearwood as well as the light houses on Rottnest Island. It is part of a chain with line of sight to a major mark on Mount Brown in the South, to the Trig Point obelisk at Buckland Hill Mosman Park in the north, which in turn is linked to another at Reabold Hill City Beach. The survey marks at Buckland Hill Mosman Park and Reabold Hill City beach and to a lesser degree Mount Brown Naval base are surrounded and protected by paving and brick walls. I believe this survey mark should also be protected in such a manner and not wiped out by housing development or a major road going through. The mark could become part of an observation lookout and would continue to be used by surveyors.	
		7. The ridgeline is part of the Quindalup dunal system and is about 1 million years old. It presents a very attractive view from the surrounding area. Carving a major road through there and placing houses all over the ridgeline would only benefit a few and would detract from the area. It would just be another case of urban sprawl. Housing would instead be better located on the flat areas below or the whole area turned over to become part of a council park reserve to the benefit of flora and fauna as it is close to Manning Park. Currently joggers and bushwalkers use the hill frequently as well as horse riders. This would be a more appropriate use of the ridgeline, as well as the preservation of an historic Lands Department Survey mark associated with the war time defence emplacements. An established look out as located at Buckland Hill and Reabold Hill is desirable as well, with walking trails.	
		In general I would like the project members to take note of the public comments and seriously take them on board. Not just pay them lip service and give attention only to the powerful commercial lobby groups who stand to profit by all of this development.	
28	Dr Jennifer Dudley PO Box 430 Hamilton Hill WA 6963	Support  As a long-term Sth Fremantle and C Y O'Connor beach goer and a person committed to seeing something fabulous happen to the architectural treasure that is the Sth Fremantle Power Station, I am very pleased to read the Master Plan	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.

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	prepared by the Hassell group who have a considerable track record in developing difficult sites for adaptive use from the present into the future.	
	My comments are few because Council amalgamations may necessitate some revision and the need for further consultation and comment from existing stakeholders and interested parties within the context of the development plans for the Cockburn coastal area. Hence my comments focus mainly on the proposed adaptive reuse of the Power Station and its immediate environs The current proposal seems very well researched and broadly-based, taking into account a "whole of the environment" approach within specific local development plans for the South Fremantle and Cockburn Coastal areas, but also taking account of heritage areas and former industrial use sites back from the immediate coastal strip. I am also pleased that the State and two local Governments concerned have recognised the potential of the Power Station renewal project as a vehicle for onsite architectural and building skills development and training and as a much-needed employment generator for the region in the C21st.	
	I also appreciate the clear manner in which the Hassell proposal has delineated the stages of the project's implementation, with particular elements of current site use being retained if not encouraged further for as long as possible while the Power Station is being renewed - and then incorporated within the new structure. The urban artists, beach goers and photographers will be pleased with that. And that the great cathedral structure will not be compromised in feeling by its new internal users. Also, it appears that Nyungar cultural and heritage concerns have been respected as have the shipwrecks and existing old structures further along the beach, provided there is minimal commercialisation around the immediate coastal environment of the Robb St Jetty area.	
	The Plan is to be commended for encouraging opportunities to maximise the educative and interpretative aspects of this rich Heritage area in an environmentally low impact and engaging way. No new marina is essential for this. However, I am concerned that an over-focus on commercial return within the Power Station precinct, on hospitality and tourism, on out-doors based art and performance spaces may be at the expense of more formal spaces for theatre and music. These need only be small and flexible, like the Space Theatre in the Adelaide Festival Centre for example, but they would suit innovative experimental theatre, art and New Music practitioners as well as the entertainers who have staked a claim to the outdoor spaces.	

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<b>29</b>	Heritage Council of Western Australia	Support  Thank you for your correspondence of 2 July 2014 regarding the Master Plan for the State Registered Heritage Place South Fremantle Power Station.  We received a document entitled South Fremantle Power Station Master Plan dated 20 June 2014. Subsequent to that we also received a copy dated 10 July 2014; however, the following comments relate to the June 2014 document.  The Heritage Council resolved to advise Landcorp that the draft Master Plan for the South Fremantle Power Station has been considered in the context of the cultural significance for the place and the following comments are given:  Findings:  The draft Master Plan provides for the conservation and adaptive re-use of the South Fremantle Power Station within a precinct redevelopment that was instigated by the Cockburn Coast District Structure Plan.  • A comprehensive heritage analysis has been undertaken to inform the development of the draft Master Plan within a redeveloped setting, and specifically of the significant elements of the Power Station such as the main station building, groynes and cooling pond.  • The 'striking dominance' of the Turbine Hall and Boiler House are key contributors to the cultural significance of the place, as articulated in the Statement of Significance. While the open space of the Turbine Hall will be retained for public purposes, the proposal includes residential development within the Boiler House as well as new residential development to interpret the original chimney stacks.  • Further documentation to be prepared includes a Local Structure Plan incorporating Design Guidelines for development at the South Fremantle Power Station.  Advice  The draft Master Plan is supported subject to the following amendments being made prior to the document being finalised:  1. The Local Structure Plan is to also provide for the following:	Noted. It is recommended that Council support the proposed lifting of urban deferment and advise the Western Australian Planning Commission accordingly.

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		The preparation of an Interpretation Strategy to inform the development of interpretive themes and elements across the South Fremantle Power Station site, which is to include a timeline and program for implementation.  A dealter are baseless in the state of th	
		b. A desktop archaeological survey to identify zones of significance within the original South Fremantle Power Station site to provide for any potential sub- surface evidence of historic use that may be impacted upon in the subsequent development.	
		2. The 2003 Conservation Management Plan shall be updated to inform the development of the Local Structure Plan, and a copy is to be provided to the State Heritage Office.	
		The Heritage Council would like to commend Landcorp on the draft Master Plan, and acknowledges that the cultural significance of the South Fremantle Power Station has been recognised at all levels and is integral to the proposed redevelopment.	
		The Council looks forward to the progression of the South Fremantle Power Station redevelopment, including the implementation of the Master Plan, preparation of the Local Structure Plan and supporting documents, and the eventual subdivision and development to give life to this significant heritage place.	
		Landcorp is encouraged to continue to engage with the State Heritage Office on the project details, and the Heritage Council looks forward to receiving updates at major milestones.	
30	Gary Pearce	Objection	1. Supported. It is recommended that the
	22 Chelydra Point North Coogee	I wish to register my strong objection to two sections of the Power Station Master Plan.	lifting of urban deferment be supported, subject to this area of 'Parks and Recreation' being retained.
		1. The Proposed Rezoning of Parks and Recreation The original plan which is a major attraction to all people purchasing land in the area is also a centre piece to the whole area. To now change that in my opinion is overdeveloping and will be seen as a terrible mistake in years to come.	2. The way that the 'potential marina area' is depicted' is considered to be appropriate. It has been included in this way for transparency, to flag that there is a
		2. Possible Marina	possibility it will be investigated in the future. However, it does not form part of

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		To develop a second Marina in the area will clutter the whole foreshore and detract from the beautiful appearance that the current plan provides. A Marina in my opinion is not a pretty site and you only have to look at the Fremantle area with all the Marinas to see what I mean.	the Master Plan, and is unrelated to the current request for the lifting of urban deferment. It would not be appropriate to include detailed information regarding a potential marina, because it is unrelated to the lifting of Urban Deferment. Comments regarding the design of the potential marina are not relevant as the Master Plan is only showing an indicative marina area. At this time the City is seeking comments that relate to the request for the lifting of urban deferment. It addition, this is not a planning instrument introducing the possibility of a marina — this was shown in the Council endorsed District Structure Plan Part 2.
31	Department of Transport	Thank you for requesting comments on the South Fremantle Power Station Masterplan. The Department of Transport (DoT) has liaised with Main Roads WA (MRWA) and the Public Transport Authority (PTA), in co-operation with Brookfield Rail.	
		The DoT, on behalf of the Transport Portfolio Agencies and Brookfield Rail, provides the following comments and conditions to be included as part of the approval process by the City of Cockburn.	Landcorp have advised that they will amend the Masterplan to reflect reference to "Bus priority" with all references to "Bus Basid To ""
		1. Future Bus Provision	references to "Bus Rapid Transit" removed. It should be noted that at the
		The Transport Portfolio has assessed the bus priority provisions in relation to the Masterplan and has identified a number of concerns to be further addressed. These are summarised below:	time the Masterplan was prepared the common reference to the public transport link from Fremantle to Cockburn Coast was referred to as "Bus Rapid Transit".
		<ul> <li>The Masterplan should be updated to remove any reference to Bus Rapid Transit (BRT), and replaced with "Bus Priority". PTA is only committed to a higher-tier level of bus service through the use of regular bus priority measures to improve travel times and reliability of bus services through the precinct.</li> </ul>	The current alignment for the public transport link from Fremantle to Cockburn Coast (including the Power Station Masterplan area) evolved from several studies prepared through the Cockburn Coast Transport Planning Group which
		<ul> <li>A bus priority link between Main Street and Port Coogee utilising the horseshoe bridge to. cross the railway should be assessed. This would</li> </ul>	supported the public transport link reverting back to Cockburn Road at the

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	create a strong linear transport connection through to Port Coog to ensure the public transport objectives of the Masterplan a realised. It is important to create a strong connection on the coastal s of Cockburn Road to make the most of deviating through-buses Cockburn Road to serve the precinct.  • Without a through connection to Port Coogee, the opportunity develop a true public transport corridor is lost. Transperth will have consider whether the higher-tier service would deviate twice Cockburn road to serve both Port Coogee and Cockburn Coast scenario which would disadvantage through passengers and P Coogee passengers. Transperth would need to decide on cost/benefits of deviating to serve the development.  • The bus priority route should continue along the eastern ramp of railway bridge, upon reaching the bridge over the railway, to continue south-west over the railway and then return to ground level on	to to off a port ne 2.	southern end as it moves through the Cockburn Coast project. These studies were developed in consultation with and supported by the Transport Portfolio LandCorp acknowledges that further planning and development of the public transport link south of Mctaggart Road is necessary and will be undertaken at the Local Structure Plan phase of the Power Station precinct.  All public transport alignment plans developed for the Cockburn Coast project to date have considered bus priority conversion to light rail in future Future investigation on the bus priority link south of McTaggart Road will further
	western side of the railway, connecting into Robb Road I Ors Boulevard Port Coogee.  • Any intersection improvements/upgrades and local road design elements should accommodate potential local bus service movements.	an a	consider the possibility for light rai conversion.  Noise and vibration assessment for the project area will be undertaken during
	PTA provides the following information in relation to bus provisions within the Masterplan area.  • There is planning for a local route to go through Port Coogee as		detailed preparation of the Local Structure Plan which is the statutory planning document that will form the planning framework for the future
	deviate through Cockburn Coast, but this will be at a lower frequency  2. Future Light Rail Provision	iu	development of the Power Station Precinct. The noise and vibration investigations will be undertaken in
	A strong linear connection (as advised within Section 1 of this letter) to modestinations would support the long term provision of light rail to this development area, as well as a higher-order bus service.	nt	direct consultation with the Transport Portfolio and will be used to inform appropriate standards / requirements to mitigate any noise and vibration issue that may exist.
	To support long term light rail, the bridge ramps must be a suitable grade (no months than 5%) and all curves must be suitable for light rail (i.e as smooth as possible was large a radius as possible, with no random deviations). Given the ramps a bridge are already proposed, making provision for future light rail design.	th 4.	End of trip facilities will be identified at the structure planning and/or development stage. These details are

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	requirements at a minimum additional cost would be beneficial and perhaps a 'curvier' solution can be found for buses.	not required to support the lifting of urban deferment.
	3. Public Transport Network	
	The Masterplan is reliant on the provision of a number of transport elements including rail crossings, bridges, bus priority corridor, pedestrian and cycle facilities that do not currently exist or are being funded. The Transport Portfolio seeks clarification on how these transport infrastructure elements would be funded.	
	The Masterplan concludes that there will be congestion in the area (as throughout the metropolitan area) and that public transport networks will be required, as well as walking and cycling to access the area. However, there are no details provided on likely mode splits required, or a scenario if these transport network provisions are not provided or funded.	
	4. Cycling and Pedestrian Network	
	The Masterplan highlights the network of pedestrian cycling provisions around the site (with a map provided), however there is no specification for the end of trip facilities, lockers and showers that are to be provided at the Local Structure Plan (LSP) stage.	
	5. Freight Rail Corridor (Noise and Vibration)	
	5.1. Transport Portfolio (DoT, MRWA and PTA)	
	The Transport Portfolio has identified a number of concerns summarised below:	
	<ul> <li>The proposed development abuts the dedicated rail freight line servicing the Fremantle Inner Harbour and the rail freight task in this location requires it to be a 24 hour I 7 days per week operation.</li> <li>It is the Government's policy to promote increased use of rail for transporting containers to and from the Port of Fremantle Inner Harbour.</li> </ul>	
	<ul> <li>Extension of network operating hours to increase the frequency of freight trains with additional evening and night operations is one of the measures likely to be adopted to achieve increased freight on rail.</li> <li>The proposed development is within the range of "noise-sensitive"</li> </ul>	

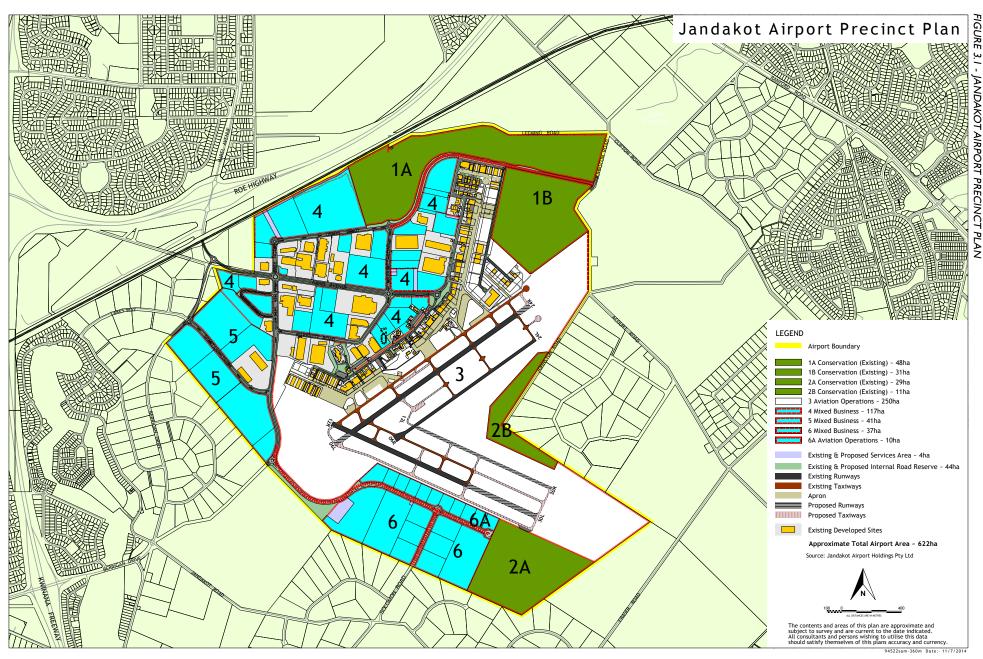
NO.	NAME/ADDRESS	SUBMISSION	COUNCIL'S RECOMMENDATION
		<ul> <li>infrastructure as defined in State Planning Policy (SPP) 5.4 "Road and Rail Transport Noise and Freight Considerations in Land Use Planning". A noise and vibration assessment needs to be undertaken to ensure that noise and vibration abatement measures outlined in SPP 5.4 are achievable, before proceeding to the LSP stage.</li> <li>The proposed urban land use creates an impost on the rail freight task that previously did not exist.</li> <li>Figure 7.3 does not appear to accurately reflect the Metropolitan Region Scheme (MRS) in this area. It shows part of the subject area in white, which appears in the legend as "Local Road". This land is shown in the MRS as "Urban Deferred".</li> <li>The north-south road and principal shared path adjacent to the freight rail line appear to be within land zoned "Railways".</li> </ul>	
		5.2 Brookfield Rail	
		Brookfield Rail does not support the Masterplan (refer to letter attached). The Transport Portfolio recommends that the conditions provided within this letter be adopted as part of the approval process by the City of Cockburn.	
		6. Wayfinding and Parking Management	·
		In order for the Power Station site to act as a seamless component to the Cockburn Coast District Structure Plan area, a parking way finding system should be implemented with the City of Cockburn.	
		The parking requirements for the Masterplan site are specified within the Traffic and Parking report, however there is no mention of how this parking will be managed or the parking management enforced.	
		7. MRWA Considerations for Masterplan	
		MRWA has identified a number of concerns and requirements to be implemented. These are summarised within the letter attached and relate to the following:	
		<ul> <li>The future grade separation of McTaggart Cove I Freight Rail Line and Robb Road I Freight Rail Line;</li> <li>BRT provisions along Robb Road and Cockburn Road;</li> <li>Funding Requirements;</li> </ul>	

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	<ul> <li>Noise and Vibration Assessment ;and</li> <li>Visual Amenity.</li> </ul>	
	Recommendations	
·	In view of the above, it is recommended that the following conditions and advice notes be included as part of the Council's approval:	
	Conditions	
	That the Masterplan be updated to remove any reference to Bus Rapid Transit (BRT) and be replaced with "Bus Priority".	
	2. That a bus priority link between Main Street and Port Coogee, crossing the railway be assessed in liaison with DoT and PTA, to create a strong linear transport connection to ensure that the public transport objectives of the Masterplan are realised.	
	3. That the design elements for the provision of future light rail be included within the Masterplan.	
	4. That a noise and vibration assessment be undertaken at the Masterplan stage, to obtain the Transport Portfolio's approval with advice from Brookfield Rail and the Department of Environmental Regulation (DER), to identify noise concerns generated by transport infrastructure (road and in particular, rail) and then abatement I amelioration measures proposed as outlined in SPP 5.4. Please refer to Advice Note 4.	
٠	5. That notification on certificates of title and/or advice to prospective purchasers advising of the potential for noise impacts from the adjacent freight rail corridor be included within the Masterplan.	
	6. That no new level crossings are provided and no access onto the rail corridor is allowed.	
	7. That a 1.8 metre high wall (fence) is provided to all rail boundaries.	
	8. That a planning design concept(s) is prepared at the LSP stage, to obtain DoT's and MRWA's approval, to evaluate how the future grade separation	

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		of McTaggart Cove I Freight Rail Line and Robb Road I Freight Rail Line will be achieved. The design concept should consider additional land requirements that may be needed to accommodate the grade separation infrastructure.	20
		9. That a planning design concept(s) is prepared at the LSP stage for bus priority concept alignment, to obtain DoT's and MRWA's approval, to evaluate how the bus priority route will navigate the Cockburn Road I Robb Road and Robb Road I bus priority underpass intersections. The design concept should consider the corridor width allocated along Cockburn Road and the impact the route may have on the horseshoe bridge.	
		10. That the visual amenity of future residents fronting the horseshoe bridge is assessed and measures proposed to ameliorate this impact. The measures should be identified as a component of the LSP and implemented during construction of the LSP area.	,
		Advice Note	
		1. Clarification is to be provided on how the transport infrastructure elements identified within the Masterplan would be funded.	
		2. The Masterplan concludes that there will be congestion in the area (as throughout the metropolitan area). Details should be provided on likely mode splits required, or a scenario if these transport network provisions are not provided I funded.	
		3. Cycling specifications for end of trip facilities, lockers and showers for the Masterplan site, should be provided at the LSP stage.	
		<ul> <li>4. The noise and vibration assessment should include the following:</li> <li>Noise modelling;</li> <li>Consideration of future growth of the rail freight task and the hours of operation.</li> </ul>	
32	Brookfield Rail 2-10 Adams Drive Welshpool WA	Objection  Brookfield Rail Pty Ltd advises that this development introduces numerous noise	The issue of issue of noise will be addressed at the local structure plan stage in accordance with State Planning Policy 5.4
	6106Australia GPO Box S1411Perth	sensitive developments I uses such as residential, cafés, small offices, civic areas	with State Planning Policy 5.4
	1 C. C DOX OTTTT CITI	alongside and within very close proximity of an important rail transport corridor	The car park referred to has been incorrec

NO.	NAME/ADDRESS	SUBMISSION	COUNCIL'S RECOMMENDATION
	WA	which services the Port of Fremantle.  Brookfield Rail has concerns about the proximity of such development and cannot support the proposal on the following points:  Change of land uses from rural/industrial to urban provides the mechanism by which to introduce incompatible land uses alongside freight rail corridor, which in turn, creates an impost to the freight rail task. These incompatible uses were not previously a threat to the rail task business.  The Master Plan document does not identify the forecasts for freight rail operations on which planning for the concept is based. The freight task in this location requires it be 24 hour I 7 day per week,  Residents occupying apartments in this location would be impacted by noise and vibration 24/7 unless noise abatement measures were installed by the developers/builders/owners to such an extent that it would serve to fully abate such an interruption to amenity. Any Environmental/Acoustic Report would need to demonstrate that adequate separation/distance has been included between buildings and the rail freight line to counter noise and vibration as well as all other noise abatement measures required under and above the SPP5.4 Noise Policy.  The Figure 1.2 by Hassell as included in the Master Plan document does not clearly define I delineate the freight rail corridor thereby not revealing the true location and impact of the freight line to the proposed development.  There is a car park shown where the current freight line is located.  Brookfield Rail requires the following conditions be applied to any proposed/eventual development at this location:  There can be no new level crossings.  No access into the rail corridor.  Fencing in the form of a wall to 1.8m height to all rail corridor boundaries Noise abatement measures to SPP5.4 to be applied.  Noise notations on titles to reflect that these buildings will be within immediate proximity of a freight rail line	located on one plan in the document, and it is proposed to be corrected.  A 1.8 m high fence similar to that proposed along the portion of the freight rail corridor adjacent to the Robb Jetty precinct as agreed previously with Brookfield Rail is proposed.

2



# MUNICIPAL BANK ACCOUNT

		MUNICIPAL BANK ACCOUNT -	-	
Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080480	10154	AUST TAXATION DEPT	3/09/2014	351,266.00
		PAYROLL DEDUCTIONS		
EF080481	10305	CHILD SUPPORT AGENCY	3/09/2014	6,763.29
		PAYROLL DEDUCTIONS		
EF080482	12656	COOGEE BEACH SURF LIFESAVING CLUB INC	3/09/2014	146,396.16
		POOR GROVE SLSC DEVELOPMENT COSTS		
EF080483	18553	SELECTUS PTY LTD	3/09/2014	12,076.31
		PAYROLL DEDUCTIONS		
EF080484	25987	TOYOTA FLEET MANAGEMENT	3/09/2014	567.62
		PAYROLL DEDUCTIONS - NOVATED LEASE		
EF080485	10196	BIBRA LAKE RESIDENTS ASSOCIATION	5/09/2014	280.00
		COMMUNITY GRANT		
EF080486	10388	CSR BUILDING PRODUCTS	5/09/2014	1,592.56
		COMMERCIAL INTERIOR SUPPLIES	, ,	,
EF080487	10788	JANDAKOT VOLUNTEER BUSH FIRE BRIGADE	5/09/2014	1,710.00
		EXPENSE REIMBURSEMENTS	' '	,
EF080488	10937	NELSON MAURICIO	5/09/2014	3,793.00
		UNIVERSITY FEES REIMBURSEMENT - MBA	0,00,000	3,120,00
EF080489	11060	OLD JANDAKOT PRIMARY SCHOOL COMM	5/09/2014	3,000.00
	11000	CULTURAL GRANT	0,05,201.	0,000.00
EF080490	11210	SOUNDPACK SOLUTIONS	5/09/2014	183.70
DI 000 130	11210	AUDIO SUPPLIES/SERVICES	0,03,2011	100.70
EF080491	11287	RSPCA WA INC	5/09/2014	1,165.20
121 000 191	11207	FUNDRAISING	0,03,2011	1,100.20
EF080492	12540	COCKBURN CRICKET CLUB	5/09/2014	1,500.00
B1 000 132	12010	COUNCIL GRANTS & DONATIONS	3/03/2014	1,300.00
EF080493	12578	PINEVIEW COMMUNITY KINDERGARTEN	5/09/2014	7,513.00
E1 000 + 93	12070	PINEVIEW COMMUNITY KINDERGARTEN	3/09/2014	7,515.00
EF080494	15625	OPUS INTERNATIONAL CONSULTANTS (PCA) LTD	5/09/2014	14,245.00
121.000.43.4	13025	CONSULTANCY SERVICES	3/09/2014	14,245.00
EF080495	15848	BERNADETTE PINTO	5/09/2014	291.57
EF000+93	15046	TAFE FEES REIMBURSEMENT	3/09/2014	291.57
EF080496	16058	SHOP-A-DOCKET PTY LTD	5/00/2014	814.00
DF000490	10038	ADVERTISING SERVICES	5/09/2014	814.00
FE000407	20621	ID CONSULTING PTY LTD	F /00 /0014	E 020 20
EF080497	20631	CONSULTANCY SERVICES	5/09/2014	5,239.30
EF080498	21108	CHILDRENS MEDICAL RESEARCH INSTITUTE	5/09/2014	880.00
E1 000430	21100	JEANS FOR GENES DAY FUNDRAISING	3/09/2014	880.00
EF080499	22109	PUBLIC LIBRARIES WESTERN AUSTRALIA INC	5/09/2014	358.75
E1000433	22109	PROFESSIONAL ORGANISATION	3/09/2014	336.73
EF080500	22637	JANDAKOT EAGLES SOFTBALL CLUB INC	5/09/2014	400.00
Er060300	22037	SPORT - SOFTBALL	3/09/2014	400.00
EF080501	23250	DEPARTMENT OF PLANNING	5/00/2014	10 740 00
EF000301	23230	DAP APPLICATIONS & DAP FEES	5/09/2014	12,742.00
EE000E00	02462	HANNAH NEAL	5 /00 /0014	450.00
EF080502	23463	YOUTH ART SCHOLARSHIP	5/09/2014	450.00
FEOGOSOS	00050		5 /00 /0014	200.00
EF080503	23853	EAST FREMANTLE JUNIOR FOOTBALL CLUB	5/09/2014	200.00
PP000F04	0.4500	REGISTRATION FEES-KIDSPORT	- 100 100 t	1 000 00
EF080504	24589	GISELLE ALLIEX	5/09/2014	1,208.38
DD000505	24616	UNI FEES CONTRIBUTION		
EF080505	24616	UNIVERSITY OF WESTERN AUSTRALIA BILJANA GASPAR	5/09/2014	3,883.00
DDOCOSS	05001	UNIVERSITY FEES - STAFF		70.05
EF080506	25391	LEAH KNAPP	5/09/2014	50.00
DD000555	05000	COMPOST BIN REBATE		1.50.5=
EF080507	25398	JUSTINA BRIGGS-	5/09/2014	160.00
		STUDY CONTRIBUTION		

#### MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080508	25474	ROBERT MARTIN VOLUNTEER REIMBURSEMENT	5/09/2014	66.90
EF080509	25568	NICHOLAS BREADSELL STUDY CONTRIBUTION	5/09/2014	538.00
EF080510	25659	JANET WELLS VOLUNTEER MILEAGE CLAIM REIMBURSEMENT	5/09/2014	450.00
EF080511	25813	LGCONNECT PTY LTD DEVELOPMENT CONSULTANCY	5/09/2014	25,300.00
EF080512	25876	ANTON LEES UNIVERSITY FEES REIMBURSEMENT	5/09/2014	3,825.00
EF080513	25962	ALL LINES LINEMARKING SERVICES	5/09/2014	715.00
EF080514	26026	R J COX ENGINEERING MEDICAL EQUIPMENT	5/09/2014	3,478.20
EF080515	26067	SPRAYKING WA PTY LTD CHEMICAL WEED CONTROL SERVICES	5/09/2014	3,608.05
EF080516	26068	PROFESSIONAL COMMUNICATION TRAINING TRAINING SERVICES	5/09/2014	885.00
EF080517	26155	SPEARWOOD GIRL GUIDES COUNCIL DONATION	5/09/2014	200.00
EF080518	26156	VETERANS OF WESTERN AUSTRALIA COUNCIL DONATION	5/09/2014	200.00
EF080519	26157	EDWARD QUAKE HIGH RISK LICENCE RENEWAL	5/09/2014	86.95
EF080520	26158	RICHARD DAVIES REIMBURSEMENT OF OVERPAID FEES	5/09/2014	78.52
EF080521	26159	AMY WYTHES STUDY FEES CONTRIBUTION	5/09/2014	538.00
EF080522	11867	KEVIN JOHN ALLEN MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080523	12740	MAYOR LOGAN HOWLETT  MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	11,705.73
EF080524	19059	CAROL REEVE-FOWKES MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	4,527.09
EF080525	20634	LEE-ANNE SMITH MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080526		BART HOUWEN MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080527	23338	STEVE PORTELLI MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080528	23339	STEPHEN PRATT MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080529	23340	SHAHYAZ MUBARAKAI MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080530		LYNDSEY WETTON MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080531		PHILIP EVA MONTHLY COUNCILLOR ALLOWANCE	5/09/2014	2,650.00
EF080532		AUST TAXATION DEPT PAYROLL DEDUCTIONS	12/09/2014	326,378.00
EF080533		COCKBURN COMMUN DONATION - PERFORMING ARTS FESTIVAL	12/09/2014	1,200.00
EF080534	10365	COC VOLUNTARY SES EXPENSE REIMBURSEMENTS	12/09/2014	5,092.35
EF080535		MCLEODS LEGAL SERVICES	12/09/2014	16,057.13

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080536	12025	TELSTRA CORPORATION COMMUNICATIONS SERVICES	12/09/2014	9,556.43
EF080537	18553	SELECTUS PTY LTD PAYROLL DEDUCTIONS	12/09/2014	11,832.08
EF080538	23834	ALAN ALDERSON SAFETY PRESCRIPTION GLASSES SUBISDY	12/09/2014	70.00
EF080539	24195	PAYNE'S WINDOW CLEANING AND SERVICES WINDOW CLEANING SERVICES	12/09/2014	5,092.96
EF080540	24806	REUBEN DIAS STUDY EXPENSES CONTRIBUTION	12/09/2014	1,712.50
EF080541	25987	TOYOTA FLEET MANAGEMENT PAYROLL DEDUCTIONS - NOVATED LEASE	12/09/2014	567.62
EF080542	26176	IAN LISTER RATES REFUND - OVERPAYMENT	12/09/2014	12,241.00
EF080543	10152	AUST SERVICES UNION PAYROLL DEDUCTIONS	17/09/2014	3,443.50
EF080544	10733	HOSPITAL BENEFIT FUND PAYROLL DEDUCTIONS	17/09/2014	1,574.10
EF080545	11001	MUNICIPAL EMPLOYEES UNION PAYROLL DEDUCTIONS	17/09/2014	679.00
EF080546	11856	WA LOCAL GOVERNMENT SUPER PLAN PAYROLL DEDUCTIONS	17/09/2014	354,899.39
EF080547	11857	CHAMPAGNE SOCIAL CLUB PAYROLL DEDUCTIONS	17/09/2014	1,115.20
EF080548	11859	STAFF SOCIAL CLUB PAYROLL DEDUCTIONS	17/09/2014	50.60
EF080549	11860	<b>45S CLUB</b> PAYROLL DEDUCTIONS	17/09/2014	44.00
EF080550	18005	COLONIAL FIRST STATE PAYROLL DEDUCTIONS	17/09/2014	405.90
EF080551	18247	ELLIOTT SUPERANNUATION FUND PAYROLL DEDUCTIONS	17/09/2014	273.93
EF080552	18432	HESTA SUPER FUND PAYROLL DEDUCTIONS	17/09/2014	4,510.30
EF080553	18718	FIRST STATE SUPER PAYROLL DEDUCTIONS	17/09/2014	2,073.03
EF080554	19010	SUMMIT PERSONAL SUPER PLAN PASQUALE CARRELLO PAYROLL DEDUCTIONS	17/09/2014	413.26
		PAYROLL DEDUCTIONS	17/09/2014	48.29
EF080556		PAYROLL DEDUCTIONS	17/09/2014	2,965.50
		MTAA SUPER FUND PAYROLL DEDUCTIONS	17/09/2014	399.17
		AUSTRALIANSUPER PAYROLL DEDUCTIONS	17/09/2014	14,439.49
		CBUS PAYROLL DEDUCTIONS	17/09/2014	1,428.76
		PAYROLL DEDUCTIONS	17/09/2014	4,372.10
		CATHOLIC SUPER & RETIREMENT FUND PAYROLL DEDUCTIONS	17/09/2014	866.17
		HOSTPLUS SUPERANNUATION FUND PAYROLL DEDUCTIONS	17/09/2014	538.46
EF080563	1	DUFFIELD SUPERANNUATION FUND PAYROLL DEDUCTIONS	17/09/2014	156.79

#### MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080564	21365	ING LIFE - ONEANSWER PERSONAL SUPER PAYROLL DEDUCTIONS	17/09/2014	115.35
EF080565	21921	MAURICIO FAMILY PAYROLL DEDUCTIONS	17/09/2014	2,682.24
EF080566	21996	ANZ ONEANSWER PERSONAL SUPER PAYROLL DEDUCTIONS	17/09/2014	264.87
EF080567	22067	STEPHENS SUPERANNUATION FUND PAYROLL DEDUCTIONS	17/09/2014	600.65
EF080568	22901	FONTANA SUPER PLAN PAYROLL DEDUCTIONS	17/09/2014	1,287.94
EF080569	23695	NETWEALTH INVESTMENT & SUPERANNUATION PAYROLL DEDUCTIONS	17/09/2014	608.43
EF080570	23993	ONEPATH LIFE LIMITED PAYROLL DEDUCTIONS	17/09/2014	508.16
EF080571	24620	E & B PINTO SUPERANNUATION FUND PAYROLL DEDUCTIONS	17/09/2014	1,150.30
EF080572	24642	TWUSUPER PAYROLL DEDUCTIONS	17/09/2014	1,076.61
EF080573	24813	KINETIC SUPER PAYROLL DEDUCTIONS	17/09/2014	585.03
EF080574	25043	COLONIAL FIRST STATE - KERRY MARGARET ROBERTS PAYROLL DEDUCTIONS	17/09/2014	162.03
EF080575	25051	ANZ SMART CHOICE SUPER (ONEPATH MASTERFUND) ROAN BARR PAYROLL DEDUCTIONS	, ,	·
	25394	PAYROLL DEDUCTIONS	17/09/2014	31.55
	25495	ONEPATH CUSTODI PAYROLL DEDUCTIONS	17/09/2014	476.20
	25538 25590	NORTH PERSONAL SUPERANNUATION PLAN PAYROLL DEDUCTIONS FIRST CHOICE WHOLESALE PERSONAL SUPER - MATHEW SAPSWO	17/09/2014 17/09/2014	
	25649	PAYROLL DEDUCTIONS  COMMONWEALTH BANK GROUP SUPER	17/09/2014	
		PAYROLL DEDUCTIONS BT LIFETIME SUPER - EMPLOYER PLAN	17/09/2014	
		PAYROLL DEDUCTIONS ONEPATH SUPER - RACHEL PLEASANT	17/09/2014	599.58
	26070	PAYROLL DEDUCTIONS  ZUVELA ENDPLAN SUPERANNUATION FUND	17/09/2014	685.84
EF080584		SUPERANNUATION FUND NORTH PERSONAL SUPERANNUATION PLAN	17/09/2014	152.13
EF080585	26089	SUPERANNUATION FUND ESSENTIAL SUPPERANNUATION FUND	17/09/2014	1,195.52
EF080586	26145	SUPPERANNUATION CHRISTIAN SUPER - REBECCA KESHWAR	17/09/2014	135.19
EF080587		PAYROLL DEDUCTIONS  DEPARTMENT OF FIRE AND EMERGENCY SERVICES	22/09/2014	3,793,010.88
EF080588		COST SHARING - COMMUNITY FIRE MANAGER SOUTHERN METRO REGIONAL COUNCIL - LOANS	22/09/2014	394,701.41
EF080589	26179	LOAN REPAYMENT  LIQUID LEARNING GROUP PTY LTD  CONFEDENCES	22/09/2014	2,189.00
EF080590	26190	CONFERENCES  NOSCIRE PISTAN  YOUTH EVENT - SPOTLIGHT WINNER	22/09/2014	500.00
EF080591	26191	SAM MARTIN TRACEY KNOX YOUTH EVENT - SPOTLIGHT WINNER	22/09/2014	250.00

#### MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080592	26192	JASMINE MURRAY	22/09/2014	100.00
		YOUTH EVENT - SPOTLIGHT WINNER		
EF080593	10042	FRANKLIN OFFSHORE AUSTRALIA PTY LTD WAS AKER UNIRIG ANI	30/09/2014	363.00
		LIFTING EQUIPMENT		
EF080594	10058	ALSCO PTY LTD	30/09/2014	3,674.74
		HYGIENE SERVICES/SUPPLIES		
EF080595	10071	AUSTRALASIAN PERFORMING RIGHT ASSOC. LTD LICENCE - PERFORMING RIGHTS	30/09/2014	2,223.23
EF080596	10086	ARTEIL WA PTY LTD	30/09/2014	195.16
	1	ERGONOMIC CHAIRS	00/05/2011	
EF080597	10110	AUSRECORD	30/09/2014	440.00
		STATIONERY SUPPLIES		
EF080598	10118	AUSTRALIA POST	30/09/2014	7,811.35
		POSTAGE CHARGES		
EF080599	10160	DORMA AUSTRALIA PTY LTD	30/09/2014	2,518.56
		AUTOMATIC DOOR SERVICES		
EF080600	10184	BENARA NURSERIES	30/09/2014	1,111.00
		PLANTS		
EF080601	10190	BETTA TURF	30/09/2014	6,584.60
		TURFING SERVICES		
EF080602	10207	BOC GASES	30/09/2014	2,352.14
		GAS SUPPLIES		
EF080603	10221	BP AUSTRALIA LIMITED	30/09/2014	10,150.29
		DIESEL/PETROL SUPPLIES		
EF080604	10226	BRIDGESTONE AUSTRALIA LTD	30/09/2014	20,166.82
		TYRE SERVICES		
EF080605	10235	BRUCE SHANNAHANS MELVILLE TOYOTA	30/09/2014	329.23
		MOTOR VEHICLES/PARTS/SERVICES		
EF080606	10244	BUILDING & CONST INDUSTRY TRAINING FUND	30/09/2014	113,792.41
		LEVY PAYMENT		
EF080607	10246	BUNNINGS BUILDING SUPPLIES PTY LTD	30/09/2014	943.16
		HARDWARE SUPPLIES		
EF080608	10247	BUNZL AUSTRALIA LTD	30/09/2014	526.24
		PAPER/PLASTIC/CLEANING SUPPLIES		
EF080609	10255	CABCHARGE AUSTRALIA PTY LTD	30/09/2014	372.64
		CABCHARGES		
EF080610	10256	CABLE LOCATES & CONSULTING	30/09/2014	1,611.50
		LOCATING SERVICES		
EF080611	10279	CASTROL AUSTRALIA PTY LTD	30/09/2014	5,436.10
77000610	1000=	GREASE/LUBRICANTS	00.100.1001.	=== 00
EF080612	10287	CENTRELINE MARKINGS	30/09/2014	550.00
EE000613	10000	LINEMARKING SERVICES	20 /00 /0014	020.80
EF080613	10292	CHADSON ENGINEERING PTY LTD MEDICAL SUPPLIES	30/09/2014	239.80
EE000614	10005	CHALLENGER INSTITUTE OF TECHNOLOGY - BEACONSFIELD	20 /00 /0014	001.20
EF080614	10295	TRAINING SERVICES	30/09/2014	921.30
EF080615	10333	CJD EQUIPMENT PTY LTD	20 /00 /0014	0 505 22
FLOODII	10333	HARDWARE SUPPLIES	30/09/2014	2,595.33
EF080616	10346	COATES HIRE OPERATIONS PTY LTD	30/09/2014	1,310.84
71.000010	100-10	EQUIPMENT HIRING SERVICES	30/03/2014	1,510.64
EF080617	10348	COCA COLA AMATIL	30/09/2014	1,958.22
21 000011	10070	SOFT DRINK SUPPLIES	30/09/2014	1,900.22
EF080618	10353	COCKBURN CEMENT LTD	30/09/2014	760.32
_1 000010		RATES REFUND	30,00,2017	700.52
EF080619		COCKBURN LIQUOR CENTRE	30/09/2014	3,583.96
			, 0-, 2011	1 2,555.56

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080620	10359	COCKBURN PAINTING SERVICE PAINTING SUPPLIES/SERVICES	30/09/2014	2,640.00
EF080621	10375	VEOLIA ENVIRONMENTAL SERVICES WASTE SERVICES	30/09/2014	9,255.13
EF080622	10380	COLQUHOUNS FREMANTLE BAG COMPANY WOVEN BAGS	30/09/2014	418.00
EF080623	10384	PROGILITY PTY LTD COMMUNICATIONS AUSTRALIA PTY LTD COMMUNICATION SERVICES	30/09/2014	209.00
EF080624	10386	COMMUNITY NEWSPAPER GROUP ADVERTISING SERVICES	30/09/2014	31,350.45
EF080625	10389	COMPU-STOR ARCHIVE BOXES	30/09/2014	1,007.16
EF080626	10394	CD'S CONFECTIONERY WHOLESALERS CONFECTIONERY	30/09/2014	1,107.20
EF080627	10459	DAVID GRAY & CO MOBILE GARBAGE BINS	30/09/2014	377.25
EF080628	10483	LANDGATE MAPPING/LAND TITLE SEARCHES	30/09/2014	16,084.46
EF080629	10485	DEPARTMENT OF SPORT AND RECREATION ACCOMMODATION DEPOSIT	30/09/2014	400.00
EF080630	10526	E & MJ ROSHER PTY LTD MOWER PARTS	30/09/2014	547.80
EF080631	10535	WORKPOWER INCORPORATED T/AS ECOSYSTEM MANAGEMENT SIPLANTS	30/09/2014	17,981.04
EF080632	10580	FC COURIERS COURIER SERVICES	30/09/2014	3,100.30
EF080633	10588	FINANCIAL COUNSELLORS ASSOC OF WA INC MEMBERSHIP RENEWAL	30/09/2014	707.50
EF080634	10590	<b>DEPARTMENT OF FIRE AND EMERGENCY SERVICES</b> COST SHARING - COMMUNITY FIRE MANAGER	30/09/2014	1,446.27
EF080635	10608	FORESHORE REHABILITATION & LANDSCAPING FENCING/LANDSCAPING SERVICES	30/09/2014	11,116.60
EF080636	10609	FORESTVALE TREES P/L PLANTS - TREES/SHRUBS	30/09/2014	2,046.00
EF080637	10641	GALVINS PLUMBING SUPPLIES PLUMBING SERVICES	30/09/2014	16,086.18
EF080638		GRONBEK SECURITY LOCKSMITH SERVICES	30/09/2014	8,564.32
EF080639	10692	AECOM AUSTRALIA PTY LTD CONSULTANCY SERVICES	30/09/2014	52,433.15
EF080640		HARTAC SIGNS & SAFETY SOLUTIONS ROAD SUPPLIES	30/09/2014	82.50
EF080641	10709	HECS FIRE FIRE SYSTEM MAINTENANCE	30/09/2014	5,249.20
EF080642		HYDROJET GRAFFITI REMOVAL SERVICES/PRODUCTS	30/09/2014	2,530.00
EF080643		ICON-SEPTECH PTY LTD DRAINAGE PRODUCTS	30/09/2014	202.40
EF080644	1	INST OF PUBLIC WORKS ENG AUST - NSW TRAINING SERVICES	30/09/2014	1,320.00
EF080645	i	J F COVICH & CO PTY LTD ELECTRICAL SERVICES	30/09/2014	27,260.06
EF080646	1	JANDAKOT EARTHMOVING & RURAL CONTRACTORS FIREBREAK CONSTRUCTION	30/09/2014	2,640.00
EF080647	j	JANDAKOT METAL INDUSTRIES METAL SUPPLIES	30/09/2014	1,496.00

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080648	10787	JANDAKOT ACCIDENT REPAIR CENTRE PANEL BEATING SERVICES	30/09/2014	4,523.31
EF080649	10794	JASON SIGNMAKERS SIGNS	30/09/2014	3,563.78
EF080650	10803	GECKO CONTRACT MOWING/LANDSCAPING SERVICES	30/09/2014	56,599.50
EF080651	10814	JR & A HERSEY PTY LTD SAFETY CLOTHING SUPPLIES	30/09/2014	1,534.85
EF080652	10824	KCI INDUSTRIES PTY LTD REPAIRS/MAINTENANCE SERVICES	30/09/2014	317.25
EF080653	10836	KERB DOCTOR CONCRETE KERBING - SUPPLY & LAYING	30/09/2014	8,601.45
EF080654	10879	LES MILLS AEROBICS INSTRUCTION/TRAINING SERVICES	30/09/2014	1,073.63
EF080655	10884	WSP BUILDINGS PTY LTD CONSULTANCY SERVICES	30/09/2014	7,700.00
EF080656	10888	LJ CATERERS CATERING SERVICES	30/09/2014	5,446.10
EF080657	10892	LOCAL GOVT MANAGERS AUSTRALIA SUBSCRIPTION	30/09/2014	1,865.00
EF080658	10913	BUCHER MUNICIPAL PTY LTD REPAIR SERVICES	30/09/2014	27,064.07
EF080659	10923	MAJOR MOTORS PTY LTD REPAIRS/MAINTENANCE SERVICES	30/09/2014	4,061.78
EF080660	10938	MAXWELL ROBINSON & PHELPS PEST & WEED MANAGEMENT	30/09/2014	15,934.45
EF080661	10939	LINFOX ARMAGUARD BANKING SECURITY SERVICES	30/09/2014	1,601.70
EF080662	10942	MCGEES PROPERTY PROPERTY CONSULTANCY SERVICES	30/09/2014	3,850.00
EF080663	10944	MCLEODS LEGAL SERVICES	30/09/2014	24,008.91
EF080664	10960	METRO FILTERS FILTER SUPPLIES	30/09/2014	385.50
EF080665		MOBILE MASTERS COMMUNICATIONS EQUIPMENT/SERVICES	30/09/2014	732.60
EF080666	10990	MOWER CITY SALES & SERVICES PTY LTD LAWN MOWING EQUIPMENT	30/09/2014	4,485.13
EF080667	10997	WILSON PARKING AUSTRALIA SECURITY SERVICES	30/09/2014	158,749.19
EF080668	11026	NESTLE FOOD SERVICES CATERING SUPPLIES	30/09/2014	378.00
EF080669	11028	NEVERFAIL SPRINGWATER LTD BOTTLED WATER SUPPLIES	30/09/2014	1,672.42
EF080670		NOISE & VIBRATION MEASUREMENT SYSTEMS MEASURING EQUIPMENT/SERVICES	30/09/2014	1,122.00
EF080671	11036	NORTHLAKE ELECTRICAL ELECTRICAL SERVICES	30/09/2014	18,526.86
EF080672	11039	NOVUS AUTO GLASS WINDSCREEN REPAIR SERVICES	30/09/2014	365.00
EF080673	11068	VODAFONE HUTCHISON AUSTRALIA PTY LTD PAGING SERVICES	30/09/2014	1,342.94
EF080674	11070	OTIS ELEVATOR COMPANY ELEVATOR REPAIRS/MAINTENANCE	30/09/2014	1,905.19
EF080675	11149	ARCHITECTURAL MATERIALS & PRODUCT SALES BUS SHELTERS	30/09/2014	3,569.50

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080676	11152	FULTON HOGAN INDUSTRIES PTY LTD ROAD MAINTENANCE	30/09/2014	8,212.60
EF080677	11182	PREMIUM BRAKE & CLUTCH SERVICE BRAKE SERVICES	30/09/2014	14,777.51
EF080678	11205	QUALITY TRAFFIC MANAGEMENT PTY LTD TRAFFIC CONTROL SERVICES	30/09/2014	3,535.87
EF080679	11208	QUICK CORPORATE AUSTRALIA PTY LTD STATIONERY/CONSUMABLES	30/09/2014	13,118.56
EF080680	11235	REINFORCED CONCRETE PIPES PTY LTD CONCRETE PIPE SUPPLIES	30/09/2014	12,639.00
EF080681	11240	INITIAL HYGIENE RENTOKIL INITIAL PRT LTD SANITARY SERVICES	30/09/2014	1,010.83
EF080682	11243	REPCO AUTO PARTS AUTO SUPPLIES	30/09/2014	186.04
EF080683	11264	ROCLA PIPELINE PRODUCTS CONCRETE LINER SUPPLIES	30/09/2014	24,361.72
EF080684	11284	ROYAL LIFE SAVING SOCIETY AUSTRALIA TRAINING SERVICES	30/09/2014	350.00
EF080685	11294	SAFEMAN (WA) PTY LTD PROTECTIVE CLOTHING/EQUIPMENT	30/09/2014	1,475.59
EF080686	11307	SATELLITE SECURITY SERVICES PTY LTD SECURITY SERVICES	30/09/2014	1,802.60
EF080687	11308	SBA SUPPLIES HARDWARE SUPPLIES	30/09/2014	4,561.40
EF080688	11311	SCITECH DISCOVERY CENTRE ENTERTAINMENT SERVICES	30/09/2014	400.00
EF080689	11318	SELECT SECURITY WA PTY LTD SECURITY SERVICES	30/09/2014	690.00
EF080690	11337	SHERIDANS FOR BADGES NAME BADGES & ENGRAVING	30/09/2014	471.59
EF080691	11361	SIGMA CHEMICALS PTY LTD CHEMICAL SUPPLIES	30/09/2014	9,405.52
EF080692	11373	SKIPPER TRUCK PARTS SPARE PARTS & MAINTENANCE SERVICES	30/09/2014	5,705.31
EF080693	11375	SLATER-GARTRELL SPORTS SPORT SUPPLIES	30/09/2014	550.00
EF080694	11380	SNAP PRINTING FREMANTLE PRINTING SERVICES	30/09/2014	1,090.00
EF080695	11425	WASTE DISPOSAL GATE FEES	30/09/2014	1,320,387.79
EF080696		SOUTHSIDE MITSUBISHI MOTOR VEHICLE PURCHASE	30/09/2014	16,262.85
EF080697		SPARE PARTS PUPPET THEATRE ENTERTAINMENT SERVICES	30/09/2014	506.00
		SPEARWOOD NEWSROUND NEWSPAPER SUPPLIES	30/09/2014	2,468.30
EF080699		SPEARWOOD VETERINARY HOSPITAL VETERINARY SERVICES	30/09/2014	1,018.00
EF080700		SPECTRUM CABINETS  CABINET SUPPLIES	30/09/2014	4,323.00
EF080701		SPORTS TURF TECHNOLOGY TURF CONSULTANCY SERVICES	30/09/2014	3,459.50
		SPORTSWORLD OF WA SPORT SUPPLIES	30/09/2014	399.30
EF080703		SPYDUS USERS NETWORK MEMBERSHIP	30/09/2014	100.00

#### MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080704	11483	ST JOHN AMBULAN	30/09/2014	3,396.70
		FIRST AID COURSES		
EF080705	11493	SAI GLOBAL LTD	30/09/2014	19,710.49
		PUBLICATIONS - STANDARDS		
EF080706	11496	STANLEE WA LTD	30/09/2014	690.80
		CATERING EQUIPMENT/SUPPLIES		
EF080707	11502	STATE LAW PUBLISHER	30/09/2014	820.50
		ADVERTISING SERVICES		
EF080708	11505	STATE LIBRARY OF WESTERN AUSTRALIA BOOK SUPPLIES	30/09/2014	9,636.00
EE000700	11511		20 /00 /0014	1.051.50
EF080709	11511	STATEWIDE BEARINGS BEARING SUPPLIES	30/09/2014	1,951.59
EE000710	11501		20,400,40014	260.50
EF080710	11531	BRUSH / DOAD BROOM SUPPLIES	30/09/2014	269.50
DD000711	11546	BRUSH/ROAD BROOM SUPPLIES		
EF080711	11546	T FAULKNER & CO	30/09/2014	5,940.00
PP000710	11555	INSTALLATIONS/SUPPLY OF HAND RAILS		
EF080712	11557	TECHNOLOGY ONE LTD	30/09/2014	28,028.00
		IT CONSULTANCY SERVICES		
EF080713	11597	THE PERTH MINT	30/09/2014	2,740.71
		PURCHASE OF CITIZENSHIP COINS		
EF080714	11619	TITAN FORD	30/09/2014	29,668.65
		AUTOMOTIVE SERVICES		
EF080715	11625	TOTAL EDEN PTY LTD	30/09/2014	63,849.84
		RETICULATION SUPPLIES		
EF080716	11642	TRAILER PARTS PTY LTD	30/09/2014	1,644.47
		TRAILER PARTS		
EF080717	11651	TREE WATERING SERVICES	30/09/2014	6,888.00
		TREE WATERING SERVICES		
EF080718	11657	TRUCKLINE PARTS CENTRES	30/09/2014	2,036.04
		AUTOMOTIVE SPARE PARTS		
EF080719	11667	TURFMASTER FACILITY MANAGEMENT	30/09/2014	81,858.87
		TURFING SERVICES		
EF080720	11669	TYCO SERVICES	30/09/2014	627.00
		FIRE ALARM SYSTEM REPAIRS		
EF080721	11697	VAT MAN-FAT FILTERING SYSTEMS	30/09/2014	456.10
		FILTER CLEANING SERVICES		
EF080722	11699	VERNON DESIGN GROUP	30/09/2014	5,836.60
		ARCHITECTURAL SERVICES		
EF080723	11701	VIBRA INDUSTRIA	30/09/2014	1,516.90
		FILTER SUPPLIES		
EF080724	11715	WA BLUEMETAL	30/09/2014	13,529.93
		ROADBASE SUPPLIES		
EF080725	11722	WA HINO SALES & SERVICE	30/09/2014	2,237.40
		REPAIRS/MAINTENANCE SERVICES		
EF080726	11725	WA LIBRARY SUPPLIES PTY LTD	30/09/2014	117.50
		LIBRARY SUPPLIES		
EF080727	11726	WA LIMESTONE	30/09/2014	15,637.39
		LIMESTONE SUPPLIES		
EF080728	11738	WA RANGERS ASSOCIATION INC	30/09/2014	1,140.00
		CONFERENCES/SEMINARS		
EF080729	11739	WA SPIT ROAST COMPANY	30/09/2014	4,556.00
		CATERING SERVICES		
EF080730	11773	WESFARMERS LANDMARK LIMITED	30/09/2014	1,576.73
		CHEMICAL SUPPLIES		
EF080731	11786	WESTCARE INDUSTRIES	30/09/2014	788.70
		STATIONERY/SAFETY VESTS		

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080732	11789	WALGA ADVERTISING/TRAINING SERVICES	30/09/2014	112,248.00
EF080733	11793	WESTERN IRRIGATION PTY LTD IRRIGATION SERVICES/SUPPLIES	30/09/2014	8,778.65
EF080734	11795	WESTERN POWER ELECTRICAL SERVICES	30/09/2014	5,232.00
EF080735	11806	WESTRAC PTY LTD REPAIRS/MTNCE - EARTHMOVING EQUIPMENT	30/09/2014	1,332.10
EF080736	11828	WORLDWIDE ONLINE PRINTING - O'CONNOR PRINTING SERVICES	30/09/2014	1,353.35
EF080737	11835	WURTH AUSTRALIA PTY LTD HARDWARE SUPPLIES	30/09/2014	2,160.87
EF080738	11845	YANGEBUP LITTLE COMMUNITY GRANT	30/09/2014	400.00
EF080739	11972	COBEY MAINTENANCE SERVICES TURF MANAGEMENT	30/09/2014	76,046.34
EF080740	11987	SAFETY ZONE AUSTRALIA PTY LTD SAFETY EQUIPMENT	30/09/2014	806.48
EF080741	11990	EARTHCARE (AUSTRALIA) P/L LANDSCAPING SERVICES	30/09/2014	3,960.00
EF080742	12007	SHANE MCMASTER SURVEYS SURVEYING SERVICES	30/09/2014	23,650.00
EF080743	12014	TUTT BRYANT EQUIPMENT BT EQUIPMENT PTY LTD T/AS EXCAVATING/EARTHMOVING EQUIPMENT	30/09/2014	15,029.40
EF080744	12018	O'CONNOR LAWNMOWER & CHAINSAW CENTRE MOWING EQUIPMENT/PARTS/SERVICES	30/09/2014	136.20
EF080745	12065	ROMERI MOTOR TRIMMERS AUTOMOTIVE UPHOLSTERY SERVICES	30/09/2014	250.00
EF080746	12079	CHARTER PLUMBING & GAS PLUMBING SERVICES	30/09/2014	173.25
EF080747	12127	ABLE WESTCHEM CHEMICAL/CLEANING SUPPLIES	30/09/2014	624.95
EF080748	12159	CITY OF JOONDALUP OVERDUE BOOK	30/09/2014	2,122.82
EF080749	12193	SAGE CONSULTING ENGINEERS P/L CONSULTANCY SERVICES - LIGHTING	30/09/2014	5,500.00
EF080750	12207	CIVICA PTY LTD SOFTWARE SUPPORT/LICENCE FEES	30/09/2014	40,580.27
EF080751	12447	BORDER EDGE KERBING KERBING SERVICES	30/09/2014	3,775.20
EF080752	12497	TROPHY CHOICE TROPHY SUPPLIES	30/09/2014	158.40
EF080753	12542	SEALIN GARLETT CEREMONIAL SERVICES	30/09/2014	400.00
EF080754	12589	AUSTRALIAN INSTITUTE OF MANAGEMENT TRAINING SERVICES	30/09/2014	7,331.40
EF080755	12621	SETON AUSTRALIA SIGN SUPPLIES	30/09/2014	1,264.84
EF080756	12656	COOGEE BEACH SURF LIFESAVING CLUB INC POOR GROVE SLSC DEVELOPMENT COSTS	30/09/2014	300.00
EF080757	12779	WESTERN RESOURCE RECOVERY PTY LTD WASTE DISPOSAL SERVICES	30/09/2014	2,972.94
EF080758	i	BORAL ASPHALT WA SUPPLY OF ASPHALT	30/09/2014	2,900.99
EF080759	13073	CUSTOM BUILT SAUNAS SAUNA EQUIPMENT/SERVICES	30/09/2014	275.00

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080760	13111	OCE-AUSTRALIA LIMITED COPIERS/PRINTERS	30/09/2014	133.20
EF080761	13325	MARTINS ENVIRONMENTAL SERVICES WEED SPRAYING SERVICES	30/09/2014	23,001.00
EF080762	13354	ROCKINGHAM HOLD VEHICLE SUPPLIES	30/09/2014	24,751.80
EF080763	13373	THE HIRE GUYS HIRING SERVICES	30/09/2014	483.00
EF080764	13393	SOUTH WEST GROUP CONTRIBUTIONS	30/09/2014	40,150.00
EF080765	13409	KLEENIT CLEANING SERVICES	30/09/2014	39,014.01
EF080766	13462	ATI-MIRAGE PTY LTD TRAINING SERVICES	30/09/2014	451.00
EF080767	13492	CHIVERS MARINE MARINE EQUIPMENT	30/09/2014	370.61
EF080768	13563	GREEN SKILLS INC. ECOJOBS ENVIRON. PERSONNEL EMPLOYMENT SERVICES	30/09/2014	11,731.51
EF080769	13671	STAPLES AUSTRALIA PTY LTD OFFICE/STATIONERY SUPPLIES	30/09/2014	66,801.19
EF080770	13767	ELLIOTTS IRRIGATION PTY LTD IRRIGATION SERVICES	30/09/2014	1,516.90
EF080771	13825	JACKSON MCDONALD LEGAL SERVICES	30/09/2014	17,292.14
EF080772	13832	INSIGHT CALL CENTRE SERVICES COMMUNICATION SERVICES	30/09/2014	4,767.09
EF080773	13834	SULO MGB AUSTRALIA PTY LTD MOBILE GARBAGE BINS	30/09/2014	120,803.76
EF080774	13849	MCMULLEN NOLAN & PARTNERS SURVEYORS P/L SURVEYING SERVICES	30/09/2014	27,500.00
EF080775	13860	KRS CONTRACTING VERGE COLLECTION SERVICES	30/09/2014	6,593.60
EF080776	14258	WARP GROUP PTY LTD ROAD CONSTRUCTION MATERIALS	30/09/2014	1,380.50
EF080777	14305	INSTITUTE OF ACCESS TRAINING AUSTRALIA TRAINING SEMINAR	30/09/2014	1,300.00
EF080778	14350	BAILEYS FERTILISERS FERTILISER SUPPLIES	30/09/2014	2,399.10
EF080779		LANDSCAPE AUSTRALIA PTY LTD  LANDSCAPE MAINTENANCE SERVICES	30/09/2014	5,940.00
EF080780		LAKES JUNIOR FOOTBALL CLUB YOUTH ACTIVE PROGRAM REGISTRATION FEES	30/09/2014	400.00
EF080781		ANDOVER DETAILERS DETAILING SERVICES	30/09/2014	3,582.00
EF080782		BIDVEST (WA) FOOD/CATERING SUPPLIES	30/09/2014	703.28
EF080783	14593	AUSTREND INTERNATIONAL PTY LTD ALUMINIUM SUPPLIES	30/09/2014	13,470.05
EF080784	14667	APPEALING SIGNS SIGNS	30/09/2014	1,758.79
EF080785	14777	LGIS INSURANCE BROKING INSURANCE PREMIUMS	30/09/2014	4,180.47
EF080786	14871	HEY PRESTO ENTERTAINMENT - MAGIC SHOW	30/09/2014	220.00
EF080787	14919	PERTH METRO STO STORAGE	30/09/2014	2,580.00

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080788	15162	PERTH MANAGEMENT SERVICES PROPERTY MANAGERS	30/09/2014	137.76
EF080789	15267	CHEMSEARCH AUSTRALIA CHEMICAL SUPPLIES	30/09/2014	7,825.80
EF080790	15272	MORRISONS PUBLIC ADDRESS & PROF AUDIO PA SYSTEMS	30/09/2014	655.50
EF080791	15363	JONES LANG LASALLE (WA) PTY LTD SHOP RENT - GATEWAY SHOPPING CENTRE	30/09/2014	2,009.47
EF080792	15393	GREENWAY ENTERPRISES HARDWARE SUPPLIES	30/09/2014	2,984.38
EF080793	15541	JANDAKOT NEWS NEWSPAPER SUPPLIERS	30/09/2014	301.00
EF080794	15550	APACE AID PLANTS & LANDSCAPING SERVICES	30/09/2014	418.88
EF080795	15588	NATURAL AREA MANAGEMENT & SERVICES WEED SPRAYING	30/09/2014	4,400.00
EF080796	15676	ADH FENCING FENCING SERVICES	30/09/2014	220.00
EF080797	15678	A2Z PEST CONTROL PEST CONTROL	30/09/2014	5,830.00
EF080798	15746	WESTERN AUSTRALIA POLICE SERVICE POLICE CLEARANCES	30/09/2014	105.70
EF080799	15760	FREMANTLE HOCKEY CLUB INC REGISTRATION FEES	30/09/2014	250.00
EF080800	15785	DIEBACK TREATMENT SERVICES CONSULTANCY SERVICES - ENVIRONMENTAL	30/09/2014	18,273.62
EF080801	15850	ECOSCAPE ENVIRONMENTAL CONSULTANCY	30/09/2014	3,512.96
EF080802	16058	SHOP-A-DOCKET PTY LTD ADVERTISING SERVICES	30/09/2014	814.00
EF080803	16064	CMS ENGINEERING PTY LTD AIRCONDITIONING SERVICES	30/09/2014	52,899.83
EF080804	16363	ATCO GAS AUSTRALIA GAS SUPPLIES/SERVICES	30/09/2014	10,232.86
EF080805	16396	MAYDAY EARTHMOVING GRADER HIRE	30/09/2014	74,053.13
EF080806	16403	ROBINSON BUILDTECH BUILDING SERVICES - ALTERATIONS	30/09/2014	6,940.45
EF080807		RANGE FORD MOTOR VEHICLES	30/09/2014	41,810.55
EF080808	16894	TREBLEX INDUSTRIAL PTY LTD CHEMICALS - AUTOMOTIVE	30/09/2014	3,471.60
EF080809	16956	CAN-CALC PTY LTD OFFICE MACHINES/EQUIPMENT	30/09/2014	345.00
EF080810	16985	WA PREMIX CONCRETE SUPPLIES	30/09/2014	51,980.28
EF080811		AUS SECURE SECURITY SERVICES/PRODUCTS	30/09/2014	500.00
EF080812		VALUE TISSUE PAPER PRODUCTS	30/09/2014	467.50
EF080813	17178	THE CLEAN UP COMPANY WASTE DISPOSAL SERVICES	30/09/2014	2,295.70
EF080814	i	KENNARDS HIRE - MYAREE EQUIPMENT HIRE	30/09/2014	2,025.00
EF080815	I	PIRTEK (FREMANTLE) PTY LTD HOSES & FITTINGS	30/09/2014	5,198.36

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EF080816	17481	ADS AUTOMATION DOOR/GATE REPAIRS	30/09/2014	720.50
EF080817	17555	ALLEASING PTY LTD LEASE REPAYMENTS	30/09/2014	67,318.87
EF080818	17600	ERECTIONS (WA) GUARD RAILS	30/09/2014	7,503.41
EF080819	17887	RED SAND SUPPLIES PTY LTD  MACHINERY HIRE	30/09/2014	2,090.00
EF080820	17942	MRS MAC'S FOOD SUPPLIES	30/09/2014	114.95
EF080821	18086	DONALD CANT WATTS CORKE (WA) P/L PROJECT MANAGEMENT SERVICES	30/09/2014	14,437.50
EF080822	18100	DAVIS LANGDON AUSTRALIA COST MANAGEMENT SERVICES	30/09/2014	6,429.50
EF080823	18217	METROPOLITAN OMNIBUS COMPANY BUS HIRE	30/09/2014	1,430.00
EF080824	18249	LASSO MEDIA ADVERTISING	30/09/2014	1,083.00
EF080825	18265	FREMANTLE CITY DOCKERS FOOTBALL CLUB	30/09/2014	195.00
EF080826	18272	AUSTRACLEAR LIMITED INVESTMENT SERVICES	30/09/2014	72.63
EF080827	18286	IW PROJECTS PTY LTD CONSULTANCY SERVICES - CIVIL ENGINEERING	30/09/2014	1,182.50
EF080828	18295	FREMANTLE UNITED SOCCER & RECREATIONAL CLUB INC REGISTRATION FEES	30/09/2014	200.00
EF080829	18343	HEYDER & SHEARS EXCLUSIVE CATERERS CATERING SERVICES	30/09/2014	21,936.22
EF080830	18425	SUCCESS STRIKER REGISTRATION FEES	30/09/2014	200.00
EF080831	18436	JCS PLUMBING SERVICES PLUMBING SERVICES	30/09/2014	875.00
EF080832	18533	FRIENDS OF THE COMMUNITY INC. DONATION	30/09/2014	2,374.00
EF080833	18611	PERTH REGION NATURAL RESOURCE MGT SERVICES	30/09/2014	5,500.00
EF080834		ECO-HIRE EQUIPMENT HIRE	30/09/2014	30,655.00
EF080835	18639	HAMILTON HILL DELIVERY ROUND NEWSPAPER DELIVERY SERVICE	30/09/2014	51.80
EF080836		P & R EDWARDS ENTERTAINMENT SERVICES	30/09/2014	650.00
EF080837		SILICH ENTERPRISES PTY LTD BOLLARDS	30/09/2014	8,380.00
EF080838	18962	SEALANES (1985) P/L CATERING SUPPLIES	30/09/2014	1,555.80
EF080839		FOREVER SHINING MONUMENT	30/09/2014	22,000.00
EF080840		SPRAYLINE SPRAYING EQUIPMENT SPRAYING EQUIPMENT	30/09/2014	699.12
EF080841		ZIP HEATERS (AUST) PTY LTD HEATERS	30/09/2014	275.67
EF080842	- 1	WHITCHURCH REFRIGERATION & AIRCONDITIONING AIR CONDITIONING SERVICES	30/09/2014	2,450.25
EF080843	19533	WOOLWORTHS LTD GROCERIES	30/09/2014	4,056.66

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EF080844	19545	GRASSWEST	30/09/2014	10,815.00
		BUILDING & GARDEN MAINTENANCE		
EF080845	19623	ERGOLINK	30/09/2014	390.10
		OFFICE FURNITURE		
EF080846	19628	PAPERBARK TECHNOLOGIES	30/09/2014	6,186.50
		ARBORICULTURAL CONSULTANCY SERVICES		
EF080847	19652	TMS SERVICES	30/09/2014	2,813.38
77000010	10655	SECURITY SERVICES	00/00/001	
EF080848	19657	COMPUTER HARDWARE/SOFTWARE	30/09/2014	4,273.50
EF080849	19718	SIFTING SANDS	30/09/2014	1,377.41
EFOOOT	19710	CLEANING SERVICES - SAND	30/09/2014	1,577.41
EF080850	19765	BACKSAFE AUSTRA	30/09/2014	2,552.63
Br occoor		LIFTING EQUIPMENT	00,03,201.	2,002.00
EF080851	19794	THE SOUTHERN LIONS RUGBY UNION CLUB	30/09/2014	600.00
		SPORTS CLUB	, ,	
EF080852	19847	PFD FOOD SERVICES PTY LTD	30/09/2014	2,519.40
		CATERING SERVICES		
EF080853	19885	SAFEGUARD INDUSTRIES	30/09/2014	1,200.00
		SECURITY SCREENS/DOORS		
EF080854	19916	THE FUNK FACTORY	30/09/2014	660.00
		ENTERTAINMENT SERVICES		
EF080855	19967	FINGER FOOD CATERING	30/09/2014	239.00
		CATERING SERVICES		
EF080856	20000	AUST WEST AUTO ELECTRICAL P/L	30/09/2014	28,328.78
		AUTO ELECTRICAL SERVICES		007.00
EF080857	20068	CLARITY COMMUNICATIONS PUBLIC RELATIONS CONSULTANCY SERVICES	30/09/2014	825.00
EEOOOOEO	00146	DATA#3 LIMITED	20 /00 /0014	25 005 78
EF080858	20146	CONTRACT IT PERSONNEL & SOFTWARE	30/09/2014	35,095.78
EF080859	20215	POWERVAC	30/09/2014	292.50
Dr 000007		CLEANING EQUIPMENT	00,03,2011	252.00
EF080860	20230	BUTT OUT AUSTRALIA	30/09/2014	1,903.00
		CLEANING SUPPLIES	, ,	·
EF080861	20321	RIVERJET P/L	30/09/2014	58,586.70
		EDUCTING-CLEANING SERVICES .		
EF080862	20322	PLANTRITE	30/09/2014	492.80
		PLANT SUPPLIES		
EF080863	20473	RACKMART	30/09/2014	919.80
		SHELVING SUPPLIES		
EF080864	20549	A1 CARPET, TILE & GROUT CLEANING	30/09/2014	1,815.00
	2252	CLEANING SERVICES - TILES/CARPET		- 05
EF080865	20697	ENCYCLE CONSULTING PTY LTD ENVIRONMENTAL CONSULTANCY	30/09/2014	5,865.75
EF080866	20763	JECODA CONCRETE	30/09/2014	2,750.00
EF000000	20703	CONCRETE SUPPLY	30/09/2014	2,730.00
EF080867	20786	THE BUTCHER SHOP	30/09/2014	147.20
D1 000001	20.00	ARTISTIC SUPPLIES	00,00,201.	1.7.20
EF080868	20833	BOOMERS PLUMBING & GAS	30/09/2014	517.98
		PLUMBING SERVICES	, , ,	
EF080869	20857	DOCKSIDE SIGNS	30/09/2014	396.00
		SIGN MAKERS	•	
EF080870	20882	BELL-VISTA FRUIT & VEGETABLE	30/09/2014	862.95
		FRUIT & VEGETABLE		
EF080871		GREENLINE AG	30/09/2014	720.84
		AGRICULTURAL EQUIPMENT		

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080872	20943	EDWARD MARCUS	30/09/2014	750.75
EF080873	20951	CONSULTANCY SERVICES - HERITAGE  ELECTROFEN PTY LTD  EENCING SERVICES	30/09/2014	192.50
EF080874	21005	FENCING SERVICES  BRAIN TEASERS OZ PTY LTD  EDUCATIONAL PRODUCTS	30/09/2014	66.00
EF080875	21127	EDUCATIONAL PRODUCTS  JOANNA AYCKBOURN  INCERPLICATION OF THE PROPULATION OF THE PROPULAT	30/09/2014	600.00
EF080876	21131	INSTRUCTION - SINGING STATE WIDE TURF SERVICES	30/09/2014	715.00
EF080877	21139	TURF RENOVATION AUSTRAFFIC WA PTY LTD	30/09/2014	3,938.00
EF080878	21291	TRAFFIC SURVEYS  CHITTERING VALLEY WORM FARM	30/09/2014	2,497.00
EF080879	21363	ENVIRONMENTAL EDUCATION TENDERLINK.COM PTY LTD	30/09/2014	550.00
EF080880	21371	COMPUTER SOFTWARE  LD TOTAL SANPOINT PTY LTD	30/09/2014	30,612.47
EF080881	21527	KERBING SERVICES TOUCHWOOD NURSERY	30/09/2014	1,335.40
EF080882	21694	PLANT SUPPLIES  UNITED EQUIPMENT PTY LTD	30/09/2014	483.12
EF080883	21796	USED EQUIPMENT  GREEN LEAF GARDENS  LANDSCAPING SERVICES	30/09/2014	2,200.00
EF080884	21879	LANDSCAPING SERVICES  SPOTLESS SERVIC  CLEANING SERVICES	30/09/2014	136,046.92
EF080885	21946	CLEANING SERVICES  RYAN'S QUALITY MEATS  MEAT SUPPLIES	30/09/2014	4,297.44
EF080886	22012	ELEGANT GLOVES EVENTS AND SERVICES CATERING SERVICES	30/09/2014	4,323.00
EF080887	22109	PUBLIC LIBRARIES WESTERN AUSTRALIA INC PROFESSIONAL ORGANISATION	30/09/2014	367.72
EF080888	22133	AIR-BORN AMUSEM AMUSEMENT SERVICES	30/09/2014	1,174.00
EF080889		GREENSTAR GROUP WA PTY LTD GREENSTAR GROUP WA AIR CONDITIONING SERVICES	30/09/2014	5,696.26
EF080890	22242	ASPHALT SURFACES PTY LTD ASPHALTING SERVICES	30/09/2014	30,557.68
EF080891	22258	WATERLOGIC AUSTRALIA PTY LTD COOL CLEAR WATER GROUP LT WATER SUPPLY EQUIPMENT	30/09/2014	405.90
EF080892	22388	CARRINGTON'S TRAFFIC SERVICES TRAFFIC MANAGEMENT SERVICES	30/09/2014	9,053.00
EF080893	22448	CAKES WEST PTY LTD CATERING	30/09/2014	77.74
EF080894	22553	BROWNES FOOD OPERATIONS CATERING SUPPLIES	30/09/2014	807.94
EF080895		SONIC HEALTH PLUS PTY LTD  MEDICAL SERVICES	30/09/2014	1,584.00
EF080896	22577	INNERSPACE COMMERCIAL INTERIORS FURNITURE	30/09/2014	40,414.00
EF080897	22613	VICKI ROYANS ARTISTIC SERVICES	30/09/2014	400.00
EF080898	22639	SHATISH CHAUHAN TRAINING SERVICES - YOGA	30/09/2014	720.00
EF080899	22653	PCYC FREMANTLE SPONSORSHIP	30/09/2014	200.00

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080900	22658	SERCUL URBAN LANDCARE SERVICES	30/09/2014	451.00
EF080901	22682	BEAVER TREE SERVICES PTY LTD TREE PRUNING SERVICES	30/09/2014	60,595.79
EF080902	22751	WORKFORCE CLOTHING PTY LTD CLOTHING - INDUSTRIAL	30/09/2014	911.13
EF080903	22805	COVS PARTS PTY LTD MOTOR PARTS	30/09/2014	788.80
EF080904	22806	AUSTRALIAN FUEL DISTRIBUTORS PTY LTD FUEL SUPPLIES	30/09/2014	137,243.67
EF080905	22854	LGISWA INSURANCE PREMIUMS	30/09/2014	665.28
EF080906	22903	UNIQUE INTERNATIONAL RECOVERIES LLC DEBT COLLECTORS	30/09/2014	883.20
EF080907	22913	AUSTRALIAN OFFICE LEADING BRANDS.COM.AU ENVELOPES	30/09/2014	236.37
EF080908	23034	DOUGLAS PARTNERS PTY LTD CONSULTANCY SERVICES - GEO TECHNICAL	30/09/2014	5,494.50
EF080909	23253	KOTT GUNNING LEGAL SERVICES	30/09/2014	1,035.32
EF080910	23302	BUILDING SERVICES LEVIES	30/09/2014	59,035.36
EF080911	23309	FUN IN TRAINING AUSTRALIA PTY LTD FITNESS CLASSES-INSTRUCTIONS	30/09/2014	836.00
EF080912	23348	ZUMBA WITH HONEY FITNESS CLASSES	30/09/2014	792.00
EF080913	23351	COCKBURN GP SUPER CLINIC PTY LTD OPERATING FUNDS	30/09/2014	55,000.00
EF080914	23411	COCKBURN REMOVALS REMOVAL SERVICES	30/09/2014	379.50
EF080915	23457	TOTALLY WORK WEAR FREMANTLE CLOTHING - UNIFORMS	30/09/2014	589.66
EF080916	23507	LOCAL GEOTECHNICS GEOTECHNICAL/ANALYTICAL SERVICES	30/09/2014	1,540.00
EF080917	23516	BOS SURVEYING PTY LTD SURVEY RESULTS SURVEYING SERVICES	30/09/2014	13,351.20
EF080918	23570	A PROUD LANDMARK PTY LTD LANDSCAPE CONTRUCTION SERVICES	30/09/2014	9,302.05
EF080919	23579	DAIMLER TRUCKS PERTH PURCHASE OF NEW TRUCK	30/09/2014	1,881.00
EF080920	23670	LIEBHERR AUSTRALIA PTY LTD SPARE PARTS	30/09/2014	2,893.00
EF080921	23685	ASTRO SYNTHETIC TURF PTY LTD SITE INSPECTIONS	30/09/2014	14,982.00
EF080922	1	DWIGHT S VAN GRAMBERG ENTERTAINMENT SERVICES	30/09/2014	1,500.00
EF080923		AM & IE MUTCH ENGINEERING CONSULTANTS CONSULTANCY SERVICES	30/09/2014	880.00
EF080924		PALMYRA REBELS NETBALL CLUB REGISTRATION FEES	30/09/2014	200.00
EF080925	23849	JCB CONSTRUCTION EQUIPMENT AUSTRALIA PLANT/MACHINERY	30/09/2014	3,585.88
EF080926	23858	SPECIALISED SECURITY SHREDDING DOCUMENT DESTRUCTION SERVICES	30/09/2014	54.18
EF080927	23866	TENNANT AUSTRALIA PTY LTD PLANT & MACHINERY	30/09/2014	692.49

#### MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080928	23872	ASB MARKETING PTY LTD	30/09/2014	6,850.00
		PROMOTIONAL PRODUCTS		
EF080929	23971	FIND WISE LOCATION SERVICES	30/09/2014	2,187.90
		LOCATING SERVICES - UNDERGROUND		
EF080930	24036	MULTI SWEEP PTY LTD (WA)	30/09/2014	952.40
		SWEEPING SERVICES		
EF080931	24038	ASHLEY GROUP PTY LTD CCTV	30/09/2014	9,634.44
EF080932	24181	FORRESTDALE JUNIOR FOOTBALL CLUB REGISTRATION FEES	30/09/2014	200.00
EF080933	24183	WELLARD GLASS	30/09/2014	5,345.58
21 000300	2.120	GLASS REPAIR SERVICES	00,03,201	0,010.00
EF080934	24185	HIPPY BELLY DANCE	30/09/2014	260.00
		TRAINING SERVICES - DANCE CLASSES	00,00,201	255.55
EF080935	24186	ELAN ENERGY MANAGEMENT PTY LTD	30/09/2014	1,072.36
		RECYCLING SERVICES - TYRES		,
EF080936	24195	PAYNE'S WINDOW CLEANING AND SERVICES	30/09/2014	16,924.04
		WINDOW CLEANING SERVICES		-
EF080937	24275	TRUCK CENTRE WA PTY LTD	30/09/2014	266.20
		PURCHASE OF NEW TRUCK		
EF080938	24424	DATACOM SYSTEMS (WA) PTY LTD	30/09/2014	15,655.26
		COMPUTER HARDWARE/SOFTWARE		
EF080939	24444	ROSEMARY ALLAN WORKSHOPS	30/09/2014	180.00
EF080940	24506	AMARANTI'S PERSONAL TRAINING	30/09/2014	225.00
DI 000510	2-1000	PERSONAL TRAINING SERVICES	30/09/2014	223.00
EF080941	24524	CALO HEALTH	30/09/2014	2,395.00
21 0005 11	2,02,	HEARTMOVE CLASSES	00/03/2017	2,090.00
EF080942	24557	AVELING	30/09/2014	1,606.00
		CONSULTANCY SERVICES	,,	_,,,,,,,,
EF080943	24599	POOLWERX SPEARWOOD	30/09/2014	3,558.90
		ANALYTICAL SERVICES		
EF080944	24643	BIBLIOTHECA RFID LIBRARY SYSTEMS AUSTRALIA PTY LTD PURCHASE OF LIBRARY TAGS	30/09/2014	3,630.00
EF080945	24655	AUTOMASTERS SPEARWOOD VEHICLE SERVICING	30/09/2014	2,046.00
EF080946	24665	IRON MOUNTAIN AUSTRALIA	30/09/2014	300.18
		DATA STORAGE SERVICES		
EF080947	24736	ZENIEN	30/09/2014	69,573.93
		CCTV CAMERA LICENCES		
EF080948	24737	ARMADILLO GROUP	30/09/2014	728.18
		EQUIPMENT MAINTENANCE		
EF080949	24748	PEARMANS ELECTRICAL & MECHANICAL SERVICES P/L	30/09/2014	8,513.46
		ELECTRICAL SERVICES		
EF080950	24805	KAREN WOOLHEAD	30/09/2014	800.00
		DANCING CLASSES		
EF080951	24863	SID THOO	30/09/2014	4,035.00
PENGANEA	04006	ARCHITECTURAL SERVICES	20/00/001	1 150 00
EF080952		A NATURAL SELF ENTERTAINMENT SUPPLIES	30/09/2014	1,152.00
EF080953		NS PROJECTS PTY LTD	20/00/0014	16 500 00
71.000329	1	PROJECT MANAGEMENT SERVICES	30/09/2014	16,500.00
EF080954		WT PARTNERSHIP	30/09/2014	6,600.00
JI: 000 904	279TU	QUANTITY SURVEYING SERVICES	30/09/2014	0,000.00
EF080955	24949	BITUMEN SURFACING	30/09/2014	30,809.35
000000	~ ' / ' /		1 00/09/2014	50,009.55

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080956	24958	KISS PHOTOBOOTHS PTY LTD PHOTOGRAPHY SERVICES	30/09/2014	1,997.00
EF080957	24973	BLUESTONE RECRUITMENT TEMPORARY PERSONNEL SERVICES	30/09/2014	17,300.81
EF080958	24976	SNAP PRINTING - COCKBURN CENTRAL PRINTING SERVICES	30/09/2014	291.50
EF080959	24980	WILLAGEE RUGBY LEAGUE FOOTBALL CLUB REGISTRATION FEES	30/09/2014	800.00
EF080960	25060	DFP RECRUTIMENT SERVICES RECRUITMENT SERVICES	30/09/2014	15,716.57
EF080961	25091	ROCKINGHAM FOOTBALL SPORTING AND SOCIAL CLUB INC REGISTRATION FEES	30/09/2014	180.00
EF080962	25102	FREMANTLE MOBILE WELDING WELDING SERVICES	30/09/2014	3,266.34
EF080963	25115	FIIG INVESTMENT MANAGEMENT SERVICES	30/09/2014	2,750.00
EF080964	25127	MILMAR DISTRIBUTORS PRINTING SERVICES - ID CARDS	30/09/2014	19.80
EF080965	25128	HORIZON WEST LANDSCAPE & IRRIGATION P/L LANDSCAPING SERVICES	30/09/2014	7,507.26
EF080966	25158	MPIRE SECURITY SECURITY SERVICES	30/09/2014	4,533.10
EF080967	25189	SPORT AND RECRE SPORTS SURFACES	30/09/2014	6,233.70
EF080968	25190	GARBOLOGIE MATTRESS RECYCLING	30/09/2014	15,461.60
EF080969	25191	HUNTINGDALE TEE REGISTRATION FEES	30/09/2014	400.00
EF080970	25193	HILTI AUST PTY POWER AND CORDLESS TOOLS	30/09/2014	1,098.90
EF080971	25201	J TAGZ PTY LTD WRISTSTRAPS	30/09/2014	1,149.50
EF080972	25262	SANDOVER PINDER ARCHITECTS ARCHITECTURAL SERVICES	30/09/2014	242,139.11
EF080973	25263	SYSTEM MAINTENANCE SEWERAGE PUMP MAINTENANCE	30/09/2014	1,050.63
EF080974	25264	ACURIX NETWORKS PTY LTD WIFI ACCESS SERVICE	30/09/2014	20,265.30
EF080975	25381	TEMBO PROPERTY GROUP PROJECT MANAGEMENT SERVICES	30/09/2014	5,362.50
EF080976	25409	AQUA ATTACK DRILLING PTY LTD	30/09/2014	3,547.50
EF080977	25415	JANDAKOT STOCK & PET SUPPLIES PET SUPPLIES	30/09/2014	88.50
EF080978	25418	CS LEGAL LEGAL SERVICES	30/09/2014	12,800.99
EF080979		KOK HUI CHEE ART PROJECTS	30/09/2014	16,500.00
EF080980		SPOTLESS FACILITY SERVICES (PAINTING DIVISION) PAINTING SERVICES	30/09/2014	6,693.50
EF080981	25539	BROWN CONSULTING (VIC) PTY LTD CONSULTANCY SERVICES	30/09/2014	19,250.00
EF080982		JOHN MASSEY GROUP PTY LTD BUILDING SURVEYING SERVICES	30/09/2014	1,100.00
EF080983	1	BIOMORPHOSIS WASTE TRIAL	30/09/2014	507.95

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF080984	25588	CIVCO MINING SERVICES PTY LTD PLANT / EQUIPMENT HIRE	30/09/2014	13,589.40
EF080985	25648	MATT NANKIVELL PHOTOGRAPHY SERVICES	30/09/2014	576.00
EF080986	25652	JUST A BUNCH FLOWER ARRANGEMENTS	30/09/2014	1,207.00
EF080987	25658	GUNDI CORPORATION ABORIGINAL REFERENCE GROUPS	30/09/2014	550.00
EF080988	25670	WARREN GREEN CONSULTING CONSULTANCY SERVICES	30/09/2014	15,367.00
EF080989	25713	DISCUS ON DEMAND PRINTING SERVICES	30/09/2014	742.50
EF080990	25796	TABLE & CHAIR COMPANY FURNITURE SUPPLIES	30/09/2014	59,497.90
EF080991	25800	OPTUM HEALTH & TECHNOLOGY (AUST) PTY LTD CONSULTANCY SERVICES	30/09/2014	2,200.00
EF080992	25823	ENIGIN WESTERN AUSTRALIA	30/09/2014	11,327.87
EF080993	25875	COOGEE PLUMBING SERVICES PLUMBING SERVICES	30/09/2014	22,970.00
EF080994	25881	TWO QUEENS CATERING SERVICES	30/09/2014	970.00
EF080995	25891	THE STRING ART CO. WORKSHOPS	30/09/2014	315.00
EF080996	25940	LEAF BEAN MACHINE COFFEE BEAN SUPPLY	30/09/2014	800.00
EF080997	25945	CH2 OFFICE FURNITURE	30/09/2014	22,577.50
EF080998	l	K CARE HEALTHCARE EQUIPMENT HEALTHCARE EQUIPMENT	30/09/2014	605.00
EF080999	25947	MATERIALS HANDLING SOLUTIONS OFFICE FURNITURE	30/09/2014	14,624.50
EF081000	25955	ADECCO EMPLOYEMENT SERVICES	30/09/2014	30,228.91
EF081001	1	EAST FREMANTLE LACROSSE CLUB INC BUILDING LEVY	30/09/2014	167.50
EF081002		KNOWLEDGE ONLINE SURVEY SERVICES	30/09/2014	12,199.11
EF081003	l 1	HAMMOND LEGAL LEGAL SERVICES	30/09/2014	17,989.37
EF081004	26061	CBH COATINGS EPOXY FLOORING	30/09/2014	7,150.00
EF081005		SPECIAL OLYMPICS WESTERN AUSTRALIA REGISTRATION FEES	30/09/2014	400.00
EF081006		SPRAYKING WA PTY LTD CHEMICAL WEED CONTROL SERVICES	30/09/2014	3,608.05
EF081007	26068	PROFESSIONAL COMMUNICATION TRAINING TRAINING SERVICES	30/09/2014	1,770.00
EF081008	26090	FREMANTLE MILK DISTRIBUTORS MILK DISTRIBUTORS	30/09/2014	1,132.05
EF081009	26106	IAN WILKES ENTERTAINMENT SERVICES	30/09/2014	1,000.00
EF081010	26109	OSHCWA MEMBERSHIP FEES	30/09/2014	150.00
EF081011	26110	DASH CIVIL CONTRACTING CONCRETING SERVICES	30/09/2014	1,870.00

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF081012	26117	SAMANTHA HUGHES ENTERTAINMENT SERVICES	30/09/2014	300.00
EF081013	26118	ADVANTA COMMERCIAL FURNITURE OFFICE FURNITURE	30/09/2014	2,293.50
EF081014	26121	COCKBURN COMMUNITY MEN'S SHED INC COUNCIL DONATION	30/09/2014	710.00
EF081015	26166	ROCKINGHAM & DISTRICTS NETBALL ASSOC INC REGISTRATION FEES	30/09/2014	490.92
EF081016	26172	DAVID JAMES ROBINSON PHOTOGRAPHY SERVICES	30/09/2014	300.00
EF081017	26174	1ST WILLAGEE/KARDINYA SCOUT GROUP REGISTRATION FEES	30/09/2014	400.00
EF081018	26188	ROCKWELL OLIVIER (PERTH) PTY LTD  LEGAL FEES	30/09/2014	23,258.18
EF081019	11794	SYNERGY ELECTRICITY USAGE/SUPPLIES	30/09/2014	288,237.20
EF081020	12025	TELSTRA CORPORATION COMMUNICATIONS SERVICES	30/09/2014	27,295.05
EF081021	13281	NELLIE D'ANGELO REFUND	30/09/2014	300.00
EF081022	21059	MATTHEW ELWELL BIBRA LAKE FUN RUN WINNER	30/09/2014	150.00
EF081023	22515	EMMA SEBALJA JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081024	22584	DE FREITAS & RYAN TRUST ACCOUNT RATES REFUND	30/09/2014	1,293.37
EF081025	22765	JARROD PICKETT JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081026	23233	AMY FITZGERALD JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081027	23244	LUKE GRAVES BIBRA LAKE FUN RUN WINNER	30/09/2014	100.00
EF081028	23247	NIAMH WILKINS BIBRA LAKE FUN RUN WINNER	30/09/2014	150.00
EF081029	23954	MIRANDA BRAGANZA JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081030	24076	RYAN MILBY JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081031	24257	KURT WESLEY BIBRA LAKE FUN RUN WINNER	30/09/2014	200.00
EF081032	24262	<b>JASMINE PUGH</b> BIBRA LAKE FUN RUN WINNER	30/09/2014	150.00
EF081033	24264	DANIEL KEMPSON BIBRA LAKE FUN RUN WINNER	30/09/2014	150.00
EF081034	24393	JAKE BLOOMFIELD JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081035	25081	CODY DIXON JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081036		LORETTE WESLEY BIBRA LAKE FUN RUN WINNER	30/09/2014	100.00
EF081037	25313	ALESHA FOSTER JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081038	25314	IZAYAH FOSTER JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081039	25316	ETHAN HOMAN-RIDDEL JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00

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EF081041 26 EF081042 26 EF081044 26 EF081045 26 EF081046 26 EF081047 26 EF081049 26 EF081050 26 EF081051 26	5322 6167 6168 6169 6170 5180 5181	JESSE LIPPERT JUNIOR TRAVEL ASSISTANCE KIRSTIE WARD  DOG REGISTRATION REFUND GWEN BRUNDREIT  DOG REGISTRATION REFUND PETER & LISA DE LANG  DOG REGISTRATION REFUND NATALIE MARIE O'SULLIVAN BIRD BATH REBATE SAMANTHA SIMS ADJUSTMENT OF RATES TOD & JANICE EAST PENSION REBATE TURLOUGH CONNOLLY	30/09/2014 30/09/2014 30/09/2014 30/09/2014 30/09/2014 30/09/2014	400.00 60.00 75.00 60.00 50.00
EF081042 26 EF081044 26 EF081045 26 EF081046 26 EF081047 26 EF081049 26 EF081050 26 EF081051 26	6168 6169 6170 6180 6181 6182	KIRSTIE WARD  DOG REGISTRATION REFUND  GWEN BRUNDREIT  DOG REGISTRATION REFUND  PETER & LISA DE LANG  DOG REGISTRATION REFUND  NATALIE MARIE O'SULLIVAN  BIRD BATH REBATE  SAMANTHA SIMS  ADJUSTMENT OF RATES  TOD & JANICE EAST  PENSION REBATE	30/09/2014 30/09/2014 30/09/2014 30/09/2014	75.00 60.00 50.00
EF081042 26 EF081044 26 EF081045 26 EF081046 26 EF081047 26 EF081049 26 EF081050 26 EF081051 26	6168 6169 6170 6180 6181 6182	DOG REGISTRATION REFUND  GWEN BRUNDREIT  DOG REGISTRATION REFUND  PETER & LISA DE LANG  DOG REGISTRATION REFUND  NATALIE MARIE O'SULLIVAN  BIRD BATH REBATE  SAMANTHA SIMS  ADJUSTMENT OF RATES  TOD & JANICE EAST  PENSION REBATE	30/09/2014 30/09/2014 30/09/2014 30/09/2014	75.00 60.00 50.00
EF081043 26 EF081044 26 EF081045 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	6169 6170 5180 5181 5182	GWEN BRUNDREIT  DOG REGISTRATION REFUND  PETER & LISA DE LANG  DOG REGISTRATION REFUND  NATALIE MARIE O'SULLIVAN  BIRD BATH REBATE  SAMANTHA SIMS  ADJUSTMENT OF RATES  TOD & JANICE EAST  PENSION REBATE	30/09/2014 30/09/2014 30/09/2014	50.00
EF081043 26 EF081044 26 EF081045 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	6169 6170 5180 5181 5182	DOG REGISTRATION REFUND PETER & LISA DE LANG DOG REGISTRATION REFUND NATALIE MARIE O'SULLIVAN BIRD BATH REBATE SAMANTHA SIMS ADJUSTMENT OF RATES TOD & JANICE EAST PENSION REBATE	30/09/2014 30/09/2014 30/09/2014	50.00
EF081044 26 EF081045 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	6170 6180 6181 6182 6183	PETER & LISA DE LANG DOG REGISTRATION REFUND NATALIE MARIE O'SULLIVAN BIRD BATH REBATE SAMANTHA SIMS ADJUSTMENT OF RATES TOD & JANICE EAST PENSION REBATE	30/09/2014	50.00
EF081044 26 EF081045 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	6170 6180 6181 6182 6183	DOG REGISTRATION REFUND  NATALIE MARIE O'SULLIVAN  BIRD BATH REBATE  SAMANTHA SIMS  ADJUSTMENT OF RATES  TOD & JANICE EAST  PENSION REBATE	30/09/2014	50.00
EF081045 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	5180 5181 5182 5183	NATALIE MARIE O'SULLIVAN BIRD BATH REBATE SAMANTHA SIMS ADJUSTMENT OF RATES TOD & JANICE EAST PENSION REBATE	30/09/2014	
EF081045 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	5180 5181 5182 5183	BIRD BATH REBATE  SAMANTHA SIMS  ADJUSTMENT OF RATES  TOD & JANICE EAST  PENSION REBATE	30/09/2014	
EF081046 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	5181 5182 5183	SAMANTHA SIMS ADJUSTMENT OF RATES TOD & JANICE EAST PENSION REBATE		410.96
EF081046 26 EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	5181 5182 5183	ADJUSTMENT OF RATES  TOD & JANICE EAST  PENSION REBATE		410.96
EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	5182 5183	TOD & JANICE EAST PENSION REBATE	30/09/2014	
EF081047 26 EF081048 26 EF081049 26 EF081050 26 EF081051 26	5182 5183	PENSION REBATE	30/09/2014	
EF081048 26 EF081049 26 EF081050 26 EF081051 26	5183		]	307.09
EF081048 26 EF081049 26 EF081050 26 EF081051 26	5183	TURLOUGH CONNOLLY		
EF081049 26. EF081050 26. EF081051 26.			30/09/2014	294.74
EF081049 26. EF081050 26. EF081051 26.		RATES ADJUSTMENT		
EF081050 26:		JING DOU	30/09/2014	239.54
EF081050 26:		PENSION REBATE		
EF081051 26	5184	GLEN P CRAWFORD	30/09/2014	322.84
EF081051 26		RATES REFUND		
	5196	BEHNAM KAVARI	30/09/2014	300.00
		CROSSOVER CONTRIBUTION		
EF081052 261	5197	EBONY SHARLAND	30/09/2014	300.00
EF081052 261		CROSSOVÉR CONTRIBUTION		
1	198	DANIEL PRATT	30/09/2014	300.00
		CROSSOVER CONTRIBUTION		
EF081053 261	199	JAYESHKUMAR PARMAR	30/09/2014	300.00
		CROSSOVER CONTRIBUTIONS		
EF081054 262	200	TRISTAN BERENTZEN	30/09/2014	300.00
		CROSSOVER CONTRIBUTION		
EF081055 262	l l	MATTHEW & REBECCA MCARTHUR	30/09/2014	300.00
		CROSSOVER CONTRIBUTION		
EF081056 262	202	CHOI HOMES PTY LTD	30/09/2014	300.00
	i	CROSSOVER CONTRIBUTION		
EF081057 262	1	TIMOTHY MARCH	30/09/2014	300.00
	- 1	CROSSOVER CONTRIBUTION		
F081058 262		JOSHUA JOHNSTONE	30/09/2014	300.00
	1	CROSSOVER CONTRIBUTION		
F081059 262		RUSSELL MORRISON	30/09/2014	110.00
	1	RATES REFUND .		
F081060 262	i	CAITLYN MAJOR	30/09/2014	400.00
	i	RATES REFUND		
F081061 262	- 1	FOLEY BURGE CONVEYANCING ON BEHALF OF CLAIRE AND IAN EX	30/09/2014	515.41
		RATES REFUND		
F081062 262	ł	ASHLEIGH SANTICH	30/09/2014	400.00
	1	JUNIOR TRAVEL ASSISTANCE		
F081063 262	- 1	CAITLYN LEWIS	30/09/2014	400.00
	l	JUNIOR TRAVEL ASSISTANCE		
F081064 262	- 1	NICHOLLAS MONTERO	30/09/2014	400.00
	I	JUNIOR TRAVEL ASSISTANCE		
F081065 262		ABBIE TEASDALE	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
F081066 262	1	MALI-JOSE BOUQUEY-DEARAUJO	30/09/2014	400.00
	,	JUNIOR TRAVEL ASSISTANCE	ı	
F081067 262		DANIEL SANTICH	30/09/2014	400.00

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Cheque/ EFT	Account No.	Account/Payee	Date	Value
EF081068	26218	RYAN MCEVOY	30/09/2014	400.00
		JUNIOR TRAVEL ASSITANCE		
EF081069	26219	LETICIA MCKENNA	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081070	26220	BRADEE BINDER	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081071	26221	BIANCA BRAGANZA	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081072	26222	ROBERT COTTERELL	30/09/2014	27.25
		RATES REFUND		
EF081073	26223	BRANDON PERERA	30/09/2014	400.00
DD001074	25004	JUNIOR TRAVEL ASSISTANCE		
EF081074	26224	LUKE STRNADICA	30/09/2014	400.00
EF081075	26225	JUNIOR TRAVEL ASSISTANCE TAYLA BAXTER	20 /00 /0014	400.00
EF001073	20223	JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081076	26226	KIARA JETTA	30/09/2014	400.00
2.001070	20220	JUNIOR TRAVEL ASSISTANCE	00/09/2014	400.00
EF081077	26227	MAGNUS ZETTEL	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE	00,03,2011	100.00
EF081078	26228	KAI ZETTEL	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081079	26229	DYLAN BLOOMFIELD	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081080	26230	SHAKAYLA UGLE	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081081	26231	JAE HOMMAN-RIDDER	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE .		
EF081082	26232	TYLER MCMILES	30/09/2014	400.00
		JUNIOR TRAVEL ASSISTANCE		
EF081083	26233	RILEY WATSON	30/09/2014	400.00
DD001004	05004	JUNIOR TRAVEL ASSISTANCE		
EF081084	26234	JARED MAHER JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081085	26225	CRYSTAL NIBBS	20 /00 /0014	400.00
Er001003	26235	JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081086	26236	COURTNEY HODDER	30/09/2014	400.00
DI 001000	20200	JUNIOR TRAVEL ASSISTANCE	30/09/2014	400.00
EF081087	26237	TARINAH NAZAROFF	30/09/2014	300.00
		JUNIOR TRAVEL ASSISTANCE	00/03/2011	300.00
EF081088	26238	KIARRA NAZZAROFF	30/09/2014	200.00
		JUNIOR TRAVEL ASSITANCE	,,	
EF081089	26239	DANIEL RAUS	30/09/2014	50.00
		JUNIOR TRAVEL ASSISTANCE	, ,	
EF081090	26240	KALEIGH SPITHOVEN	30/09/2014	100.00
		JUNIOR TRAVEL ASSISTANCE		
EF081091	26241	ALEISHA WESLEY	30/09/2014	50.00
		JUNIOR TRAVEL ASSISTANCE		
EF081092	26242	JOSHUA RIGOLI	30/09/2014	100.00
		JUNIOR TRAVEL ASSISTANCE		
EF081093	26243	HAYDEN CLARK	30/09/2014	50.00
DD00105	25211	JUNIOR TRAVEL ASSISTANCE		
EF081094	1	GENEVIEVE BRINK	30/09/2014	50.00
006000		JUNIOR TRAVEL ASSISTANCE	4/00/00:	2 222 43
026080	1	ARMAGUARD BANKING SERVICES	4/09/2014	3,020.40
		DUINTING DELVICES		

# MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Value
026081	13932	ARMAGUARD	11/09/2014	2,645.90
026082	13932	BANKING SERVICES ARMAGUARD	17/09/2014	2,892.95
		BANKING SERVICES		_,
026083	13932	ARMAGUARD	24/09/2014	3,607.40
		BANKING SERVICES		
026084	10747	INTER LIMITED	30/09/2014	1,072.17
026085	11348	INTERNET SERVICES SHIRE OF KALAMUNDA	20 /00 /0014	0.006.50
020083	11346	ENTRY FEES	30/09/2014	2,306.59
026086	11760	WATER CORPORATION	30/09/2014	22,491.50
		SEWER EASEMENT		
026087	15476	DEPARTMENT OF HOUSING	30/09/2014	1,000.00
		RATES REFUND		
026088	19321	RJ & LA CHARLTON  DOR REGISTRATION REFUND	30/09/2014	424.49
026089	20333	AUSTRALAND HOLDINGS LTD	20/00/2014	1 521 20
020003	20000	RATES REFUND	30/09/2014	1,531.39
026090	20679	OFFICE OF STATE REVENUE	30/09/2014	465.28
		RATES REFUND		
026091	26185	PEDRO GAMES	30/09/2014	733.18
		PENSION REFUND		
026092	26186	HELEN THOMSON	30/09/2014	383.82
026093	26187	PENSION REBATE  G & D ORLANDO	30 /00 /0014	450.05
020093	20107	PENSION REBATE	30/09/2014	458.25
026094	26208	GLENN GOMES	30/09/2014	391.99
		RATES REFUND		
026095	26209	AMBICA CHOPRA-D'COSTA	30/09/2014	306.68
		RATES REFUND		
026096	26210	JOSEFA PEREZ LEBRON	30/09/2014	437.09
026097	10047	RATES REFUND ALINTA ENERGY	20 (00 (2014	222 50
020091	10047	GAS SUPPLIES	30/09/2014	222.50
026098	11758	WATER CORP	30/09/2014	11,260.75
		WATER USAGE SUPPLIES	30, 33, 231	11,2000
		ADD RETENTION HELD		
		NIL		
EF079528	10388	LESS PRIOR PERIOD CANCELLED CHEQUES/EFTS CSR BUILDING PRODUCTS LTD	5 /00 /0014	1 500 50
	15625	OPUS INTERNATIONAL CONSULTANTS (PCA) LTD	5/09/2014 5/09/2014	1,592.56 5,720.00
	23463	HANNAH NEAL	5/09/2014	450.00
EF079976	25813	LGCONNECT PTY LTD	5/09/2014	25,300.00
		CHEQUE LIST TOTAL		11,575,529.62
		TOTAL AS PER AP SOURCE 14GLACT9991000		11,509,404.50
		TOTAL AS PER TR SOURCE 14GLACT9991000		·
		ADDITIONAL DIRECT PAYMENTS		11,509,404.50
		DANK DDDG		
		BANK FEES MERCHANT FEES COC		07 945 41
		MERCHANT FEES COC MERCHANT FEES SLLC		27,345.41 4,278.84
	1	MERCHANT FEES VARIOUS OUT CENTRES		147.10
		NATIONAL BPAY CHARGE		7,607.01

#### MUNICIPAL BANK ACCOUNT

Cheque/ EFT	Account No.	Account/Payee	Date	Val
		RTGS/ACLR FEE		
		NAB TRANSACT FEE		9,769.4
				49,147.8
		FAMILY DAY CARE AND IN HOME CARE PAYMENTS		
		FDC PAYMENTS		56,426.2
		IHC PAYMENTS		110,067.2
				166,493.4
		PAYROLL TRANSACTIONS		
		COC 08/09/14 CITY OF COCKBURN 042958		2659.9
		COC 09/09/14 CITY OF COCKBURN 042958		1070451.7
		COC 09/09/14		2834.8
		COC 11/09/14		2659
		COC 16/09/14		13286.0
		COC 19/09/14		2715.4
		COC 23/09/14 CITY OF COCKBURN 042958		1052953.4
		CREDIT CARD PAYMENTS		2,147,560.7
		CBA CREDIT CARD PAYMENT		50,955.6
		CENT CREET THINDIN		50,955.6
		TOTAL PAYMENTS FOR AUGUST		13,923,562.2

# **PAYMENT SUMMARY**

# **CHEQUE PAYMENTS**

026080 - -026098

# **CANCELLED PAYMENTS**

Nil.

# **ELECTRONIC FUNDS TRANSFER PAYMENT**

EF080480 - EF081094

# **STATEMENT OF FINANCIAL ACTIVITY**

for the period ended 30 September 2014

		YTD Revised	Variance to	\$ Variance to	Revised	Adopte
	Actuals	Budget	YTD Budget	YTD Budget	Budget	Budge
Operating Revenue	\$	\$	%	\$	\$	\$
Governance	65,709,724	65,623,588	0%	06.125	74.400.007	
Financial Services	319,025	164,262		86,135	74,108,927	74,022,182
Information Services	120	375	94%	154,763	657,050	657,05
Human Resource Management	61,026		-68%	(255)	1,500	1,50
Library Services	8,523	21,500	184%	39,526	86,000	86,00
Community Services		13,337	-36%	(4,813)	53,346	53,34
Human Services	3,755,123	3,777,590	-1%	(22,466)	7,345,732	7,338,20
Corporate Communications	1,739,532	1,686,354	3%	53,178	6,454,383	6,459,38
Development Services	29	8,000	-100%	(7,971)	12,500	12,50
	1,229,884	1,130,254	9%	99,630	3,374,215	3,374,21
Planning Services	708,473	732,091	-3%	(23,619)	1,471,943	1,471,94
Waste Services	21,027,480	21,088,067	0%	(60,587)	29,153,124	29,143,12
Parks & Environmental Services	14,237	475	2897%	13,762	1,900	1,90
Engineering Services	79,938	73,341	9%	6,597	303,363	293,36
Infrastructure Services	18,606	824	2157%	17,782	3,297	3,29
	94,671,720	94,320,058	0%	351,662	123,027,280	122,918,00
otal Operating Revenue	94,671,720	94,320,058	0%	351,662	123,027,280	122,918,00
Operating Expenditure						
Governance	(1,040,470)	(1,134,294)	-8%	93,824	(4,688,532)	(4,633,85
Financial Services	(1,951,598)	(1,835,169)	6%	(116,429)	(5,504,284)	
Information Services	(1,253,931)	(1,294,591)	-3%	40,661	(4,407,974)	(5,464,28
Human Resource Management	(741,862)	(546,716)	36%	(195,146)	(2,312,028)	(4,385,90
Library Services	(782,411)	(754,958)	4%	(27,453)	(3,185,897)	(2,302,02
Community Services	(1,793,980)	(2,831,285)	-37%	1,037,305 √	(9,511,031)	(3,168,30
Human Services	(1,850,924)	(1,868,100)	-1%	17,176		(9,490,80
	(1,030,324)	(1,808,100)	-170		(7,821,058)	(7,729,70
Corporate Communications		(E01 E02)	120/	CA 2AA		
Corporate Communications  Development Services	(437,248)	(501,592)	-13%	64,344	(2,771,953)	
Development Services	(437,248) (1,094,670)	(1,071,920)	2%	(22,750)	(4,661,122)	(4,624,50
Development Services Planning Services	(437,248) (1,094,670) (324,258)	(1,071,920) (326,264)	2% -1%	(22,750) 2,006	(4,661,122) (1,587,702)	(4,624,50 (1,566,42
Development Services Planning Services Waste Services	(437,248) (1,094,670) (324,258) (4,732,181)	(1,071,920) (326,264) (4,923,922)	2% -1% -4%	(22,750) 2,006 191,741	(4,661,122) (1,587,702) (20,076,655)	(4,624,50 (1,566,42 (20,076,65
Development Services Planning Services Waste Services Parks & Environmental Services	(437,248) (1,094,670) (324,258) (4,732,181) (2,310,211)	(1,071,920) (326,264) (4,923,922) (2,727,983)	2% -1% -4% -15%	(22,750) 2,006 191,741 417,772 √	(4,661,122) (1,587,702) (20,076,655) (11,365,867)	(4,624,50 (1,566,42 (20,076,65 (11,330,86
Development Services Planning Services Waste Services Parks & Environmental Services Engineering Services	(437,248) (1,094,670) (324,258) (4,732,181) (2,310,211) (1,801,870)	(1,071,920) (326,264) (4,923,922) (2,727,983) (1,909,565)	2% -1% -4% -15% -6%	(22,750) 2,006 191,741 417,772 √ 107,695	(4,661,122) (1,587,702) (20,076,655) (11,365,867) (7,997,243)	(4,624,50 (1,566,42 (20,076,65 (11,330,86 (7,985,24
Development Services Planning Services Waste Services Parks & Environmental Services	(437,248) (1,094,670) (324,258) (4,732,181) (2,310,211)	(1,071,920) (326,264) (4,923,922) (2,727,983)	2% -1% -4% -15%	(22,750) 2,006 191,741 417,772 √	(4,661,122) (1,587,702) (20,076,655) (11,365,867)	(2,682,29 (4,624,50 (1,566,42 (20,076,65 (11,330,86 (7,985,24 (8,195,69

# **STATEMENT OF FINANCIAL ACTIVITY**

# for the period ended 30 September 2014

	Actuals	YTD Revised Budget	Variance to YTD Budget	\$ Variance to YTD Budget	Revised	Adopted
	\$	S	%	\$	Budget \$	Budge ¢
Less: Net Internal Recharging	797,785	806,611	-1%	(8,826)	3,243,783	3,243,783
Add: Depreciation on Non-Current Assets	•••	,		(0,020)	3,243,763	3,243,763
Computer & Electronic Equip	(52,306)	(23,610)	122%	(28,696)	(94,440)	(94,440
Furniture & Equipment	(42,187)	(39,103)	8%	(3,084)	(156,413)	(156,413
Plant & Machinery	(747,345)	(742,317)	1%	(5,028)	(2,969,268)	(2,969,268
Buildings	(1,065,414)	(1,065,414)	0%	(5)525)	(4,261,656)	(4,261,656
Roads	(2,366,988)	(2,366,988)	0%	_	(9,467,952)	(9,467,952
Drainage	(572,517)	(572,517)	0%	_	(2,290,068)	(2,290,068
Footpaths	(290,337)	(290,337)	0%	_	(1,161,348)	(1,161,348
Parks Equipment	(838,503)	(838,503)	0%		(3,354,012)	(3,354,012
	(5,975,597)	(5,938,789)	1%	(36,808)	(23,755,157)	(23,755,157
Total Operating Expenditure	(27,056,375)	(28,884,655)	-6%	1,828,279	(114,691,310)	(114,147,951
Change in Net Assets Resulting from Operations	67,615,344	65,435,403	3%	2,179,941	8,335,970	8,770,056
Non-Operating Activities						
					τ,	
Profit/(Loss) on Assets Disposal						
Profit/(Loss) on Assets Disposal Plant & Machinery	305,049	56,733	438%	248,316	(//	(582,947
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land	305,049	56,733 825,681	438% -100%	248,316 <b>\</b> (825,681) <b>\</b>	(//	
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment	305,049 - -				(//	
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land	, - , - 		-100%		(//	
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment	305,049 - - - - 305,049		- <b>100%</b> 0%		(//	1,150,000 - -
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment	, - , - 	825,681 - -	-100% 0% 0%	(825,681)	5,586,363	1,150,000 - -
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment Buildings	, - , - 	825,681 - - - 882,414	-100% 0% 0% -65%	(825,681)	5,586,363 - - - - 5,239,416	1,150,000 - -
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment Buildings  Less: Underground Power Infrastructure Contribution	305,049	825,681 - - - 882,414 (574)	-100% 0% 0% -65%	(825,681) <b>)</b> (577,365) 574	5,586,363 - - - 5,239,416 (574)	1,150,000 - - - 567,053
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment Buildings  Less: Underground Power Infrastructure Contribution  Asset Acquisitions	305,049  (2,720,659)	825,681 - - - 882,414 (574)	-100% 0% 0% -65% -100%	(825,681) > - - - (577,365) 574 2,600,564	5,586,363 - - - 5,239,416 (574) (33,115,756)	1,150,000 - - 567,053 - (24,387,000
Profit/(Loss) on Assets Disposal  Plant & Machinery  Freehold Land  Furniture & Office Equipment  Buildings  Less: Underground Power Infrastructure Contribution  Asset Acquisitions  Land and Buildings	305,049 305,049 (2,720,659) (2,194,989)	825,681 - - - 882,414 (574) (5,321,223) (5,333,869)	-100% 0% 0% -65% -100%	(825,681) <b>)</b> (577,365)  574  2,600,564 3,138,880	5,586,363 - 5,239,416 (574) (33,115,756) (29,934,206)	1,150,000 - 567,053 - (24,387,000 (17,116,028
Profit/(Loss) on Assets Disposal Plant & Machinery Freehold Land Furniture & Office Equipment Buildings  Less: Underground Power Infrastructure Contribution  Asset Acquisitions Land and Buildings Infrastructure Assets	(2,720,659) (2,194,989) (693,459)	825,681 - - 882,414 (574) (5,321,223) (5,333,869) (1,919,369)	-100% 0% 0% -65% -100% -49% -59% -64%	(825,681) <b>)</b> (577,365)  574  2,600,564 3,138,880 1,225,910	5,586,363 - 5,239,416 (574) (33,115,756) (29,934,206) (5,584,369)	1,150,000 - 567,053 - (24,387,000 (17,116,028 (4,007,500
Profit/(Loss) on Assets Disposal  Plant & Machinery Freehold Land Furniture & Office Equipment Buildings  Less: Underground Power Infrastructure Contribution  Asset Acquisitions Land and Buildings Infrastructure Assets Plant and Machinery	(2,720,659) (2,194,989) (693,459) (4,797)	825,681 - - 882,414 (574) (5,321,223) (5,333,869) (1,919,369) (11,000)	-100% 0% 0% -65% -100% -49% -59% -64% -56%	(825,681) <b>)</b> (577,365)  574  2,600,564 3,138,880 1,225,910 6,203	5,586,363 5,239,416 (574) (33,115,756) (29,934,206) (5,584,369) (11,000)	1,150,000 
Profit/(Loss) on Assets Disposal  Plant & Machinery Freehold Land Furniture & Office Equipment Buildings  Less: Underground Power Infrastructure Contribution  Asset Acquisitions Land and Buildings Infrastructure Assets Plant and Machinery Furniture and Equipment	(2,720,659) (2,194,989) (693,459)	825,681 - - 882,414 (574) (5,321,223) (5,333,869) (1,919,369)	-100% 0% 0% -65% -100% -49% -59% -64%	(825,681) (825,6	5,586,363 5,239,416 (574) (33,115,756) (29,934,206) (5,584,369) (11,000)	1,150,000 567,053 567,053 (24,387,000 (17,116,028 (4,007,500 (206,000 (434,000
Profit/(Loss) on Assets Disposal  Plant & Machinery Freehold Land Furniture & Office Equipment Buildings  Less: Underground Power Infrastructure Contribution  Asset Acquisitions Land and Buildings Infrastructure Assets Plant and Machinery Furniture and Equipment Computer Equipment	(2,720,659) (2,194,989) (693,459) (4,797) (304,195)	825,681 - - 882,414 (574) (5,321,223) (5,333,869) (1,919,369) (11,000) (593,053)	-100% 0% 0% -65% -100% -49% -59% -64% -56% -49%	(825,681) (825,6	5,586,363 5,239,416 (574) (33,115,756) (29,934,206) (5,584,369) (11,000) (1,191,595) (69,836,926)	(582,947) 1,150,000 567,053  (24,387,000) (17,116,028) (4,007,500) (206,000) (434,000) (46,150,528) (35,534,109)

# **STATEMENT OF FINANCIAL ACTIVITY**

# for the period ended 30 September 2014

		Actuals	YTD Revised Budget	Variance to YTD Budget	\$ Variance to YTD Budget	Revised Budget	Adopted Budget
		\$	\$	%	Ś	\$	Ś
Add Funding from					•	*	¥
Grants & Contributions - Asset Development		3,544,854	1,203,889	194%	2,340,965 √	7,722,142	6,726,309
Less: held in restricted funds from prior years		_	-	0%	-		0,720,303
Proceeds on Sale of Assets		305,049	1,267,806	-76%	(962,757) <b>X</b>	7,197,488	2,525,125
Reserves		6,326,490	9,466,288	-33%	(3,139,798) <b>X</b>	32,301,822	18,281,347
Loan Funds Raised		_	-	0%	(0,133,730)	20,000,000	20,000,000
		69,188,232	61,124,006	13%	8,064,227	(29,011,136)	(24,814,748)
Non-Cash/Non-Current Item Adjustments							
Depreciation on Assets		5,975,597	5,938,789	1%	36,808	23,755,157	22 755 157
Profit/(Loss) on Assets Disposal		(305,049)	(882,414)	-65%	577,365 √		23,755,157
Loan Repayments		-	(002)414)	0%	377,303	(5,239,416)	(567,053)
Non-Current Leave Provisions		65,961	_	0%	65,961	(1,373,356)	(1,373,356)
		74,924,742	66,180,381	13%	8,744,361	(44.000.750)	(2.000.000)
		74,324,742	00,100,301	13/0	0,744,301	(11,868,750)	(3,000,000)
Opening Funds		13,175,076	11,890,675	11%	1,284,401	11,890,675	3,000,000
Closing Funds	Note 2, 3.	88,099,818	78,071,056	13%	10,028,762	21,925	3,000,000
		-	-		-		

# **Notes to Statement of Financial Activity**

Note 1.

Additional information on the capital works program including committed orders at end of month:

		Commitments at	Commitments &	YTD Revised	Full Year	Uncommitted at
	Actuals	Month End	Actuals YTD	Budget	Revised Budget	Month End
Assets Classification	\$	\$			\$	\$
Land and Buildings	(2,720,659)	(2,577,064)	(5,297,723)	(5,321,223)	(33,115,756)	27,818,033
Infrastructure Assets	(2,194,989)	(2,706,867)	(4,901,856)	(5,333,869)	(29,934,206)	25,032,350
Plant and Machinery	(693,459)	(1,455,937)	(2,149,396)	(1,919,369)	(5,584,369)	3,434,973
Furniture and Equipment	(4,797)	-	(4,797)	(11,000)	(11,000)	6,203
Computer Equipment	(304,195)	(131,802)	(435,997)	(593,053)	(1,191,595)	755,598
	(5,918,098)	(6,871,671)	(12,789,769)	(13,178,513)	(69,836,926)	57,047,157

#### Note 2.

Closing Funds in the Financial Activity Statement are represented by:

		YTD Revised	Full Year	Adopted
	Actuals	Budget	Revised Budget	Budget
	\$	\$	\$	\$
Current Assets				
Cash & Investments	141,031,372	157,295,657	93,815,141	86,462,923
Rates Outstanding	33,955,049	900,000	900,000	900,000
Rubbish Charges Outstanding	2,340,544	300,000	300,000	300,000
Sundry Debtors	7,866,478	2,700,000	2,700,000	2,700,000
GST Receivable	1,336,311	-	-	-
Prepayments	0	350,000	350,000	350,000
Accrued Debtors	323,074	-	-	-
Stock on Hand	(5,820)	20,000	20,000	20,000
	186,847,007	161,565,657	98,085,141	90,732,923
Current Liabilities				
Creditors	(12,002,268)	(3,641,948)	(5,000,496)	(5,000,496)
Income Received in Advance	-	52,856	52,856	52,856
GST Payable	(453,683)	-	-	-
Witholding Tax Payable	-	-	-	-
Provision for Annual Leave	(2,674,992)	(2,000,000)	(2,000,000)	(2,000,000)
Provision for Long Service Leave	(1,950,770)	(2,154,509)	(2,595,980)	(2,595,980)
	(17,081,713)	(7,743,601)	(9,543,620)	(9,543,620)
Net Current Assets	169,765,294	153,822,056	88,541,521	81,189,303
Add: Non Current Investments	4,402,494	4,339,420	4,339,420	4,339,420
	174,167,788	158,161,476	92,880,941	85,528,723
Less: Restricted/Committed Assets				
Cash Backed Reserves #	(82,252,530)	(80,090,421)	(92,859,016)	(85,528,723)
Deposits & Bonds Liability *	(3,815,441)	(2,789,342)	(2,789,342)	(2,789,342)
Grants & Contributions Unspent *	-	2,789,343	2,789,343	2,789,343
,	88,099,818	78,071,056	21,925	-
Closing Funds (as per Financial Activity Statement)	88,099,818	78,071,056	21,925	-

<sup>#</sup> See attached Reserve Fund Statement

<sup>\*</sup> See attached Restricted Funds Analysis

Note 3.

Amendments to original budget since budget adoption. Surplus/(Deficit)

Ledger	Project/ Activity Description	Council Resolution	Classification	Non Change (Non Cash Items) Adjust.	Increase in Available Cash	Decrease in Available Cash	Amended budget Running Balance
	Budget Adoption		Closing Funds Surplus(Deficit)	·	•	Ť	0
GL	830 Increase conference budget	OCM 11/9/14 #5370 OCM 11/9/14	Operating Expenditure			2,000	(2,000)
GL	594 Salary reduction due to system error	#5370	Operating Expenditure		18,369		16,369
GL	105 Increase in FAGS grant 161, 162,	OCM 11/9/14 #5370 OCM 11/9/14	Operating Income		86,745		103,114
GL	175 Reallocating FESA grants and expenditure  Allocating telecommunication expenses budget which was missed out	#5370	Operating Income		4,498		107,612
GL	137 during annual budget process  Carried forward unspent fund in Coastal Monitoring project which was	Sept 14 OCM	Operating Expenditure			65,000	42,612
OP	6245 missed out during carry forward process	Sept 14 OCM	Operating Expenditure Closing Funds Surplus (Deficit	)0	109,612	20,687 <b>87,687</b>	21,925 21,925

# Statement of Comprehensive Income by Nature and Type

for the period ended 30 September 2014

			Amended	\$ Variance to YTD		Amended	Adopted
		Actual	YTD Budget	Budget	Forecast	Budget	Budge
ODEDATING DEVENUE		\$	\$	\$	\$	\$	Ş
OPERATING REVENUE			2				
01 Rates		62,064,681	61,860,000	204,681	63,084,681	62,880,000	62,880,000
02 Specified Area Rates		262,334	270,000	(7,666)	262,334	270,000	270,000
05 Fees and Charges	Note 1	24,432,976	24,322,889	110,086	39,818,997	39,708,911	39,708,911
06 Service Charges		3,879,797	3,939,752	(59,956)	3,879,797	4,000,000	4,000,000
10 Grants and Subsidies		2,416,195	2,386,158	30,037	9,455,076	9,425,038	9,325,765
15 Contributions, Donations and Reimbursements		134,627	99,136	35,491	402,331	366,840	356,840
20 Interest Earnings		1,477,146	1,440,348	36,798	6,406,189	6,369,391	6,369,391
25 Other revenue and Income		3,965	1,775	2,190	9,290	7,100	7,100
Total Operating Revenue		94,671,720	94,320,058	351,662	123,318,694	123,027,280	122,918,007
OPERATING EXPENDITURE							
50 Employee Costs - Salaries & Direct Oncosts	Note 2	(10,021,154)	(9,690,449)	(330,705)	(43,020,498)	(42,689,793)	(42,697,487
51 Employee Costs - Indirect Oncosts		(159,200)	(140,525)	(18,676)	(923,142)	(904,466)	(898,966
55 Materials and Contracts	Note 3	(7,840,692)	(9,111,000)	1,270,308	(34,688,049)	(35,958,358)	(35,536,617
65 Utilities		(1,022,168)	(1,160,403)	138,235	(4,443,909)	(4,582,144)	(4,513,005
70 Interest Expenses		(2)022)200)	(2)200,100,	-	(123,300)	(123,300)	(123,300
75 Insurances		(1,146,654)	(1,122,551)	(24,103)	(2,364,603)	(2,340,500)	(2,340,500
80 Other Expenses		(1,688,694)	(2,527,549)	838,855	(6,742,520)	(7,581,375)	(7,526,702
85 Depreciation on Non Current Assets		(5,975,597)	(5,938,789)	(36,808)	(23,791,965)	(23,755,157)	(23,755,157
Add Back: Indirect Costs Allocated to Capital Works		797,785	806,611	(8,826)	3,234,956	3,243,783	
Total Operating Expenditure		(27,056,375)	(28,884,655)	1,828,279	(112,863,031)	(114,691,310)	3,243,783 <b>(114,147,951</b>
CHANGE IN NET ASSETS RESULTING FROM OPERATING							
ACTIVITIES		67,615,344	65,435,403	2,179,941	10,455,663	8,335,970	8,770,056
NON-OPERATING ACTIVITIES							
11 Capital Grants & Subsidies		352,500	453,889	(101,389)	3,255,831	3,357,220	2,361,387
16 Contributions - Asset Development		3,192,354	750,000	2,442,354	6,807,276	4,364,922	4,364,922
95 Profit/(Loss) on Sale of Assets		305,049	882,414	(577,365)	4,662,051	5,239,416	567,053
57 Acquisition of Crown Land for Roads				-	-	_	
58 Underground Power Scheme		-	(574)	574	-	(574)	,
Total Non-Operating Activities		3,849,903	2,085,729	1,764,174	14,725,158	12,960,984	7,293,362
NET RESULT		74 465 242	C7 F24 422	2 244 417	AF 400 055		
NET RESULT		71,465,248	67,521,133	3,944,115	25,180,820	21,296,953	16,063,417

# **Notes to Statement of Comprehensive Income**

#### Note 1.

Additional information on main sources of revenue in fees & charges.

		Amended	Amended	Adopted
	Actual	YTD Budget	Budget	Budget
	\$	\$	\$	\$
Community Services:				
Recreational Services	134,645	133,580	534,320	534,320
South Lake Leisure Centre	624,785	694,693	2,988,286	2,988,286
Law and Public Safety	138,745	97,124	388,496	388,496
	898,175	925,397	3,911,102	3,911,102
Waste Services:				
Waste Collection Services	18,586,216	18,471,060	18,695,101	18,695,101
Waste Disposal Services	2,439,371	2,612,006	10,448,023	10,448,023
	21,025,587	21,083,066	29,143,124	29,143,124
	21,923,762	22,008,463	33,054,226	33,054,226

#### Note 2.

Additional information on Salaries and Direct On-Costs by each Division.

		Amended	Amended	Adopted
	Actual	YTD Budget	Budget	Budget
	\$	\$	\$	\$
Executive Division	(474,198)	(436,589)	(1,919,506)	(1,919,506)
Finance & Corporate Services Division	(1,655,957)	(1,389,133)	(6,145,420)	(6,145,420)
Community Services Division	(2,991,578)	(2,968,468)	(13,189,123)	(13,196,817)
Planning & Development Division	(1,208,482)	(1,147,079)	(5,024,097)	(5,024,097)
Engineering & Works Division	(3,690,940)	(3,749,179)	(16,411,647)	(16,411,647)
	(10,021,154)	(9,690,449)	(42,689,793)	(42,697,487)

#### Note 3

Additional information on Materials and Contracts by each Division.

		Amended	Amended	Adopted
	Actual	YTD Budget	Budget	Budget
	\$	\$	\$	\$
Executive Division	(385,513)	(541,714)	(2,087,788)	(2,087,788)
Finance & Corporate Services Division	(920,084)	(1,081,264)	(3,341,779)	(3,269,713)
Community Services Division	(1,533,182)	(1,845,621)	(7,838,018)	(7,649,134)
Planning & Development Division	(206,562)	(240,463)	(1,123,794)	(1,065,895)
Engineering & Works Division	(4,795,352)	(5,401,939)	(21,566,979)	(21,464,087)
Not Applicable	0	0	0	0
	(7,840,692)	(9,111,000)	(35,958,358)	(35,536,617)

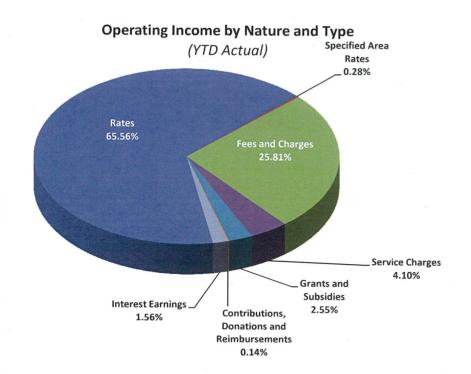
# **City of Cockburn - Reserve Funds**

Financial Statement for Period Ending 30 September 2014

	Financia	l Statemer	nt for Period	l Ending (	30 Septemb	per 2014				
Account Details	Opening		Interest Re		t/f's from N		t/f's to M	unicipal	Closing	Balance
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Council Funded							220000000000000000000000000000000000000		VII. II	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Bibra Lake Management Plan Reserve	847,819	847,819	(9,120)	5,267		-	(120,000)	(13,330)	718,699	839,757
Bibra Lake Nutrient Managment	313,447	313,447	12,230	1,947		-	-	(10,000)	325,677	315,394
CCW Development Fund	-	-		-	11,241,207			-	11,241,207	-
Community Infrastructure	9,830,572	9,830,572	200,590	61,631	4,508,068	-	(8,105,850)	(17,150)	6,433,380	9,875,053
Community Surveillance Levy Reserve	653,841	653,841	29,690	3,661	503,160	-	(227,898)	(138,361)	958,793	519,142
Contaminated Sites	2,518,882	2,518,882	51,520	15,509	-		(100,000)	(35,028)	2,470,402	2,499,363
DCD Redundancies Reserve	2,991	2,991	-	19		-		-	2,991	3,010
Environmental Offset Reserve	277,367	277,368	(3,110)	1,723	-	-	٧, -	-	274,257	279,091
Green House Emissions Reductions	652,516	652,516	13,880	4,054	200,000	-	(762,000)	-	104,396	656,570
Information Technology	261,600	261,600	37,220	1,465	100,000	-	(167,361)	(48,675)	231,459	214,390
Land Development & Investment Fund Reserve	4,719,455	4,719,455	283,600	26,209	5,966,053	-	(4,308,477)	(1,566,525)	6,660,631	3,179,139
Major Buildings Refurbishment Mobile Rubbish Bins	5,439,366	5,439,366	25,930	33,794	The state of the s	-	-	-	5,465,296	5,473,160
Municipal Elections	63,279	63,279	24,440	392	- T	-	(170,000)	(110,143)	(82,281)	(46,472)
Naval Base Shacks	49,722	49,721	13,270	309	-	-	-	-	62,992	50,030
Plant & Vehicle Replacement	766,920	766,921	16,420	4,765	151,413		(759,428)	-	175,325	771,685
Port Coogee Special Maintenance Reserve	5,930,546 1,005,467	5,930,546	76,610	35,344	3,450,000		(3,655,375)	(478,719)	5,801,781	5,487,171
Roads & Drainage Infrastructure	2,026,150	1,005,468 2,026,150	23,060	6,173	270,000	-	(117,925)	(61,612)	1,180,602	950,029
Staff Payments & Entitlements	2,020,130	2,026,150	101,580	10,879	1,250,000	-	(3,214,532)	(930,649)	163,198	1,106,381
Waste & Recycling	18,659,246	18,659,246	157,540 626,270	13,928	110,000	-	(180,000)	(121,672)	2,358,640	2,163,356
Waste Collection Levy	264,697	264,697	1,540	115,818	3,518,824	-	(2,500,495)	(71,040)	20,303,845	18,704,023
Workers Compensation	379,495	379,495	15,480	2,231 2,358	190,955	-	(200,000)	-	257,192	266,929
POS Cash in Lieu (Restricted Funds)	4,240,467	4,240,466	132,710	26,250		-	(000,000)	(00.005)	394,975	381,853
(100110100)	61,174,947	61,174,947	1,831,350	373,725	31,459,680		(888,000)	(33,885)	3,485,177	4,232,831
Grant Funded	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,	1,001,000	010,120	31,433,000	-	(25,477,341)	(3,626,790)	68,988,636	57,921,883
Aged & Disabled Vehicle Expenses	322,162	322,162	0.055	4.040	00.005		(4.40.700)			
CIHF Building Maintenance Resrv	322, 102	322, 102	9,855	1,918	62,625	-	(146,763)	(27,632)	247,880	296,448
Cockburn Super Clinic Reserve	1 026 274	1 020 274	400,000	-	600,000	-		-	600,000	-
Family Day Care Accumulation Fund	1,936,374	1,936,374	169,220	11,361		-	(1,985,154)	(39,924)	120,440	1,907,811
Naval Base Shack Removal Reserve	22,384	22,383	3,000	181	-	-	(30,000)	(24,314)	(4,616)	(1,750)
Restricted Grants & Contributions Reserve	333,944	333,945	4,270	2,075	54,693	-	-	-	392,907	336,019
	5,923,657	5,923,657	-	26,854	-	-	(2,808,883)	(2,607,830)	3,114,774	3,342,682
UNDERGROUND POWER	754,224	754,224	(11,570)	4,686	1,200,000	-	(1,372,637)	-	570,016	758,910
Welfare Projects Employee Entitilements	444,423	444,422	12,452	2,789	-	26,966	(11,060)	-	445,815	474,177
	9,737,168	9,737,168	187,227	49,863	1,917,318	26,966	(6,354,497)	(2,699,700)	5,487,216	7,114,297
Development Cont. Plans										
Aubin Grove DCA	170,698	170,698	4,705	1,061	-	-	(887)	_	174,516	171,758
Community Infrastructure DCA 13	10,029,345	10,029,345	140,180	66,143	3,000,000	1,988,373	(359,999)	_	12,809,526	12,083,860
Gaebler Rd Development Cont. Plans	984,238	984,238	18,924	6,115		-	(3,474)	_	999,687	990,353
Hammond Park DCA	(14,180)	(14,180)	9,354	(88)	396,000	_	(13,595)	_	377,579	(14,268)
Munster Development	432,526	432,526	18,147	3,125	443,798	109,278	(17,871)	_	876,600	544,928
Muriel Court Development Contribution	(48,104)	. (48,104)	(206,000)	(299)			(19,092)	_	(273,196)	(48,403)
Packham North - DCA 12	(105,792)	(105,792)	10,529	(657)	434,388	_	(19,192)	_	319,933	(106,449)
Solomon Road DCA	360,190	360,190	8,493	2,238	120,000	_	(7,721)	_	480,962	362,427
Success Lakes Development	887,990	887,991	3,817	5,517	-	_	(3,474)	_	888,333	893,508
Success Nth Development Cont. Plans	1,185,551	1,185,550	15,311	7,988	11,700	311,129	(5,611)	-		
Thomas St Development Cont. Plans	12,079	12,079	294	75	11,700	-	(5,011)	-	1,206,951	1,504,667
Wattleup DCA 10	(9,363)	(9,363)	201	(58)		_	(12 605)	-	12,373	12,155
Yangebup East Development Cont. Plans	436,865	436,865	6,026		120.020	2F 0.40	(12,695)	-	(22,058)	(9,421)
Yangebup West Development Cont. Plans	354,406	AND THE PARTY OF T		2,714	130,036	35,048	(3,748)	-	569,179	474,627
. sgodap 1100t Botolopinent Cont. Flans		354,406	9,195	2,202			(2,624)	-	360,977	356,608
	14,676,448	14,676,448	38,975	96,074	4,535,922	2,443,827	(469,984)	-	18,781,361	17,216,350
Total Reserves	85,588,562	85,588,563	2,057,552	519,663	37,912,920	2,470,793	(32,301,822)	(6,326,490)	93,257,213	82,252,530
4205607										

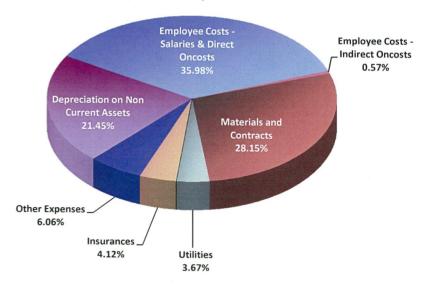
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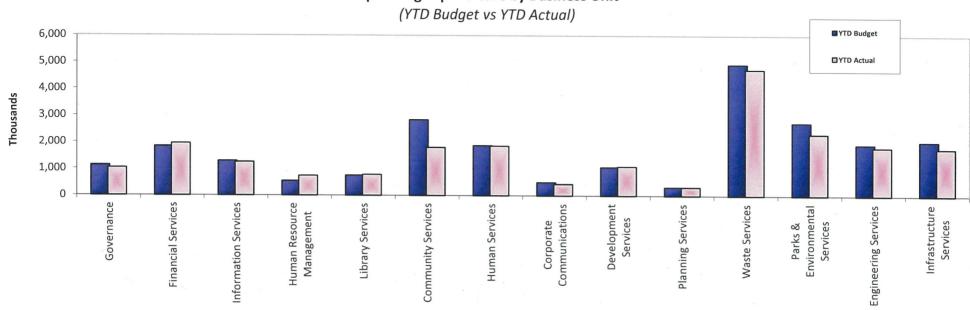


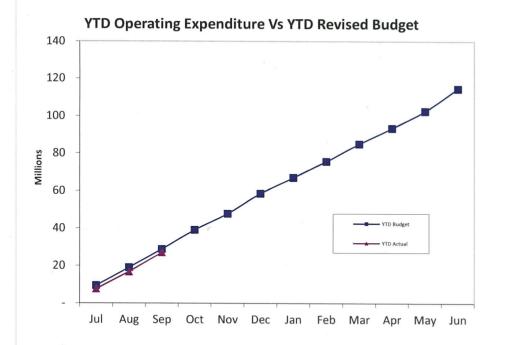
# Operating Expenditure by Nature and Type

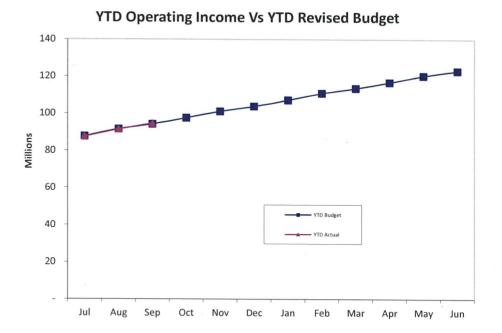
(YTD Actual)

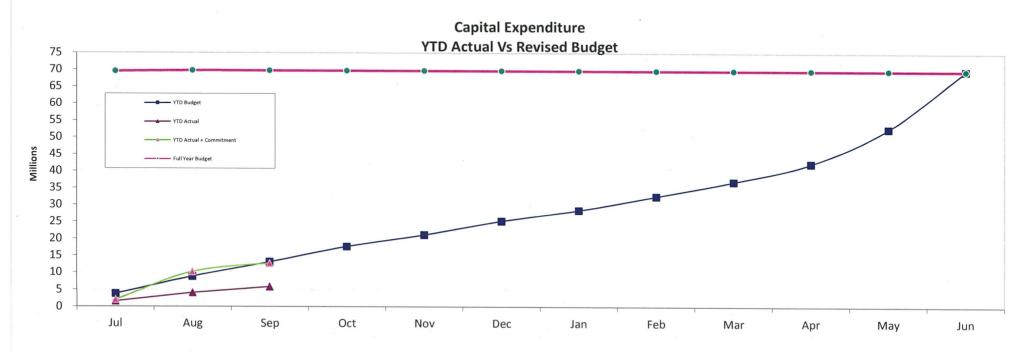


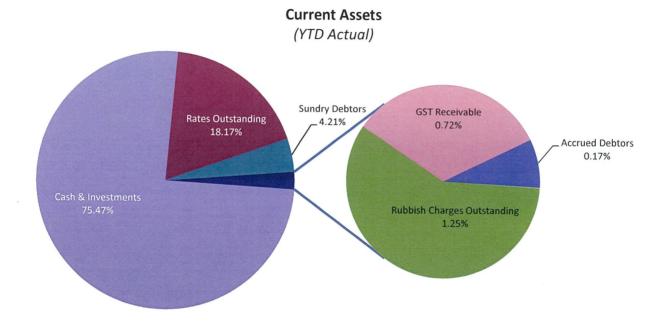


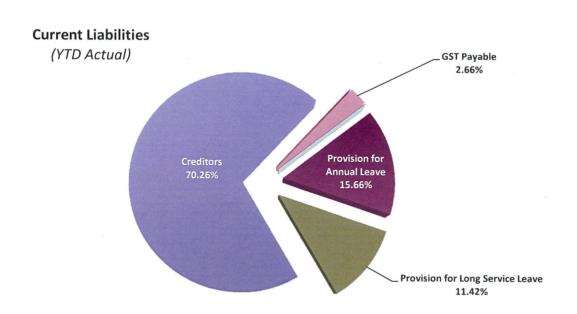




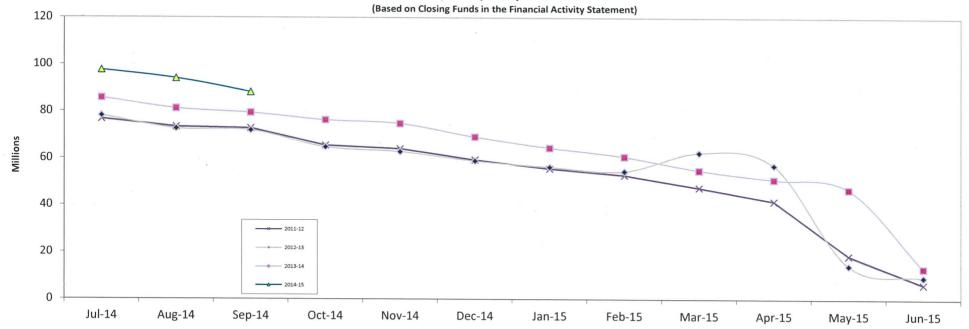


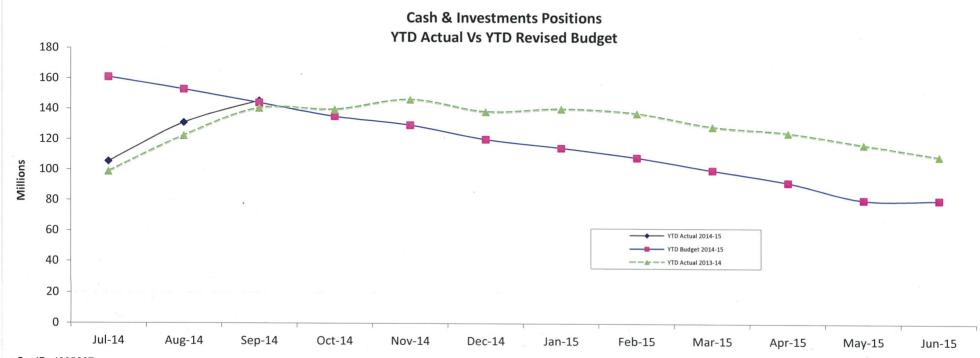






# Municipal Liquidity Over the Year





Variance Analysis						
Municipal Financial Activity Statement for the per	iod ended 30 Sept	ember 2014				
	YTD Actuals \$	YTD Revised Budget \$	Full Year Revised Budget	YTD Variance	√ = Favourable X = Unfavourable	Sep-14
OPERATING EXPENDITURE						
Community Services	1,793,980	2,831,285	9,511,031	1,037,305	√	Employee Costs-Salaries and Direct Oncosts of Community Services Unit Management are underspent by \$104k. Material & Contracts Expenses of Law Public Safety are under ytd budget by \$123k. Expenditures Council Donations/Contrib Projects - Operating Projects are under ytd budget by \$746k, mainly due to the donations expenses for group of projects(value of \$607k)have not come in yet.
Parks & Environmental Services	2,310,211	2,727,983	11,365,867	417,772	√	Contract Expenses for Environmental Management and Parks Construction & Maintenance are under ytd budget by \$101k and \$144k.
Infrastructure Services  ADDITIONAL FUNDING RECEIVED	1,762,948	2,026,117	8,288,591	263,169	1	Expenses in Facilities Maintenance and Management are under ytd budget by \$194k.
ASSITIONAL I SHOULD RECEIVED						
	-					
Grants & Contributions - Asset Development	3,544,854	1,203,889	7,722,142	2,340,965		Owner Contribution received for DCA1,DCA6 and DCA13 are ahead of its ytd budget by \$311k, \$109k, \$1.2m. Contribution received from POS Cash in Lieu is ahead of its ytd budget by \$250k.  Developer Contributions Received for New Cockburn Central Aquatic & Recreation Centre are ahead of it ytd budget by \$348k.  Sports and Recreation Grant for the capital works project of Formalise path to lookout from Manning Car park are not received yet resulting in unfavourable variance of \$100k.
Proceeds on Sale of Assets	305,049	1,267,806	7,197,488	(962,757)	X	Subdivision Lot 702 Bellier PI & Lot 65 Erpingham Rd, Lot 23 Russell Road, Hammond Park, Lot 40 Cervantes Loop - surveying and construction of access have not been sold, resulting in unfavourable variance of \$351k, \$250k and \$225k respectively.

# **Capital Expenditure**

for the period ended 30 September 2014

			YTD Revised	Full Year Revised	\$ Variance to YTD	√ = Favourable	
		Actuals	Budget	Budget	Budget	X = Unfavourable	Explanation
		\$	\$	\$	\$		
UMMARY							
Purchase of Land and Buildings		2,720,659	5,321,223	44,042,673	2,600,564	√	
Acquisition & Development of Infrastructure Assets		2,194,989	5,333,869			, v	1
Purchase of Plant and Machinery						1	
urchase of Furniture and Equipment		693,459	1,919,369			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
urchase of Computer Equipment		4,797	11,000			1	
		304,195 5,918,098	593,053 13,178,513	2,974,879 76,131,390		V	
aterial Variances Identified:							
Yorks in Progress - Roads Infrastructure							
478 - Barfield Road Gaebler to Rowley (Reconstruct, Stabilise)		3,360	120,000	0	116,640	√	\$7750 in committed orders. Project to begin February 2015 as the site needs to be stabilised as as resurfaced.
442 - Frankland Avenue construction Single carriaway Roper Bouleva		165,202	470,344	1,432,000	305,142	√	Currently \$258k in committed orders. Wall in October to be build. Along with the committed orders only another \$10k expected to be spent. Project to be completed November. Approx \$430k to be spent.
544 - North Lake Road (Hammond to Kentucky)		911,527	1,261,452	0	349,925	1	spent not \$1.4m. Progressing and project on track, delay in payments. Committed order of \$255k.
471 - Beeliar Drive [Wentworth Pde to Kwinana Fwy]		41,128	509,465	0	468,337	,	Limited resources. CW3545 given higher priority. Expected to start major works November.
545 - Beeliar Drive Hammond Road North and South		36,738	831,717	0	794,979	V	Western power held up the project as a pillar needed to be removed from the area. Works currently progressing as normal, with 3 light needing to be relocated. Expected to finish the pro
	Sub Total	1,157,955	3,192,978	1,432,000	2,035,023		in November. \$295k in committed orders.
44.							
Vorks in Progress - Parks Hard Infrastuc	VIII -						
443 - Formalise path to lookout from Manning Carpark. (Wooden Step		0	200,000	119,603	200,000	<b>V</b>	Grant successful and tender being developed. Approx 5% complete with a committed order of \$6500
	Sub Total	0	200,000	119,603	200,000		
reehold Land							
539 - Subdivision Lot 702 Bellier Pl & Lot 65 Erpingham Rd		1,000	146,085	604,700	145,085	1	Negotiation with the department of housing delaying the start of project. The project is anticipa to cost \$800k, and additional funds need to be found before project continues. Project to begin
	Sub Total	1,000	146,085	604,700	145,085		November.
Valle in Duanuasa Buildings							
Vorks in Progress - Buildings 26 - Cockburn Central Aquatic Recreation Gtr		758,838	533,328	0	(225,510)	X	Committed order of \$1m. \$238k architectrical expense for CW4517 with the budget being \$65k
06 - Coogee Surf Life Saving Club		148,005	35,382	5,235,144	(112,623)		that project. High consultancy expenditure for project CW4393.
05 - Cockburn Integrated Health Facilities		1,553,796	3,500,409			^	Committed order of \$1.68m. Initial delay due to change of construction methodology. Library
504 - Manning Southern Toilet Block Replacement		126,045	249,672	0	123,627	, 1	systems charge from Bibliotheca of \$179k. \$154k in committed orders. Variation spending not reflected in the Actual expenditure. Expecte
.541 - CoC Civic Building HVAC Upgrade Project		0	137,500	0	137,500	, v	finish Dec -14 Still in the feasibility study stage. Expected to complete the project Jun 15.
	Sub Total	2,586,684	4,456,291	34,504,610	1,869,607		
Computance							
Computers CCTV		100.15					
010 - CCTV		168,198	44,375	908,575	(123,823)	X	Cashflow adjustment in regards to budget may need to be made, as an invoice for Project CW1386(CCTW expansion program) from last financial year got paid in this financial year.
.403 - OCR AP Automation Processing	7	0	100,000	0	100,000	√ √	Other options being explored. Kwinana users to be trained in Tech One before final go ahead ca happen.
mont Sat ID: 4205607	Sub Total	168,198	144,375	908,575	(23,823)	]	

Document Set ID: 4205607

Version: 1, Version Date: 04/12/2014

# **Capital Expenditure**

for the period ended 30 September 2014

		Actuals	YTD Revised Budget	Full Year Revised Budget	\$ Variance to YTD Budget	<ul><li>√ = Favourable</li><li>X = Unfavourable</li></ul>	Explanation
		\$	\$	\$	\$		
Plant & Machinery							
7756 - New Waste Collection Truck PL756-1		0	330,000	0	330,000	V	Committed order of \$325k. Delivered August, invoice to be paid
7755 - Heavy Fleet-Waste Iveco F2350G/260 Rubbish Truck PL7551		0	350,000	0	350,000	V	Committed order of \$343k. Delivered August, invoice to be paid.
S	Sub Total	0	680,000	0	680,000		

# DAVILAK RUINS ARCHAEOLOGICAL MANAGEMENT STRATEGY

# MANNING ESTATE, HAMILTON HILL





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# 1.0 Authorship

This report is an amended version of an original document prepared by Fiona Bush (BA (Hons), MBEnv (Bldg Cons), PhD. AlCOMOS, archaeologist and heritage consultant titled *DRAFT ARCHAEOLOGICAL MANAGEMENT STRATEGIES for DAVILAK RUINS, MANNING ESTATE, HAMILTON HILL, January 2014.* The original report was funded by Lotterywest, through the Historical Society of Cockburn.

# **Original Report Acknowledgements**

This report would not have been possible without the assistance and enthusiasm of members of the Historical Society of Cockburn (Inc), in particular Alex Campbell. I am also grateful for the historical assistance provided by Diane Stewart and the City of Cockburn's History/Museum Officer, Christine Elaine.

## Glossary

#### 2.0 Definitions

A number of definitions are used in this report that is specific to cultural heritage. The following terms listed below are derived from the Burra Charter:

Place Means site, area, building or other work, group of

buildings, or other works together with associated

contents and surroundings.

Cultural significance Means aesthetic, historic, scientific, social or spiritual

value for past, present or future generations. It is embodied in the *place* itself, its *fabric*, *setting*, *use*, *associations*, *meanings*, records, *related places* and

related objects.

Fabric Means all the physical material of the place including

elements, fixtures, contents and objects.

Conservation Means all the processes of looking after a place so as

to retain its cultural significance.

Maintenance Means the continuous protective care of a place, and

its setting. It is to be distinguished from repair which

involves restoration or reconstruction.

Preservation Means maintaining a place in its existing state and

retarding deterioration.

Restoration Means returning a place to a known earlier state by

removing accretions or by reassembling existing

elements without the introduction of new material.

Reconstruction Means returning a place to a known earlier state and is

distinguished from restoration by the introduction of

new material.

Adaptation Means changing a place to suit the existing use or a

proposed use.

Use Means the functions of a place, including the activities

and traditional and customary practises that may occur

at the place or are dependent on the place.

Compatible use Means a use which respects the cultural significance of

a place. Such use involves no, or minimal, impact on

cultural significance.

Setting

Means the immediate and extended environment of a place that is part of or contributes to its *cultural* significance and distinctive character.

In addition to the above, there are also terms that relate specifically to archaeology and the ones listed below have been drawn from the Heritage Council's (NSW) document Guidelines for the preparation of Archaeological Management Plans.<sup>1</sup>

Archaeology

The study of the human past using material evidence

Archaeological feature

Any physical evidence of past human activity. Archaeological features may include buildings, works, relics, structures, foundations, deposits, cultural landscapes and shipwrecks. On archaeological excavations the term 'feature; may be used in a specific sense to refer to any item that is not a structure, a layer or an artefact (for examples, a post hole).

Archaeological potential

The degree of physical evidence present on an archaeological site usually assessed on the basis of physical evaluation and historical research. It refers to the surviving condition of archaeological sites.

Archaeological site

A place that contains evidence of past human activity. Below ground archaeological sites may include building foundations, occupation deposits, features, artefacts and relics. Above ground archaeological sites may include buildings, works or industrial structures that are intact or ruined.

Artefacts

An object produced by human activity.

Ruin

The remains of a building, city, etc., that has been destroyed or that is in disrepair or a state of decay

Guidelines for the preparation of Archaeological Management Plans, Heritage Branch, Dept. of Planning, NSW. A full version of this publication can be found at: http://www.environment.nsw.gov.au/search.htm?q=archaeological+management+plans

#### 3.0 Introduction

The Davilak Ruins are the remains of buildings constructed by members of the Manning Family from the late 1850s and early twentieth century. The ruins form part of a rich and well known component of Cockburn's history. The ruins represent the remains of a large homestead (comprising 11 rooms and a detached kitchen) and its associated outbuildings, together with farm buildings such as stables, a coach house and accommodation for farm workers. The farming property, which came to be known as Davilak, comprises a number of land parcels that were gradually acquired by the Manning family.

The conservation of *Davilak Ruins* provides the City of Cockburn with the ideal opportunity to explore techniques that will preserve the ruins, provide visitors with a more fulfilling experience and at the same time retain the archaeological potential of the site for future research purposes.

The care and preservation of ruined structures in Western Australia is currently in its infancy. The conservation of standing structures is well understood and conservation practices are well established. On the other hand, ruined buildings present the conservator with a different set of problems. If a ruin is to be conserved not only does it require stabilisation processes but the potential archaeological resource that the ruin represents also needs to be taken into account. In addition, the rationale behind the conservation of the ruin should also be considered. So the conservation of a ruin will require a team of people working together collaboratively to obtain the best outcomes for that ruin.

#### 4.0 Site Background

Henry Manning, a London merchant and builder who operated a successful building and export business from England, acquired the first component of the farm in 1844 when he purchased Cockburn Sound Location 3. His younger brother Charles arrived in the colony (c.1854) to run the family business and began acquiring more blocks of land around Cockburn Sound Location 3 until by February 1869, when he died, all of the land parcels that came to be known to as Davilak Estate were purchased. Lucius Alexander, Charles' eldest son by his second marriage, wed Florence Bickely in September 1869. According to Lucius Alexander's son Lucius Charles Manning, his father built Davilak after he had constructed his large house (Manning Hall) in Fremantle. Davilak provided the family with fresh produce and was apparently a large house built behind two hills.<sup>2</sup>

Following Lucius Alexander's death in 1888, the land comprising Davilak passed into the ownership of his wife Florence and their eldest son, Alfred Julian. In 1900, Azelia Helena (Lucius and Florence's eldest daughter),

Lucius Charles Manning, Interviewed by John Slee, January, 1975, Battye Library OH 1005 transcript, pp 1- 2.

married John Ley and a new house (known today as Azealia Ley Museum), was built for the couple to the north of *Davilak Ruins* on the western side of the lake. Florence and Alfred subdivided Davilak in 1915 amongst the children of Lucius and Florence with Lot 10, which held *Davilak Ruins*, being retained by Alfred while Azelia obtained title to the land on which her house stood (Lot 9). Alfred died in 1924 and it passed through his siblings' hands until in 1949 Azelia gained title to the block, once again combining her land with the original homestead. It was only after Azelia's death in 1954 that Davilak Estate finally passed out of the Manning family's hands. The Metropolitan Regional Planning Authority acquired the property in 1963 and the place was gazetted as regional parkland. The City of Cockburn is responsible for the land and the management of both the *Davilak Ruins* and the Azelia Ley Museum, which collectively form the Manning Estate. The daily running of the Museum and the ruins are the responsibility of the Historical Society of Cockburn (Inc).

In June 2013 the Historical Society of Cockburn was successful in obtaining a Lotterywest grant to commission a treatment plan<sup>3</sup> for *Davilak Ruins*. This report is the outcomes of that Plan.

A detailed history of the Davilak Ruins can be found in Appendix 1.

# 5.0 Description of Study Area

The Davilak Ruins are located on Lot 10 and Lot 64 Azelia Rd, Spearwood of the south western side of Manning Lake. The ruins are situated at the western end of Azelia Road before it turns north into Davilak Avenue towards parking areas on the western side of Manning Lake and the Azelia Ley Museum, all of which lie to the north of the ruins. The land is listed in certificate title Vol. 2680 Folio 2957, and is now part of a large regional park known as Manning Park. Davilak Ruins comprise a number of ruined structures that together make up what was once known as Davilak Farm. The ruined buildings are the original homestead, with its detached kitchen, wash and smoke house as well as several smaller outbuildings, a coach house, stables, carpenter's shop and workers' cottages. The ruined structures represent those buildings that were built from limestone. Any timber buildings or extensions to the main homestead and outbuildings disappeared following a bushfire that swept through the property in 1960. Davilak Ruins are set within a public open space, with Manning Lake to the north and open parkland and remnant bush. These features were all once part of Davilak Farm.

The term 'treatment plan' is not commonly used in either Australia or Western Australia and the more commonly used phrase 'archaeological management strategies' has therefore been adopted.

## 5.1 Study Objectives

Manning Park is a public reserve owned by the Western Australian Planning Commission. This document has been prepared for the City of Cockburn, who manages the place and the Historical Society of Cockburn (Inc), who is the custodian of Davilak Ruins. The proposed strategies do not extend to any issues relating to the Azelia Ley Museum. A draft Conservation Plan was prepared for Manning Estate, Hamilton Hill in 2011.4 The Davilak Ruins are a component of the Manning Estate. The Conservation Plan indicated that there were areas of Davilak Ruins that required urgent attention due to issues of stability, invasive vegetation and ongoing disturbance that in combination were accelerating the rate of decay of the ruins. Policies in the Conservation Plan outlined a number of recommendations for the retention and care of the ruins to prevent further deterioration and also to improve their interpretation. The archaeological management actions outlined in this document have been suggested to address the issues raised in the Conservation Plan, such as the stabilisation of the walls, a program to address invasive vegetation, suggestions to provide weather protection for the ruins to prevent further deterioration and suggestions for their interpretation. The strategies in this report follow the general principles laid out in the Australia International Council on Monuments and Sites (ICOMOS) Burra Charter, 2013.5 ICOMOS is an international non-government professional organisation that provides philosophical, methodological and technological approaches to conservation of cultural heritage. The Australian body is guided by the Burra Charter, which provides guidelines for the care and conservation of historic places in Australia. It is the key document used by people working in the heritage industry today.

Nayton, Gaye: 'Manning Estate, Hamilton Hill Conservation Plan', prepared for the City of Cockburn, September 2011.

The Burra Charter: The Australia ICOMOS Charter for places of Cultural Significance. Download a copy at: <a href="http://australia.icomos.org/publications/charters/">http://australia.icomos.org/publications/charters/</a>. Australia ICOMOS is the national chapter of the International Council on Monuments and Sites, an international non-government organisation that is primarily concerned with the philosophy, terminology, methodology and techniques of cultural heritage conservation.

# 6.0 Legislative and other Requirements

Heritage legislation in Western Australia involves each tier of government. Commonwealth legislation recognises the importance of places to the nation. The next level is state protection and each state has its own system. Western Australia has legislative authority under the *Heritage of Western Australia Act 1990*. One of the key components of this Act is that each local government has to develop its own list of places (municipal inventories) that are considered to be significant to that locality. Management categories are to be assigned to each listed place and in general those places allocated the highest category (or protection) would be placed on a heritage list that is linked to a town planning scheme. Under the provision of the local scheme, these high category places would be protected at the local level.

#### 6.1 Protective Framework

In the past, the heritage significance of the *Davilak Ruins* had gone largely unrecognised while the intact and younger Azelia Ley Homestead had been recognised as having cultural significance. Both the National Trust of Australia's (WA) Classified List and the City of Cockburn's Municipal Inventory have recognised the cultural significance of Azelia Ley Homestead. This was also the case with the Heritage Council of Western Australia, which permanently placed *Azelia Ley Homestead, Manning Estate* on the State's Register in June 2001. Following an archaeological report for the City of Cockburn by Gaye Natyon in 2011<sup>6</sup>, the importance of the *Davilak Ruins*, together with the archaeology associated with the farming activities once practised at this site, led to the broadening of the listing to include these additional features. The name of the listing was also changed to recognise the depth of history on this site and its former owners. *Manning Park Estate, Hamilton Hill* was permanently entered on the State Register in January 2012.

Entry into the State Register affords a place full legislative protection under the Act and if any alteration, change or demolition is to be made to a State registered place then the State Heritage Office must be consulted so that penalties are to be avoided.

Under the Western Australian Heritage Act 1990 (the Act) archaeological sites that are related to European activity (not Aboriginal sites) are not protected unless the site falls within a Registered Place or if it is a Registered Place in its own right. This differs from other states, for example New South Wales, where all archaeological sites are protected regardless of whether they have been registered on that state's heritage register.

Nayton, Gaye: 'Manning Estate, Hamilton Hill Conservation Plan', prepared for the City of Cockburn, September 2011.

Davilak Ruins are a component within the group of sites of the Manning Estate, Hamilton Hill and thus do have legal protection under the Act.<sup>7</sup> This assessment also includes Manning Lake, Azelia Ley Homestead (now Museum) and its outbuildings and a large portion of the land that comprises Manning Park. The extent of this assessment has ensured that features formerly associated with the activities that were carried out on Manning Estate are protected.

The City of Cockburn's Municipal Inventory was adopted in April 1997 and updated in 2012. The Davilak ruins are included on the City of Cockburn's Local Government Inventory ("LGI") as part of Place No. 33 'Manning Park', as 'Management Category B' Place. having 'considerable significance'. They are also associated with Place No. 1 'Azelia Ley Homestead', which is included as a 'Management Category A' Place, having 'exceptional significance'. Sites classified as having 'exceptional significance' are to be retained and conserved unless there is no feasible and prudent alternative to doing otherwise. They are also on the City of Cockburn Heritage List, adopted pursuant to City of Cockburn Town Planning Scheme No. 3 (TPS3), which comprises the City's most significant heritage places. This list is part of a requirement in the City of Cockburn's TPS3 and means that these places are protected under the Scheme.

The National Trust of Australia (WA) placed Azelia Ley Homestead on their Classified List in February 1982. This classification does not include *Davilak Ruins*. A classification by the National Trust does not provide any legal protection. However, the National Trust is a non- government body that is respected by the community for the role it has played in the retention of places that have cultural significance for Western Australia. The National Trust upgrades its listings in line with Municipal Inventories.

## 6.2 Archaeological Resources

Archaeological sites are finite resources. Once they are disturbed through a variety of actions their integrity starts to degrade and the valuable information that they contain becomes lost. This disturbance can occur through environmental action (wind, rain, vegetation and erosion), animal or human activities and also poorly conceived archaeological excavation. The archaeological potential and significance of an archaeological site are two factors that should be considered when developing management guidelines (or strategies) for this type of place. The archaeological potential of a site takes into consideration its intactness, or how much information has remained intact following the destruction of that site or the level of post-destruction contamination. The archaeological significance is how important the site is in telling us about the past. The significance is determined by assessing whether

Data base No. P00533, State Heritage Office of Western Australia.

the site provides information that cannot be found from other sources (documented or verbal), the rarity or uniqueness of the site to provide information and its potential to inform current research questions.

Using this methodology, it is possible to grade the archaeological significance of a site in much the same way that historic places or standing structures are assessed. However the terms used below are low, medium and high.<sup>8</sup>

#### 6.3 Ruins

Places generally become ruins because they lose their purpose, fall into disuse or are abandoned following a disaster. Unlike standing structures, ruins appear to have no apparent function because they cannot be 'used' which makes it difficult for them to provide an income for the owners. However, ruins are important as they have the potential to provide us with information about the people who once owned a place, how it functioned and if the ruination was due to a disaster. Information about how the people worked or lived in the ruin can have high archaeological significance because after a disaster the owners or occupiers generally walk away, leaving evidence of the activities that occurred at that ruin just before the disaster intact. Without conservation, ruins will gradually degrade to such an extent that they will lose both their archaeological potential and their archaeological significance.

While the *Davilak Ruins* fall into the disaster category, the buildings were probably becoming dilapidated by the time the fire destroyed the buildings as they had been unused for many years. Due to their abandonment prior to their destruction by fire the archaeological significance is probably medium but the archaeological potential would be high as the buildings were not used following the fire and even though the ruins have deteriorated over the years, much of the valuable archaeological information has been sealed away beneath layers of stone.

It should be noted here that in the assessment of significance for either the Heritage Council of Western Australia, or in conservation plans, levels of significance are generally listed as being of: exceptional, considerable, some or little significance. Exceptional is usually the level for national and state listing, considerable is the level for state listing and some is the threshold for state listing or for Municipal Inventories.

## 7.8 Archaeological Research Questions

The detailed archaeology of the site can be found in Appendix 1.

The Davilak Ruins have the potential to reveal information about several historic national themes such as:

- Migrating to seek opportunity
- Promoting settlement
- Developing primary production

#### State themes include:

- · Grazing, pastoralism and dairying
- Domestic activities
- Early settlers

Within the framework of these themes archaeological research questions could include:

- Assessing any differences in construction techniques at the homestead site that relate to early and later construction periods
- Establishing the layout of the homestead and its outbuildings for interpretation purposes
- Determining differences between items found at the homestead site with those found in the kitchen building and the farm workers' cottages
- Determining the developmental sequence of the farm buildings to see which buildings were constructed first or later expanded
- Trace the remnants of the gardens which were known to exist at the homestead site

This list of research questions can be expanded following consultation with other archaeologists.

## 7.9 Archaeological Potential and Significance

The homestead complex has high archaeological potential and significance. Despite the fact that the building had largely been abandoned shortly before the bushfire, the building has sealed layers beneath the accumulated building rubble and due to the ruined nature of the site the development of the homestead can be more easily seen than if it was still intact. The significance of the site has also increased now that it is know that the homestead complex incorporates the original farm developed by Charles Manning following his purchase of Cockburn Sound Location 81, which became the nucleus of Davilak Estate.

The coach house and stables complex has high archaeological potential but only medium archaeological significance. Both buildings were probably left undisturbed for many years prior to their destruction, but the significance of

this site to provide information that is markedly different from other farm buildings in the state is not considered to be high.

The three cottages however have both high potential and significance as few farm worker's cottages survive on farms either in the rural areas of Western Australia or in the metropolitan area. The cottages have the potential to compare the differences between the lifestyles of the workers at Manning Estate and those of the Manning family.

Due to the destruction of the walls to the vineyard and also the vegetation in this area, the former vineyard has low archaeological potential and significance.

The area described by Nayton as possibly the former rubbish dump may have high archaeological potential but this is dependent on whether it has been gone over in the past by bottle collectors. The significance is medium for although the dump has the potential to contain items discarded by members of the Manning family and both the farm and domestic workers it is not possible to tell which group of people discarded what item. The site would provide invaluable information on the items used by these people, particularly if it was a long-term discard site.

## 8.0 Recommended Management of Davilak Ruins

The cultural significance of the *Davilak Ruins* has been established in the assessment documentation prepared by the State Heritage Office and also the Conservation Plan for the Manning Estate. All activities that take place on the site need to take into account the statement of significance provided in these two documents and also the policies outlined in the Conservation Plan.

Ruins can be managed in a variety of ways and the City of Cockburn needs to decide which management approach is best for them to ensure that the heritage values of the *Davilak Ruins* are maintained and that the scope of works is within the capabilities of the City itself and also the Historical Society of Cockburn who is the custodian of the ruins.

## 8.1 Management Approaches

Some of this information has been drawn from a document prepared by Heritage Victoria. This document suggests that they are five different approaches that can be used in the management of ruins:

- 1. Coming alive again: bringing the place back to life through a new use
- 2. Returning it to its former state: partial restoration or reconstruction
- 3. Simply maintain: preserve the ruin in its existing state through maintenance

<sup>&</sup>lt;sup>9</sup> Heritage Victoria, Ruined Places: a guide to their conservation and management, Heritage Victoria, www.heritage.vic.gov.au, 2012.

- 4. Letting nature take its course: allowing the gradual degradation of the ruin to continue
- 5. Complete removal: documenting the place prior to the removal of the building material.

In the case of *Davilak Ruins* numbers 1, 4 and 5 are not to be considered to be appropriate options. As indicated previously, the place has been entered on the state's Register of Heritage Places so it has high cultural significance for the State and therefore needs to be maintained and preserved. Options 2 and 3 have been identified as the most relevant for the place.

## 8.2 Returning the Place to its Former State (Option 2)

This management approach could be considered for the *Davilak Ruins* as it would assist in revealing the heritage values of the place that, particularly in the case of the homestead complex, are largely obscured across the site. The amount of restoration and reconstruction work proposed will vary across the site. Partial reconstruction of the walls at the homestead complex, some of the farm buildings and also the wall around the vineyard would provide greater stability and provide a basis for the maintenance of these buildings. This maintenance falls under management category number 3. As this site functioned quite differently from Azelia Ley's house the information displayed in the museum is quite generalised (information on the Manning family and Azelia Ley) as well as being associated with a large collection of farming equipment. While this information is interesting in itself, it does not specifically relate to the buildings associated with *Davilak Ruins*. Therefore the full reconstruction of one of the farm buildings, for example the coach house, would enable this building to be used as an interpretation facility for this site.

## 8.3 Simply Maintain (Option 3)

This action would apply to some of the structures associated with the homestead complex, such as the remains of the detached kitchen and baker's oven as well as the majority of the farm buildings. The management process would involve actively maintaining those buildings where the decision had been made not to carry out any reconstruction work to ensure their survival. This decision could also be made for the management of the buildings across the whole of the site if funding needs to be allocated on a yearly basis. In this way the current deterioration of the site can be halted and a program of works instigated that would address which buildings should be reconstructed first and which could wait until funding becomes available.

Regardless of which management approach is taken by the City of Cockburn and the Historical Society, these two bodies need to consult with the State Heritage Office to ensure that management procedures are acceptable and that suitably qualified persons are employed for the reconstruction, preservation and maintenance of the site. As this is an archaeological site, all

work that disturbs the ground surfaces or walls needs to be carried out under the supervision of an accredited archaeologist.

## 9 Management Approach

As indicated in the previous section, the conservation of ruins needs to have a proper management approach, particularly when the ruins are to be made accessible to the public. Conserving ruins so that members of the public can appreciate them is a balancing act that the custodians have to get right if the visitor is to enjoy their visit without inflicting accidental damage to the ruins that they have come to visit. Many Western Australians are familiar with the rather romantic ruins that they can visit in Great Britain and Europe. Generally these ruins are set in landscaped grounds with the ruined walls rising up out of manicured lawns. This type of approach is not possible in Western Australia as the amount of water required to keep the grass green would be extremely high and it would also be an intrusive element in a landscape that in summer is generally dry. Therefore this type of picturesque display is considered to be inappropriate for *Davilak Ruins*.

The interpretation of the site for visitors and how they move around the site will therefore need to be considered in conjunction with conservation strategies for the ruins. This also brings to the fore the tricky dilemma of what types of conservation practices should be used to preserve the ruins. It is a well-known fact that once a building loses its roof the walls start to deteriorate and fall down. This is what has happened at the Davilak Ruins. In the past, conservation practitioners might possibly have rebuilt the walls so that they were all approximately the same height and then capped the wall with cement. Cement would also have been used to re-build the wall. However, practices have changed and we now know that the use of cement mortar, where previously there was none, causes further problems leading to additional deterioration. There are now many different ways to cap a stone wall. In Britain where ruins in some areas are subjected to extremes of heat and cold a soft capping composed of earth, vegetation and synthetic materials has been used. 10 In the United States the National Parks Service came to realise in the 1980s that the wholesale use of cement to make repairs to the ancestral sites of the Pueblo Indians in the south-west had created numerous problems. Today their Parks Service uses a variety of techniques, including soft wall capping and traditional building methods to preserve the ancient ruins. 11 This type of mentality needs to be considered for Davilak Ruins, whereby a team of people is engaged that includes architects and engineers

Lee, Z., Viles, H and Wood, Chris (ed), 'Soft Capping of Historic Walls: a better way of conserving ruins?', Univ. of Oxford and English Heritage, 2007.

Bawaya, M., 'The Race to Save the Ruins', Preservation, Journal of the National Trust for Historic Preservation, January/February 2011.

who are experienced in conserving heritage buildings, archaeologists and traditional craftsmen.

The purpose of the strategies outlined below is to assist the Historical Society and the City of Cockburn in managing and conserving the *Davilak Ruins*. The strategies should be read in conjunction with the policies outlined in Section 8 of the Manning Estate, Hamilton Hill Conservation Plan, 2011. In the Conservation Plan, parts of the place were identified as having exceptional archaeological potential and one of these places was *Davilak Ruins*.

Some of the strategies listed below are considered urgent while others represent short or long term strategies. The following designations have been used:

- U Urgent: needs to be carried out within the next six months
- S Short term: needs to be carried out within one year
- L Long term: needs to be addressed within two years
- O Ongoing: needs to be addressed on an annual basis.

# 9.1 Vegetation

When the consultant first visited *Davilak Ruins* in August the site was heavily overgrown with weeds. It was explained to the consultant that in the past the City of Cockburn had carried out a regular program of weed spraying to control weed growth but the practice had not occurred that year. In addition a number of trees had been allowed to grow in sections of the site.

- Action 1 The City of Cockburn needs to implement an annual weed control program specifically tailored for this site to ensure that plants do not grow in and near the walls. The person employed to carry out this spraying program needs to be instructed on the fragile nature of the ruins and that where possible walking on the walls should be avoided. This spraying program should cover all of the structures in the ruins complex. (U and O)
- Action 2 There are a number of trees and large shrubs growing in various locations across the site. Some are growing close to walls and others are growing in the open areas that were once rooms. These trees need to be removed to open up the site as well as eliminate the possibility of damage to the walls by the trees' roots. These trees should be cut down near their bases and then poisoned. Advice should be sought from a suitably qualified Arboricultural consultant who can provide expert advice on the best way to remove the various trees and shrubs that are causing problems. Digging out the roots needs to wait until an archaeologist is there to supervise the process. (U and O)
- Action 3 Shrubs or bushes that are growing near walls must not be removed by pulling them out by their roots as this action could damage the walls. They will need to be poisoned. (O)
- Action 4 Dead trees and branches should be carefully removed from the site as they represent a fire hazard. Care should be taken not to damage the walls. (L)
- Action 5 A Horticultural specialist should be engaged to determine whether any of the exotic trees on the site represent remnants from the garden or whether they represent opportunistic colonisation by windblown seed. (S)

# 9.2 Structural Integrity

All of the walls are in a fragile condition. The stones can be easily knocked off and if persons walk on them they can collapse thus injuring the person and damaging the walls.

- Action 6 The retaining wall to the north of the detached kitchen (or the southern side of the sunken garden area) is gradually starting to bow outwards and is in danger of collapse. To halt the wall's deterioration, it should be temporarily braced with wood supports. Advice from a qualified structural engineer should be sought before work begins. Once conservation works commence this wall can be de-constructed and repaired properly. This work can only take place once a full conservation program has been implemented and qualified archaeologists are present on the site. (U) Since the release of the original report, this work has been completed.
- Action 7 Stop water and soil cascading down into the sunken garden on the western side of the homestead by recreating a permanent retaining wall to prevent further erosion. (U)

The City of Cockburn needs to determine what its management approach will be for the preservation of this site. If they decide to carry out partial reconstruction on any parts of the site then an action plan will need to be developed on how to implement this approach as well as conservation of the ruins. The City should become pro-active in their approach to the conservation of the homestead ruins as there is an opportunity here to implement a conservation program not previously seen in Western Australia. The place has the potential to play an educative role in the conservation of ruins.

- Action 8 Develop a management approach for the site. (U)
- Action 9 Advice should be sought from a range of conservation practitioners (architects, engineers and traditional craftsmen) on the most appropriate methods of conserving the walls from further deterioration. Capping with cement must not be used and the walls must not be repaired with cement. (S)

The implementation of a management approach for the site will take time, meanwhile the homestead complex will continue to degrade unless it is protected from the elements. At this stage a short-term solution may be to erect a free-standing, open structure over the top of the ruins to protect them. This can be a fairly simple structure composed of steel uprights that are capable of supporting a roof. This can be clad in either corrugated galvanised steel or perhaps clear polycarbonate sheeting (to provide better lighting

inside) or a combination of the two. This will also provide protection for archaeologists at a later date. An example of one form of new roof covering can be seen on the Belmont brick kilns. A more innovative example is the new roof covering the ruins of the Old Halls Creek Post Office. In this instance the new protecting roofing intentionally replicated the original roof.

- Action 10 A short-term approach to conserve the homestead ruins is to construct a free-standing structure that covers the complex until a long term approach has been decided. This type of covering will have minimal impact on the archaeology of the site. (S)
- Action 11 Implement an education program about the fragility of the site, and in particular the need to stay off the walls whenever possible. This information is particularly pertinent for people who are required to work on the site (such as spraying weeds). All persons working on the site need to be provided with this information which can be prepared by the Historical Society. This information should also be included in the information provided on an interpretation panel about the site. (U)

# 9.3 Archaeology of the Site

Although it seems to be stating the obvious, *Davilak Ruins* is an archaeological site. Rebuilding or removing rocks that once formed the walls can potentially damage the archaeological record, which means that a possible research component could be lost.

- Action 12 No stones should be removed from their current location, in an attempt to 'tidy up' the ruins unless an archaeologist is present to record the process. (O)
- Action 13 Record any activities on the site that will affect its current status, this would include recording the site prior to any archaeological or conservation works taking place. (O)
- Action 14 The location of any artefacts scatters or additional features that come to light following the clearing of the vegetation should be recorded. (O)
- Action 15 Visitors must be made aware that any items or artefacts found anywhere on the site must not be removed. (O)

Davilak Ruins are an unusual within the metropolitan area because they comprise a complete farming complex (the homestead and a set of outbuildings) set within its original farming environment). As a large percentage of the original farm has been retained within Manning Park there

is the potential to explore not only the ruined structures that comprise *Davilak Ruins*, but also the archaeological remnants of earlier farm buildings that were identified in the Conservation Plan. It is due to this invaluable resource that it is recommended that the City of Cockburn approach the archaeology departments of either Notre Dame University or the University of Western Australia for advice on implementing a collaborative research program that will assist the City in managing this archaeological resource. This program has the potential to provide training for archaeology students and well as involving members of the community.

Action 16 Approach the archaeology departments of either Notre Dame University or the University of Western Australia to assist in developing a research program for *Davilak Ruins*. (S)

#### 9.4 Access

Currently the site can be accessed by vehicles via the bush track that runs between the homestead complex and the farm buildings and then heads off to the south, or around to the north-west of the farm buildings. This access road needs to be restricted to emergency vehicles only as recreational vehicles can potentially cause extensive damage to the ruins. There are potentially several ways of dealing with this problem.

- 1. Restrict vehicular access to the track that runs between the homestead complex and the farm buildings.
- 2. Fence off the entire area, this would entail extending the fence that currently runs along the eastern side of the homestead complex, to encompass the whole of the area occupied by the ruins (cutting off the track that runs between the two complexes).
- 3. Fencing off the homestead complex and the farm buildings and leaving the access track that runs between the two complexes accessible.

Option 2 is considered to be the most suitable as it cuts off both pedestrian and vehicular access to the entire sit. Visits to the ruins could be become part of a walking tour organised by members of the Historical Society. The whole of the complex could be fenced with 8 strand ringlock fencing which is not intrusive and would look very similar to the types of fencing material that the Manning family probably used in the past to enclose their fields.

Until a decision is made about how to restrict access to the entire site vehicular access must be stopped immediately.

Action 17 Place bollards on the track at the northern end of the site where it intersects with a westerly track and at the southern end just to the south of the ruined farm cottages. This will prevent unauthorised vehicular access. (U)

The City of Cockburn's Trails Master Plan<sup>12</sup> shows an existing Davilak Heritage Trail that commences near Azelia Ley Museum. The track does not currently pass near *Davilak Ruins*. However, the Trails Master Plan proposes an extension to this trail that would provide a loop track around the ruins. The loop trail would pass along the farm access track and then extend westward along the limestone ridge behind the farm buildings before heading north to rejoin the main westward track. A viewing platform is proposed for the homestead complex at the northern end. This trail has potential, and together with the proposed signage would make both the site and its history more accessible. However, it would enable easy public access to the ruins unless they were fenced off. Therefore, if the proposed Davilak Heritage Trail does proceed, Option 3, which was discussed above, would be best. A viewing platform could still be built at the northern end of the homestead complex but it would need to take into consideration sight lines as the roofing proposed for the homestead will obscure views from certain positions.

Action 18 Investigate fencing options for the whole of the site. These options can either enclose both the homestead complex and the farm buildings or the whole site including the track that runs between the farm buildings and the homestead complex. (U)

At present information signage is located within the fence that currently surrounds the homestead complex. As discussed above the ruins are fragile and access to them should be limited to authorised personnel. The current sign needs to be re-located to outside of the fence line and the current access to the ruins closed.

Action 19 Relocate the current timber signage that is located in the southeast corner of the ruins to somewhere outside the fence and close off the fence to public access. (S)

#### 9.5 Interpretation

The Historical Society and the City are interested in developing *Davilak Ruins* into a place that provides visitors with a more informative experience of the history of the site and the Manning family. As stated previously, *Davilak Ruins* are important state archaeological site that has the potential to provide educational opportunities for archaeology students and students involved in the heritage conservation field. The types of activities that students would be involved in would be 'hands-on' under the guidance of experts. Members of the public could also have the opportunity to participate in these more intensive activities, but would more likely be interested in viewing the ruins and learning about the history of the site and the conservation and archaeological works being undertaken. The strategies listed below are based

<sup>&</sup>lt;sup>12</sup> City of Cockburn Trails Master Plan, 2013 (based on original plan prepared by Transplant Pty Ltd)

on the premise that the Historical Society and the City will want to adopt a management approach that involves the partial restoration or reconstruction of some or all of the buildings in the complex. In this instance the Historical Society and the City may wish to partially reconstruct the walls at the homestead complex so that the room arrangement can be more easily understood. While the historic photographs are very informative, they only provide an overall image of the roof line or the eastern side of the house. There is insufficient information to carry out a full reconstruction of this building or its outbuildings.

Photograph evidence on the appearance of the farm buildings is better, particularly the coach house. This building could be fully reconstructed and then used to house an interpretation centre for the site.

- Action 20 Archaeological investigations must precede any reconstruction work. (L and O)
- **Action 21** Employ a suitably qualified consultant to develop an Interpretation Plan for *Davilak Ruins*. (L)
- Action 22 Work with an archaeologist and a conservation architect on all reconstruction work planned for the site. (O)
- Action 23 Work with the State Heritage Office to ensure that the management approach that the Historical Society and the City decide to adopt receives their approval before work progresses.

  (S)

The Master Trail Plan has indicated that the Davilak Heritage Trail has 'outstanding potential, with sweeping views from the three lookouts.......the absence of any interpretation.......undermines this potential.' <sup>13</sup> Suggestions for the type of information that could be placed on this signage are provided in this report. This information is pertinent for the overall proposed trail, but signage at the ruins themselves should also be considered providing information on how the site function and provide images of what the place used to look like. This signage should also carry information about the delicate nature of the ruins and that climbing on the walls is dangerous.

Action 24 Erect interpretative signage around the site that includes images of the buildings but also information on the delicate nature of the site. (S)

# 9.6 Heritage Listing

At discussed earlier in this report, *Davilak Ruins* is included on the State Register of Heritage Places as part of the Manning Estate. In this entry the

<sup>&</sup>lt;sup>13</sup> City of Cockburn Trails Master Plan, 2013, p.29

ruins are afforded the same level of protection as the rest of the site; their important heritage values are fully recognised. Currently in the City of Cockburn's Local Government Heritage Inventory, Azelia Ley Homestead is listed under management category A while Manning Park and Tuart Trees (which includes Davilak Ruins) has management category B. This category fails to acknowledge the importance of the ruins and also the surrounding landscape that has been identified as retaining evidence of the Manning's former farming practices, archaeological sites and exotic vegetation. These differences in management category should be addressed so that the City's Inventory reflects the State's heritage listing. Combining these three elements was also discussed in a report prepared by the Western Australian Planning Commission in 2009.<sup>14</sup>

Action 25 During the next revision of the Heritage Inventory combine Manning Park, Davilak Ruins and Azelia Ley Homestead in the same listing with an 'A' management category. (L)

Cockburn Coast District Structure Plan, endorsed in August 2009 and published in September 2009. Part of this report included an appendix on European Heritage in the area by A. Yates and J. Mackay: Cockburn coast district report: historic sites report, June 2008.

**APPENDIX 1 – ACTION PLAN**Table 1 - Time and Expertise Requirements to Implement Strategies

STATUS	Complete	Partially Complete	Quote sourced for works.	Not yet commenced	Ongoing
FUNDING	Municipal Budget (Museum)	OP Funds	Lotterywest Funding	50/50: City of Cockburn and Lotterywest	OP Budget
RESPONSIBILITY	City of Cockbum Notify State Heritage Office	City of Cockbum with assistance from Historical Society	City of Cockburn Notify State Heritage Office	City of Cockburn Notify State Heritage Office	City of Cockburn
EXPERTISE	Structural engineer familiar with heritage buildings	Aboricultural specialist for the larger trees. HS members can manage dead weeds.  Archaeologist required for root removal	Structural engineer familiar with heritage buildings	City contractors and Historical Society.	City employees together with assistance from HS.
DESCRIPTION	Shoring up retaining wall to the north of the detached kitchen	Removal of trees and shrubs	Construct temporary wall above western side of homestead complex	Restrict vehicular access through fencing the whole site.	Annual weed control program
STRATEGY	φ	2	7	17/18	-
TIMEFRAME		ext 6 months	ent work – n	อิมก	

Davilak Ruins Archaeological Management Strategy 2014

Manning Not yet Park Master commenced	Existing museum activities budget in first year, seek Lotterywest funding after if needed
City of Cockburn, Manager Parks and Environment	City of Cockburn with assistance from Historical Society and universities
City employees	Members of HS and CC employees and historical archaeology lecturers
Management plan for site	Approach archaeology departments of UWA and Notre Dame and develop education program regarding fragility of walls for personnel employed to work on and around the site.
ω	16/11

TIMEFRAME	STRATEGY	DESCRIPTION	EXPERTISE	RESPONSIBILITY	FUNDING	STATUS
	10	Erect free-standing roof over the homestead ruins to provide temporary protection	City employees	City of Cockburn in consultation with State Heritage Office	Investigate once the weeds have been cleared and the stabilisation works complete	Not yet commenced
hin one year	Ō	Seek advice from heritage professionals on best practise for halting the deterioration to the walls	Qualified heritage architects, heritage engineers and archaeologists	City of Cockburn	Municipal Budget (Museum Activities)	Underway/ ongoing
hort term – wit	24	Erect interpretive signage that includes information about the fragile nature of the walls	City employees	City of Cockburn with input from Historical Society and Aboriginal Reference Group.	Municipal Budget (Arts and Culture and Reconciliation Action Plan)	Billboards purchase commenced
S	19	Relocate current sign in SE comer of homestead site	City employees in conjunction with HS members	City of Cockburn	Municipal Budget (staff resources)	15-16 Financial Year
	5	Engage Horticultural specialist to investigate exotic trees and shrubs	Landscape garden specialist	City of Cockburn	Municipal Budget (staff resources and to engage a contractor)	Not yet commenced

Complete	Underway
N/A	Municipal Funds (staff resources)
City of Cockburn and Historical Society	City of Cockburn with assistance from Historical Society
City employees and members of Historical Society	Historical Society members and City employees
Develop working relationship with State Heritage Office	Careful removal of dead trees and branches as required
23	4

	70	70		
STATUS	Not yet commenced	Not yet commenced	Underway/ Ongoing	Underway
FUNDING	Municipal Funds (Staff Resources) Parks and Environment	Municipal Funds (staff resources)	Municipal funds (Museum Activities)	Municipal funds (staff resources)
RESPONSIBILITY	Historical Society	City of Cockburn	City of Cockburn and Historical Society	Historical Society and City of Cockbum
EXPERTISE	Interpretation consultant/Manager Parks and Environment	City Employees (Strategic Planning)	Qualified historical archaeologist	City employees or Historical Society members
DESCRIPTION	Develop Interpretation Plan to be contained within the Manning Park Management Plan	Revise Heritage Inventory to combine Azelia Ley Homestead with Manning Park as a Category A Listing	Archaeological investigations must precede any reconstruction work	Shrubs or bushes growing near walls must not be removed by pulling up by their roots
STRATEGY	21	25	20	en en
TIMEFRAME	•	- within 2 years	Long Term	

TIMEFRAME	STRATEGY	DESCRIPTION	EXPERTISE	RESPONSIBILITY	FUNDING	STATUS
sised leunne r	15	Make visitors aware that artefacts must not be removed from the site; erect fencing	Historical Society members and City employees	Historical Society and City of Cockburn	Municipal funds (interpretative signage) and consultant (fencing)	Temporary sign erected; fencing not yet constructed
done on ai	14	Record general location of all artefacts found on the site	Members of Historical Society	Historical Society	N/A	Underway/ Ongoing
ed of s	13	Record any changes that take place on the site	Members of Historical Society	Historical Society	N/A	Underway/ Ongoing
ıg – work that need	22	Work with archaeologist and conservation architect on reconstruction work envisaged for place; to be contained within the Manning Park Master Plan	Members of Historical Society and City employees	Historical Society and City of Cockburn	Municipal Funds (staff resources)	Underway/ Ongoing
niognO	12	Do not 'tidy up' the ruins by removing any stones from the walls or rooms	Members of Historical Society and City employees	Historical Society and City of Cockburn	N/A	Underway/ Ongoing

#### APPENDIX 2 THE ARCHAEOLOGY OF THE DAVILAK RUINS

The description provided below of the archaeological remains at Davilak should be read in conjunction with the information provided by Nayton in her 2011 report. At the time of her site visit, vegetation appears to have been a lot less prolific and some areas of the site were easier to interpret and access due to slightly lower vegetation levels.

### 7.1 The Setting

Manning Park Reserve is a small landscaped park within the much larger Beeliar Regional Park. The western side of Manning Park is a dunal system that rises up from the coastal plain to a limestone ridge that runs north-south, parallel with the coast before dropping down gently on its eastern side to the shores of Manning Lake. The sandy soil in the vicinity of the Davilak Ruins is derived from the Tamala Limestone that forms this ridge. Access is via Davilak Avenue from the north entrance, skirting the western side of Manning Lake and Azelia Road from the eastern entrance, skirting Manning Lake on the southern end where the ruins are situated. Vegetation in the parkland is predominantly remnant native vegetation, particularly around the margins of the lake. Around the homestead ruins the vegetation is a mix of introduced species coupled with native species, which are gradually becoming reestablished in the area. Access from the north is via Rockingham Road or from the east via Hamilton Road where the Davilak Ruins are located at the western end of Azelia Road before it turns north onto Davilak Avenue to pass along the western side of the Lake.

As mentioned in the previous chapter, there are a number of historic photographs that show the *Davilak Ruins* prior to their destruction by fire and time and also a series of historic aerial photographs. These images provide us with a better understanding of the place and in the case of the aerial photographs a broader understanding of how the overall site has decayed and developed. The aerial photographs show changes to the landscape around the *Davilak Ruins* such as the creation of tracks to access the limestone quarries, the abandonment of these quarries and then the development of recreational tracks to access the western area of Beeliar Regional Park.

For example, the 1950 aerial photograph indicates that the road between the homestead and the farm buildings only led to the farm buildings and no further. However the tracks around the *Davilak Ruins* began to change in the 1960s, obscuring the physical evidence of the relationship between the homestead and the farm buildings and how the farm buildings themselves functioned. A track running south from the farm buildings towards what looks

<sup>&</sup>lt;sup>15</sup> Nayton, 2011, pp 31 – 52.

like a small quarry first appeared in the 1965 aerial photograph. <sup>16</sup> By 1981 this quarry had disappeared and become part of an access road that extended further to the south where it met up with a well-defined road that led to a very large quarry to the west of the *Davilak Ruins*. By 1995 this access road ran along the north eastern side of the quarry before turning east to pass to the north of the farm buildings. This access road still exists in 2013 although the large quarry has completely disappeared. The development of what is essentially a circular track between the two building complexes interferes with how the present day visitor views the site and understands how it once functioned.

### 7.2 The Ruin Complex

The Davilak Ruins are divided into three distinct areas:

- 1. The remains of the homestead and its associated outbuildings (the homestead site)
- 2. The remains of the outbuildings associated with farming activities on the property (the farm buildings)
- 3. The remains of the limestone wall that once enclosed the vineyard on the eastern side of the homestead

The fallen walls that comprise the homestead are the most complex to understand due to the amount of scattered and fallen building rubble, while the remains of the walls that formerly enclosed the vineyard appear to be missing large sections. The area to the north of the *Davilak Ruins* has been heavily disturbed due to the widening of Davilak Road. Photographs taken in the early 1900s indicate that there were a pair of buildings located to the north of the walled enclosure at the western end and a building at the eastern end. These buildings could be the shade house and orchid house (west end) and a tool shed (east end) that appear on a plan drawn by Lucius C. Manning in 1960.<sup>17</sup> It is possible that the archaeological remains of these structures survive on the northern side of Davilak Road.

The remains of the farm buildings have become heavily overgrown with vegetation. The remains of the structures in all three areas suggest that in the past some of the stone rubble had been removed. The whole of the site has been subjected to the process of weathering through the usual processes of wind, rain, invasive vegetation, erosion and the activities of human

All of these aerial photographs can be viewed at: <a href="http://intermaps.cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=C">http://intermaps.cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=C</a> ockburn&, City of Cockburn.

Photographs: Davilak Homestead (al.86.23g) and View of Davilak House (alp.00104), held by City of Cockburn Library; Plan of Davilak drawn by Lucius C. Manning in November 1960, Acc1440A, Battye Library.

interference. Despite these processes affecting the appearance of the ruins, the archaeological potential of the site is still considered to be high. It should be noted that since the original report, vegetation has been removed from the farm buildings and they are now fully accessible and reveal substantial ruins, which are of equal significance to the Estate, being one of the first farms in WA.

#### 7.3 The Homestead Site

Due to the sloping nature of the site, the homestead and its outbuildings were constructed on two different levels. The homestead lies on one level with the outbuildings located to the west on higher ground. The homestead's walls were constructed from randomly laid rubble limestone blocks, held together with a lime sand/mortar. It should be noted that when the fire destroyed this building (and the others on the site), the heat may have affected the mortar, changing its appearance and consistency. It currently presents as a fairly crumbly mixture. In addition to the use of lime mortar, there was sufficient evidence left on standing sections of the walls to determine that the walls were originally covered with a limestone render on both the exterior and interior. On the exterior side, the walls had been marked out to resemble ashlar masonry.

The height of the walls varies across the site from approximately 200 mm with the highest sections being nearly 2.0 metres. In general the height of the walls is about 1.0 metre. The thickness of the walls varies from 330 mm to 450 mm. Wall construction comprises randomly laid blocks of limestone with the dressed side facing outwards. A major feature of the site is the amount of small rocks spread across the built area. It is possible that the fire affected the strength of the limestone and when the walls began to collapse the rocks fractured when they fell. Due to the amount of rock scatter the location and size of the rooms was difficult to determine accurately, this was especially the case for the eastern (or front) wall, which was largely obscured by fallen rock. During August 2013 members from the Historical Society of Cockburn sprayed the site to assist in the eradication of weeds, which left the homestead itself comparatively free of vegetation. The smoke house, baker's oven and wash house group of buildings are easily accessible and many artefacts have been recorded and collected from the site.

Natyon incorrectly states that cement mortar was used.

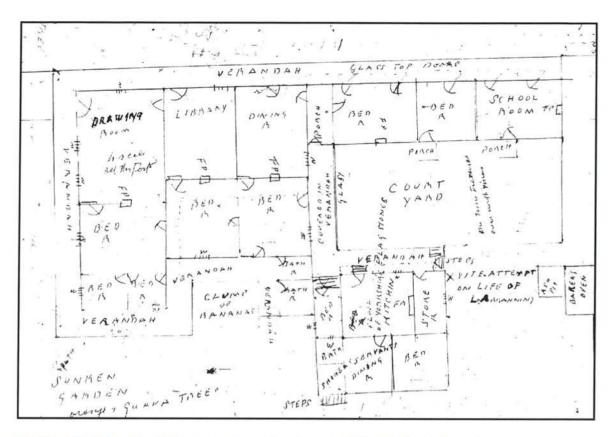


Figure 1 Detail of L.C. Manning's Plan showing layout of the homestead (Courtesy Battye Library)

As discussed in the documentary section, it would appear that the Davilak Homestead began as a small cottage. This is corroborated with physical evidence. Manning's plan (see Figure 1) shows a rectangular building with its long axis running north-south. According to this plan, verandahs ran around all sides of the building, with the exception of the southern side. The various rooms in the building comprise three distinct suites of rooms. The largest suite is the wing at the northern end of the building. This wing contains a drawing room on the east side, with three bedrooms on the west. The next suite lies on the southern side of the drawing room and contains four rooms: library, dining room and (on their western sides), two bedrooms. The final suite is on the southern side of these four rooms. It is separated from the second suite by a covered passage way (possibly a breezeway, the plan does not make this clear). The last suite is a row of three rooms that open onto the eastern verandah: two bedrooms with a schoolroom at the southern end. On the western side of this suite is a courtyard and to the west of the courtyard is the detached kitchen. The kitchen building had seven rooms that included the kitchen, storeroom and accommodation for servants. On the northern side of the detached kitchen two bathrooms are shown.

An examination of the homestead's ruined walls indicates that the four rooms to the south of the drawing room (library, dining room and two bedrooms) once formed the core of this building. The walls to both the drawing room and

the extension to the south butt onto the walls of these four rooms. This unit measured approximately 11 metres in width. The rear bedrooms were six metres long, but the length of the two front rooms could not be determined due to the amount of rubble lying along the eastern walls. These dimensions roughly tally with the cottage shown in Phelps 1859 plan.

To accommodate the detached kitchen the ground on the western side of the homestead had to be levelled and contained with walls. Two stone walls were constructed. One formed the western side of the courtyard and the other was a wall that ran east-west and can still be seen today when standing to the north of the kitchen area. This wall runs east-west wall and butts onto the south-west corner of the original suite of four rooms. The area immediately to the north of the kitchen area was designated as a 'sunken garden' on Manning's plan. The seven rooms that comprised the kitchen are no longer clearly visible nor was it possible to find the steps that once led up from the courtyard or the steps at the western end of the northern retaining wall that led to the sunken garden. The gap in the northern wall where the stairs should be is still clearly visible.

Manning's plan also showed that the western side of the sunken garden was contained by a wall that ran north-south. This wall also defined the western side of the homestead complex as there was a dirt road that ran on the western side of this wall. The road led to the farm buildings to the west of the homestead complex and also to the driveway that ran north out of the property (and past Azelia's house). This north-south retaining wall terminated at its southern end at the western corner of the kitchen area's retaining wall. At the northern end it terminated at a picket fence that can be seen in some of the historic photographs of Davilak. Steps led down to the homestead from the road. These northern steps have disappeared (as has the picket fence), but the parallel stone walls that once housed them still stand. A large section of the wall between these steps and the northern end of the kitchen's retaining wall has disappeared (or is buried beneath sand), allowing water and soil to cascade down into the sunken garden area. This has led to water pooling in this area after heavy rain and it is gradually undermining the kitchen's northern retaining wall, which is starting to bow outwards and stones have started to fall from its lower courses.

Other buildings were once located in this upper area, such as a smoke house with a baker's oven and a wash house. This area was heavily covered with vegetation. A section of stone walling was observed in the spot described by Nayton as being the location of the baker's oven and this feature could be the oven, but due to the heavy growth it was impossible to reach. It is possible the oven and the structures associated with this feature could be more easily

viewed at the end of summer when the vegetation in this area has died back.<sup>19</sup>

The line of the retaining wall running due south from the school room can be clearly seen in the 1965 aerial photograph.<sup>20</sup> This was the western wall of the vineyard. The line of this wall was traced to its south-west corner. Like the homestead buildings it was constructed using randomly laid limestone blocks. Since the original report, this area has been cleared of vegetation, is easily accessible and reveals obvious features of each building.

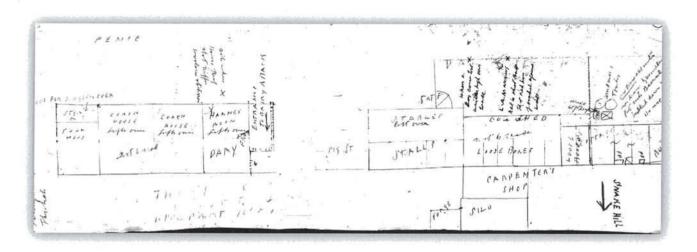


Figure 2 Detail of L.C. Manning's Plan showing farm buildings. Battye Library

### 7.4 The Farm Buildings

The farm buildings lie to the west of the homestead. In the 1965 aerial photograph the line of these buildings is clearly seen, running slightly to the west of a north-south alignment. Manning's map indicates that these buildings once functioned as a coach house (with a loft above) containing accommodation for hens and a harness room with a dairy at the rear of this room. There was then a rather large building that contained stables with a loft over it, stalls at the rear and a cowshed with loose boxes at the back. On the western side of the cowshed was a carpenter's shop, silo and forge. Butting onto this complex was a row of three cottages. A pigsty was located at the northern end of this long building. Fenced yards were located on the eastern side of the building.

<sup>&</sup>lt;sup>19</sup> Nayton, 2011, p. 43.

<sup>&</sup>lt;sup>20</sup> 1965 aerial photograph, City of Cockburn website.

The majority of these buildings can also be seen in the historic photographs of Davilak, and these also show the more ephemeral elements that did not survive the bushfire.

### Coach House

This building was the most northerly of the farm buildings and views of the front and rear of this structure are clearly visible in historic photographs. The images show a two storey building with a large central opening with a door (and opening above) on the northern end and two doors at the southern end. An enclosure is visible at the northern end. At the rear (which is not shown on Manning's plan) is a small outshoot with a skillion roof and then at the southern end a low wall with a door is visible – Manning's dairy.

On the site today the eastern (front) wall of the building has completely disappeared, however the rear and side walls remain. Sections of the rear wall stand nearly two metres. The low capped wall that protected the entry to the dairy on the southern side of the building is still intact as is the fireplace in the south-west corner of the harness room. There was no above ground evidence of the small fenced yard that could be seen in one of the historic photographs.

### Stables, Cowshed and Cottage Complex

This complex lies immediately to the south of the coach house. The historic photographs and the 1950 aerial photograph show a long line of structures with a one and a half storey section at the southern end with a fairly open section in the middle with a skillion roofed structure on the western side. The three cottages are located at the south end.

The remains today are dominated by what was once the western (rear) wall of this complex that stands above 2 metres in places. This long building (approximately 39 metres) still retains evidence of the different spaces that were shown in Manning's plan such as the stables at the northern end, the cow shed in the centre and the area where the looseboxes would have been located at the southern end (evidence of the timber partitioning may still be found below ground level). It is a large open space heavily overgrown with vegetation with loose stones beneath.

On the western side is a high walled structure that is probably the silo shown on Manning's plan. This structure is close to the edge of the limestone ridge, which was probably modified to fit this structure and provide stone for its construction. Evidence of modification to the natural limestone can be found on the northern side of the silo however at the time of the visit the whole of this area had to be approached cautiously as bees have constructed a large

beehive within the slightly over hang in the rock face. This feature looks very similar to the forge described by Nayton.<sup>21</sup> Evidence of the carpenter's shop that backed onto the eastern side of the complex's western wall could not be found due to heavy vegetation.

As stated previously, Manning's plan shows a row of three cottages at the southern end of this complex. The area where these three cottages were supposedly located was the most heavily overgrown in this complex. Evidence of the southern-most cottage was found, together with the remains of its fireplace. Historic photographs show that each of these three cottages had a fireplace on their western (rear) wall. No evidence for a fireplace was found for the northern cottage and the southern dividing wall between this cottage and the middle cottage was also difficult to locate. There was minimal evidence of a fireplace for the middle cottage.

The removal of vegetation in this area (and also the bees) would enable a better examination of the archaeological evidence to determine if the features recorded by Nayton in 2011 are still present.

#### Waterhole and Watercourse

Nayton's report refers to this feature, which lay to the south of the Stables and Cowshed Complex. A feature of this type is not visible in the 1965 aerial photograph and is not obvious in historic photographs. The area to the south of the Stables Cowshed Complex is shown as fenced, in two historic images (alp. 00104 and alp.00113). The height at which the 1950 aerial photograph was taken from is too high to see either the fencing or the clearing however the presence of vegetation in this area, together with what appear to be partially cleared strips suggests that this area was once set out with paddocks. The present day clearing is not a water hole but evidence of quarrying activity and the watercourse an access road. This activity has started to become evident in the 1965 aerial photograph. Since the original report, this area has been identified as the quarry, but a 65 foot well has been uncovered.

<sup>&</sup>lt;sup>21</sup> Nayton, 2011, figure 54, p. 51

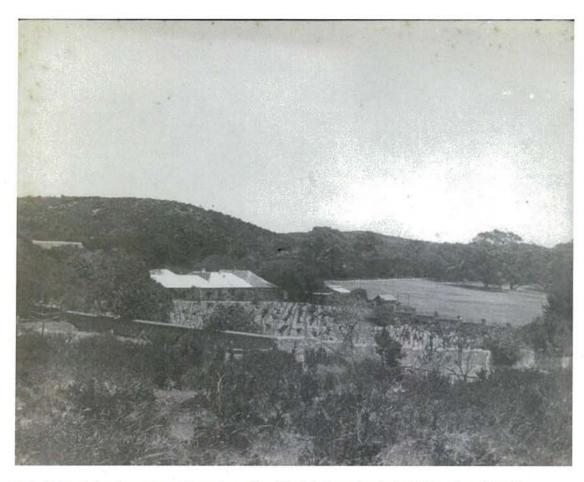


Plate 1 View of the vineyard and the eastern side of Davilak Homestead c.1900 (Courtesy City of Cockburn Library)

### 7.5 The Former Vineyard

The enclosed vineyard is clearly shown on Manning's plan and appears in a number of photographs taken around the turn of the twentieth century. It has been suggested that this was the first vineyard in WA; the vines were since removed to Toodyay. In the 1960 plan Manning shows that the northern wall to the vineyard was composed of pillars. In another plan held at Azelia Ley Museum the northern boundary wall is described as being comprised of five foot stone pillars set about 25 feet apart. These pillars can be seen in the photograph shown in Plate 1 with timber palings in between the pillars. The other sides of the walls are of solid limestone. In all of the early twentieth century photographs the vines within the enclosure appear to be quite young. In the photograph shown at Plate 2 the eastern side of property is shown. It was taken some distance from the house, well beyond the walled enclosure. It shows that grassed fields were once located to the east of the enclosure and that a line of pines extended in an east-west line from the eastern wall providing the field with a northern windbreak. <sup>22</sup>

<sup>&</sup>lt;sup>22</sup> Photograph alp.00116, held by City of Cockburn Library.

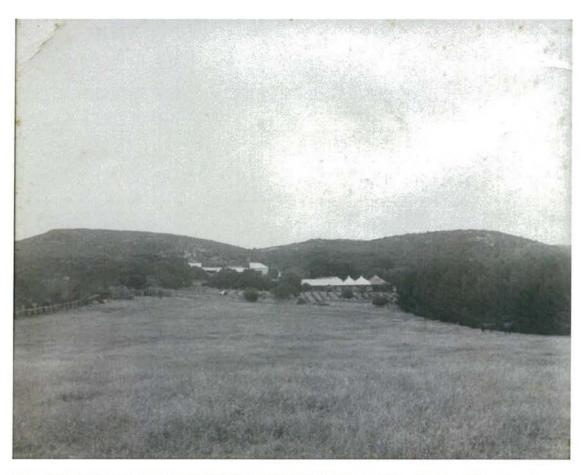


Plate 2 View looking west across paddocks towards Davilak. The long line of the homestead can be seen on the right and beyond, to the left are the farm buildings. The line of vines can be clearly seen in front of the homestead. (Courtesy City of Cockburn Library).

As indicated at the beginning of this report, the physical evidence of this high stone wall was hard to find. Small sections of the eastern wall were observed in the cleared area directly to the east of the fenced off ruins. By assessing the documentary evidence it is now possible to understand why there is little evidence surviving above ground of the northern wall of the enclosure. The timber palings would have been destroyed in the 1960 fire, leaving the columns as an isolated line. As these pillars were close to the road, the limestone was probably taken to be recycled elsewhere. The lack of evidence for the western and eastern walls is unclear, although again it could be due to robbing of material. Manning noted in his plan that the southern wall had started to collapse sometime during World War 2 due to nearby artillery practice. Archaeological investigations could provide information on the line of the northern wall and the removal of vegetation along the line of the east, west and southern walls would assist in determining the extent of what remains of these walls.

No evidence survives of the vines that were once planted in this area. The only exotic vegetation surviving in this area was a solitary mulberry tree that has been protected with a ring of vertical treated pine poles (approximately

.75cm high. Several mature *Pinus canariensis* trees (Canary Island pine) to the east of the ruins suggest that the line of pines that can be seen in Plate 2 may have been *Pinus canariensis*. The pines that are present today are probably the offspring of the original trees, as pines do not regenerate after bushfires.

### 7.6 Artefacts Scatters

Nayton described a mound of dirt to the south of the farm buildings, which she identified as possibly being the site of the homestead's rubbish dump. She considered that this area was relatively untouched. She also discovered a collection of artefacts that had been left on one of the walls of the baker's oven. Further artefacts scatters may be present elsewhere on the site but can only be found once the thick layer of vegetation is removed. Since the original report, artefact collection in top soil has been ongoing by archaeologists and the Historical Society to document and store appropriately, identified as being of earliest settlement, circa early 1800s.

#### APPENDIX 3 - THE HISTORY OF THE DAVILAK RUINS

A full outline of the historical development of a place is not generally required for archaeological management plans as these plans usually accompany existing conservation plans or other supporting reports. The history of both Azelia Ley Homestead and *Davilak Ruins* has previously been discussed in the State Heritage Office's assessment of Manning Estate, Hamilton Hill and also in Nayton's conservation plan for this place. However, new historical information relating to the development of the Manning Estate has led to the inclusion of the historical development of Manning Estate in this report as it alters the importance of *Davilak Ruins*.

### **Charles Manning and Davilak Estate**

Charles Alexander Manning was the son of London builder William Manning. William's eldest son Henry expanded the family business into one that developed portable houses that were shipped all over the world to many of Britain's colonies (including Peru) together with an extensive mercantile business. Henry sent his younger brother Charles to establish a branch of the family's business in Peru in the early 1830s. While in Peru, Charles married and was widowed twice. Both his wives were the daughters of Don Luis Calero. His first wife was Joaquina Calero, with whom he had three children and he had eleven children with his second wife Juano Calero. Only seven of these children survived to adulthood (See Appendix 1). Following Juano's death in 1852 and due to civil unrest in Peru, Charles returned to England and then moved to Western Australia to expand the family's business.<sup>23</sup>

Henry Manning had begun purchasing land in the colony prior to his brother Charles' arrival. One of his purchases was Cockburn Sound Location 3 from James Woodley Davey in February 1844.<sup>24</sup> It is not known exactly when Charles arrived in Western Australia although, Erickson suggested the year as around 1854.<sup>25</sup> Charles Manning settled down into the colony and married Matilda Birkett in Fremantle in July 1855. The couple had seven children, four of whom survived to adult hood. Two of Charles' children by his previous marriages also settled in Western Australia, his eldest daughter Henrietta Joaquina (who married John Henry Monger) and Lucius Alexander who married Florence August Bickley in

Herbert, Gilbert: The Portable Colonial Cottage, in *The Journal of the Soc. of Architectural Historians*, Vol. 31, No. 4 (1972), p. 72; Berson, Michael: *Cockburn – the making of a community*, Town of Cockburn, 1998, facsimilie edition, p. 36; Hilfers, Kathleen: Charles Alexander Manning and his family, notes from the family bible, 1983, held in Battye Library and Manning, L.C.: Charles Alexander Manning and family, biographical information, held in Battye Library.

It is thought that J W Davey worked as Henry Manning's agent and that it was following his accidental death in October 1852 that led to Charles being sent to Western Australia. Ref?

Erickson, Rica: The Bicentennial Dictionary of Western Australians pre 1829 – 1888, Vol. III, UWA Press, Nedlands, 1988, p. 2065.

September 1869.<sup>26</sup> Charles also purchased a large number of land parcels in various parts of Western Australia and some of these were adjacent to his brother Henry's Cockburn Sound Loc. 3. These parcels were: Cockburn Sound Loc. 80 – 85 and 87 (1857), Loc. 102 (1858), Loc. 98, 99, 109 and 112 - 114 (1860), Loc. 101 (1861) and Loc. 133 (1867). These parcels of land eventually came to be known as 'Davilak Farm'.<sup>27</sup>

Together with these rural locations, Charles Manning also had a number of lots in Fremantle on some of which he built warehouse facilities and also a couple of houses. His most iconic house was the one he built in 1858, which became known as 'The Folly', due to the large quantity of glass used in its construction. Berson states that Charles built a:

10-roomed farm house to the north of Davilak Lake and it was from this farm, with its large stables and walled stockyard came the meat, fruit, honey and vegetables that graced the tables at receptions for visiting ship's captains and other guests.<sup>28</sup>

Charles' grandson, Lucius Charles Manning also refered to this farm building, which he called 'Old Farm'. In an interview he stated that the old house was leased to the government to accommodate convicts while Rockingham Road was being built. During the convicts' occupancy the house was destroyed by fire. Nayton's report repeated this information and concluded that archaeological evidence of structures found on the northern side of Manning Lake belonged to the 'Old Farm' (these structures were located using aerial photography, there is no above ground evidence of these buildings).<sup>29</sup> However, the information provided by Berson, and also used by Nayton, was based on Lucius Charles' recollections and in some instances these recollections have proven to be faulty.<sup>30</sup>

Currently there appears to be some confusion as to when the homestead at *Davilak Ruins* was constructed. Berson suggested that Charles Manning built a large, fourteen roomed house on the southern side of the lake for his son Lucius

Hilfers, Kathleen: Charles Alexander Manning and his family, notes from the family bible, 1983, held in Battye Library.

Enrolment Nos: 401, 1080 – 1085, 1079, 1090, 1179, 1341, 1342, 1347, 1416 and 1818, Cons. SROWA; Perth Gazette and West Australian Times, 15 October 1869, p. 1. He also acquired Cockburn Sound Loc. 4 in 1863 but this was not included in the 1869 article as part of the 'Davilak' sale.

Berson, Michael: Cockburn – the making of a community, Town of Cockburn, 1978, p. 37.

<sup>&</sup>lt;sup>29</sup> L.C. Manning, interviewd by J. Slee, January 1975, ,Battye Library OH 1005 transcript; Nayton, Gaye: 'Manning Estate, Hamilton Hill Conservation Plan', September 2011, pp. 10, 28, 64 and 66.

For instance he refers to his father as Charles Alexander Manning at one stage and in other notes, now lodged in Battye Library, the names he provides for his father's mother and his siblings, are incorrect, despite the fact that they are carefully recorded in the Manning Family bible. Manning Family Ephemera PR14514/MAN.

Alexander and his new wife Florence in 1866.<sup>31</sup> This is taken to be *Davilak Ruins*. However, Lucius and Florence were married on 2 September 1869. Charles never lived to see this marriage as he died on 1 February 1869.<sup>32</sup> It seems highly unlikely that Charles constructed such a large house for his son in such an isolated area. A surveyor's notebook sheds some light on both the 'Old Farm' and the construction date for the homestead at *Davilak Ruins*.

In May 1859 government surveyor W. Phelps carried out a survey of what he referred to as 'Mannings Farm Davys Lake'. Two pages provide details of Charles Manning's farm in 1859. The first page shows the locations that Manning owned in this area: 81 - 85, 102 and 109. The other page shows a detailed section of Loc. 81 that contained structures. In this case a walled vineyard with a small cottage abutting its western side. This cottage sits within a fenced garden. All of these features are located slightly to the north-east of Loc. 81's south-east corner.33 If one considers the present location of Davilak Ruins, the ruins currently lie to the north-west of what was originally Loc. 81's south-east corner; the same location as the 1859 survey. The only difference is the size of the cottage and the walled vineyard. The survey therefore suggests that the nucleus of Davilak Ruins was present as early as 1859. Documentary evidence for the way in which buildings developed in colonial Western Australia has shown that a small basic cottage was constructed first, and then once the settler had the time and the resources, the cottage would be expanded by the addition of more rooms.34 This probably happened at Davilak.

Following Charles' death in February 1869, his executors auctioned off his estate, despite the fact that his will stated that his wife Matilda was to have the land that contained 'Davilak'. However auction notices placed in October 1869 clearly show the 'Davilak' land as being part of the auction and a November advertisement refers to Cockburn Sound Locations 80 – 85, 87, 98, 99, 101, 102, 109, 112 – 114 and 133 (541 acres) as being the

well known Estate of 'Davilak'. A considerable portion of this property is under cultivation. There is a commodious dwelling-house and out-

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Berson, Michael: Cockburn – the making of a community, Town of Cockburn, 1978, p. 38. It is not known where Berson obtained this date from, although the description probably came from Slee's 1975 interview with L.C. Manning as the description of the house and rooms is very similar to the information obtained in the interview.

The Herald, 4 September 1869, p.2; Perth Gazette and West Australian Times, 5 February 1869, p. 2.

W. Phelps Field Book No?,, Series 32, Cons 3401, Item No? SROWA.

Bush, Fiona: 'The convicts' contribution to the built environment of colonial Western Australia between 1850 – 1880', doctoral thesis, Curtin Univ., 2012, pp 105 – 121.

buildings, and a large vineyard thereon. It is now in the occupation of Mr A. Armstrong<sup>35</sup>, at the low rental of £35 per annum.<sup>36</sup>

However, for whatever reason this parcel of land was not sold at auction for in April 1870, Matilda's brother-in-law Henry Manning, purchased all of these locations from her for £400.<sup>37</sup> Henry Manning did not hold the property for very long as he died at his London home on 15 December 1871. His nephew, Charles James Wainwright was the executor of his estate, which was valued at under £100,000.<sup>38</sup> A copy of this will has not been viewed so it is not known how Henry's estate was divided amongst his relatives.

### **Davilak in the Early Twentieth Century**

Lucius Alexander and Florence Manning had seven children between 1870 and 1886; some of whom were been born at 'Davilak'. Lucius died at 'Davilak' on 12 November 1888. Following Lucius' death his son Alfred advertised the whole of the property to let and we get a description the farming property:

Florence married Charles Edmund Strode Hall in 1897 and in 1898 a certificate of title for 'Davilak' was issued. The issuing of this title was probably in response to Florence's marriage. The title indicated that Florence and Elias Solomon were the trustees for the estate as per the instructions of Lucius Charles' will. Included in this title were Cockburn Sound Locations 3 and 4, which previously had not been part of the Davilak Estate. In this document the total land area is given as 744 acres (301.08 hectares). This title also included the information that Charles' widow Matilda was receiving an annuity of £52 per year. 40

<sup>&</sup>lt;sup>35</sup> Mr A Armstrong who rented Davilak, was in fact Captain Adam Armstrong who arrived at the first settlement here, Peel Town/Clarence, aboard one of the first ships, the Gilmore, 1829. (The Azelia Ley Museum houses his harmonium, one of the very rare items of furniture still in existence from the first settlers)

<sup>&</sup>lt;sup>36</sup> Last will and testament of Charles Alexander Manning, copy held by Historical Society of Cockburn.

Memorial VII No. 270, registered 23 April 1870. Landgate.

<sup>38</sup> Probate of Will 1871

<sup>&</sup>lt;sup>39</sup> The West Australian 27 March 1891, p. 3.

<sup>&</sup>lt;sup>40</sup> Certificate of Title Vol. 156 Fol. 90, issued 5 December 1898, Landgate.

It is not known if Alfred Manning was able to lease the property, and the new title indicated that Florence was living in Singapore, but various snippets in newspaper articles suggest that a lessee was not found. In September 1900 Lucius and Florence's eldest daughter Azelia married John Morgan Ley at Davilak. An article in the *Western Mail* recorded that the couple were married in the drawing-room that was 'made festive for the occasion with pretty drapings [sic], flowers and palms.' Following her marriage to John Ley, work started on a house for Azelia and her husband, although apparently John never lived in the house. This house, known today as Azelia Ley Museum, was located to the north of *Davilak Ruins*. The couple had no children, apart from a stillborn daughter born in 1902. On a somewhat sadder note the death of Florence's youngest daughter Xanthorina Agnes (or Dot), was recorded at 'Davilak' in February 1908. It would appear that despite having accommodation in Fremantle, many members of the Manning family continued to live at Davilak.

Around the turn of the twentieth century a number of photographs show members of the family in different locations around the house. In particular, the lawn (tennis court) and verandah on the northern side of the house. Other images show some of the farm buildings that lined the access road on the western side of the homestead and also general views of the property. These photographs show that the garden came right up to the verandah on this side of the house, with vines growing up verandah posts and along the valance. Many of these views contain the images of family members providing the very strong impression that this was a house that was well loved and lived in by members of the Manning family. Who these specific members were is not known, but it was most likely Alfred Manning together with his brothers and sisters. The photographs also show that the house's limestone walls had been finished with a render that had been marked out to resemble dressed ashlar blocks. The verandah floor was timber, a fence appears to have surrounded one side of the garden and a high limestone wall can be seen on another side - possibly this is the northern side of the walled vineyard. The roof was shingled although by the 1910s the bulk of the house was clad with corrugated iron sheets leaving just the eastern wing with a shingled roof.45

In 1903 Florence and her eldest son Alfred Julian became the trustees for the estate. Davilak continued to be used by members of the Manning family as their home. In 1907, 1910 and 1911 the government resumed portions of the property

<sup>&</sup>lt;sup>41</sup> The Western Mail, 15 September 1900 p. 45.

Manning Estate Hamilton Hill, Heritage Council of Western Australia assessment, P00533, 2012, p.7; Registry of Births, Deaths and Marriages,

http://www.bdm.dotag.wa.gov.au/ apps/pioneersindex/default.aspx, accessed 30 November 2013.

West Australian, 15 February 1908, p.1.

<sup>&</sup>lt;sup>44</sup> Information obtained from certificates of title for example, Vol. 399 Fol. 106, issued 12 July 1907.

Digital photographic images of Davilak can be found be in the City of Cockburn's library catalogue.

for the purposes of constructing the Robb Jetty – Jandakot Railway line. All of these sections lay to the west of  $^{\star}$ .

Florence's second husband Charles Strode-Hall died at their home in East Fremantle in December 1912 and it is possible that after this date, Florence spent more and more of her time at Davilak. Three years after Charles Strode-Hall's death major changes occurred with the ownership of the large estate. Florence Hall and Alfred sub-divided the property in 1915 between Florence's surviving children: Alfred Julian, Azelia Helena (now Ley), Olivia Davilia (now O'Connor), Florence Juanita (now Holmes), Lucius Charles and Victor Calero. Alfred's land, designated as Lot 10, included the whole of Locations 80 – 82, 84 and portions of Locations 3, 109, 114 and 133 (109 acres and 3 roods). *Davilak Ruins* was located on this parcel of land. Azelia Helena, who had married John Morgan Ley in 1900, received Lot 9. This land included portions of Locations 3, 83, 85 101, 113 and 114 (152 acres) and contained her house (Azelia Ley Museum). Further information about Azelia Ley's house and how this portion of the estate developed, can be found in Nayton (2011).

Davilak continued to be owned by Alfred until his death in November 1924. Alfred never married and his will has not been consulted to determine his wishes for the distribution of Davilak amongst the members of his family. Probate of his estate was granted to his brothers Lucius Charles Manning in December 1924 and extended to Victor in March 1925. Victor Manning died in November 1935 leaving Lucius Charles as the sole surviving executor. At the time of both Alfred's death and later Victor's, their mother Florence was still living at Davilak as a newspaper article records her 90<sup>th</sup> birthday celebrations. These celebrations were held at Davilak and describe her as sitting 'by a huge log fire in the old world drawing room.' Prior to this, when her grand-daughter Molly Manning (daughter of Lucius Charles and his wife Eileen) married in July 1940, it was noted that her grandmother had picked the orange blossoms in her floral sheaf from her garden at Davilak. Florence Strode-Hall died at Davilak in March 1946<sup>51</sup>. <sup>52</sup>

In February 1948 the land comprising Davilak Estate was transferred to the Western Australian Trustee Executor and Agency as the new executor. The reason for this transfer is not known, although by this stage Lucius Charles, due

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<sup>&</sup>lt;sup>46</sup> Certificate of Title Vol. 156 Fol. 90, issued 5 December 1898, Landgate.

<sup>&</sup>lt;sup>47</sup> The West Australian 17 December 1912, p. 10.

 $<sup>^{\</sup>rm 48}$  Certificate of Title Vol. 608 Fol. 22, issued 8 January 1915, Landgate.

Certificate of Title Vol. 608 Fol. 30, issued 8 January 1915, Landgate; 15 September 1900, Western Mail,
 p. 45 and Nayton, Gaye: Manning Estate, Hamilton Hill Conservation Plan, September 2011, pp. 12 - 13.

<sup>&</sup>lt;sup>50</sup> The West Australian, 2 August 1939, p. 4.

<sup>&</sup>lt;sup>51</sup> Since the original report, the Historical Society have been given transcripts of the diaries of Florence Bickley/Manning/Strode-Hall, that provide significant insight and details of daily life at Davilak House and Farm, 1870-1916

<sup>&</sup>lt;sup>52</sup> The West Australian, 22 July 1940, p. 10; The West Australian, 25 March 1946, p. 6.

to the death of Victor, had been left the sole trustee. Finally in May 1949, Davilak became the property of Azelia Ley who was listed as living at Manning Tree, Spearwood.<sup>53</sup>

The final chapter for Davilak and the Manning family occurred following Azelia's death.

### Davilak: a public recreation area

Following her husband John's death at the couple's house in Fremantle in October 1927, Azelia Ley appears to have spent the majority of her time at her house Manning Tree (Azelia Ley Museum).<sup>54</sup> Azelia died at Davilak on 31 July 1954. 55 A newspaper article that appeared following her death implies that Azelia had been rather secretive about whom she wanted to inherit the estate following her death. According to her brother Lucius she had been 'intent on keeping Davilak as an undivided property in the family and would not hear of anything else'. 56 Azelia did leave a will, although it has not been consulted for this report. The Western Australian Trustee Executor was appointed as her trustee for a period of five years after her death. This ceased in November 1959.57 During this period the homestead appears to have been left empty. In December 1960 a bushfire swept through the area and the homestead, the outbuildings and the farm buildings were destroyed. The limestone walls of the homestead and the farm buildings were left, but as the majority of the homestead's outbuildings were of timber construction, they were destroyed.<sup>58</sup> An aerial photograph taken in 1953 shows the property prior to the fire and one taken in 1965, five years after the bushfire, shows the complete devastation to all of the buildings and the loss of the fruit trees in the adjacent walled vineyard. As the fire had only recently passed through, the remains of the ruined buildings are extremely clear showing the layout of the homestead, and the farm buildings. The outline of the buildings that once stood on the western side of the homestead can also be made out, together with what appear to be structures at the southern end of the homestead. The full extent of the walled vineyard is still well defined and shows that the western wall of the vineyard butted onto the eastern side of the homestead at its southern end 59

<sup>&</sup>lt;sup>53</sup> Certificate of Title Vol. 608 Fol. 22, Landgate. Azelia's husband John died in October 1927The name Manning Tree was apparently the name used by Azelia to refer to her house on Lot 9.

Manning Estate Hamilton Hill, Heritage Council of Western Australia assessment, P00533, 2012, p.7.

<sup>&</sup>lt;sup>55</sup> Certificate of Title Vol 608 Folio 30.

<sup>&</sup>lt;sup>56</sup> The Argus 21 May 1955, p. 3 and 24 May 1955, p. 3.

<sup>&</sup>lt;sup>57</sup> Certificate of Title Vol. 608 Fol. 22, Landgate.

The West Australia 1 December 1960, p. 7.

<sup>&</sup>lt;sup>59</sup> 1953 and 1965 aerial photographs accessed on the City of Cockburn's website on 21/11/13. The link can be found at:

http://intermaps.cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn&; aerial historical.

During her lifetime Azelia had managed to ensure that the nucleus of Davilak Estate had remained in Manning family as one unit. It was after her death that the property was divided. Azelia's Lot 9 was sold in April 1959 to two brothers and their wives, Peter & Eva Musulin and Tony and Dorothy Musulin. 60 Alfred's Lot 10, which contained \* remained under the control of the Western Australian Trustee until February 1963 when it was transferred to two couples, the Fazios and the Galatis. Both lots were re-united late in 1963 when the Metropolitan Region Planning Authority purchased the two land parcels. 61

A succession of aerial photographs taken between 1965 and June 2013 show the gradual decay of the homestead and the rural outbuildings leaving the structures as we see them today.<sup>62</sup> In 2013, the former Davilak Estate (including Azelia's house) forms part of the Manning Park Reserve.

<sup>&</sup>lt;sup>60</sup> Certificate of Title Vol. 608 Fol. 30, Landgate.

<sup>&</sup>lt;sup>61</sup> Certificate of Title Vol. 1224 Fol. 230, Landgate.

These images can be viewed on the City of Cockburn's website at:
<a href="http://intermaps.cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Application.aspx?project=Cockburn.wa.gov.au/intramaps70/ApplicationEngine/Applicat

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# **CITY OF COCKBURN**

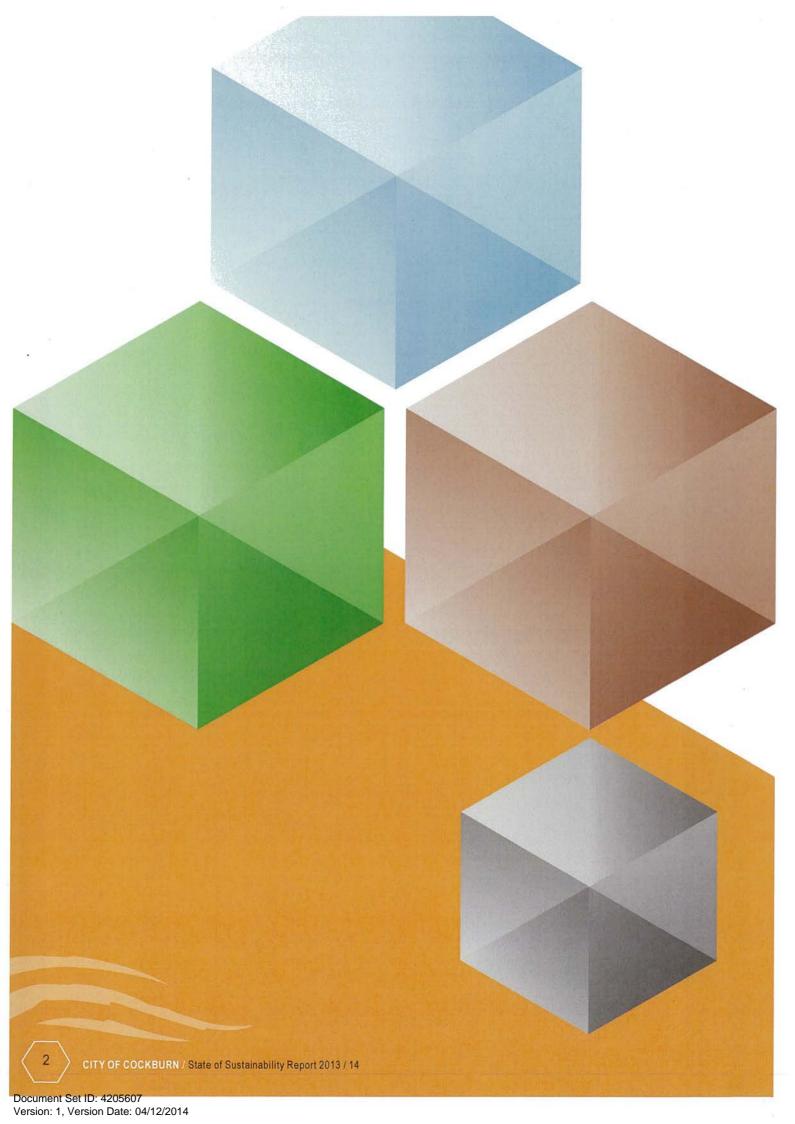
# State of Sustainability Report 2013/14



Governance Environment Society Economy



Version: 1, Version Date: 04/12/2014



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The City acknowledges that it is the Noongar people who are the Traditional Custodians of this Land.

### **Our Mission**

To make the City of Cockburn the most attractive place to live, work, visit and invest in, within the Perth metropolitan area.

# Our Sustainability Definition

Pursuing governance excellence to meet the needs of current and future generations through an integration of the environment, society and economy.

# Key themes guiding our development

- Growing the City Plan for growth of our City
- Community and Lifestyles Improve communities and lifestyle options
- · A Prosperous City Strengthen our economic base
- Environment and Sustainability Sustainably manage our environment
- Infrastructure Provide community and civic infrastructure
- Moving Around Facilitate movement
- · Leading and Listening Deliver sustainable governance



CITY OF COCKBURN / State of Sustainability Report 2013 / 14

Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014

# Our Sustainability Focus Areas

- · Management, Accountability, Transparency and Engagement
- Sustainable Planning and Development
- · Environmental Management
- · Efficient Settlements and Use of Resources
- Sense of Place and Healthy Communities
- · Community Involvement
- · Economic Development
- · Employment Opportunities

This is the City of Cockburn's fourth annual State of Sustainability (SoS) Report. It is an overview of progress toward sustainability through the key areas of focus for the City: Governance, Environment, Society and Economy. In the interests of maintaining a strong strategic alignment, this report is imbedded within the City's network of corporate planning documents and policies, forming an integrated reporting platform, shown below.



# STATEMENT FROM THE MAYOR



I am pleased to present you with the City's fourth annual State of Sustainability Report. The City continues to focus on forming strong and inclusive partnerships across our community and valuing the input of all stakeholders.

Our achievements throughout the past year reflect the leadership of Council, our Executive team and the passion of our staff and volunteers to work in collaboration with Industry, small to medium enterprises, the not-for profit sector, educational institutions and our community.

We look forward to continuing our successes in the coming year.

Logan How-lett.

Logan K Howlett, JP MAYOR

# STATEMENT FROM THE CEO



Mahatma Gandhi once said "you must be the change you wish to see". With this vision in mind the City of Cockburn has sought to introduce change that promotes a more sustainable future for our current and future residents. It was for this reason our Sustainability Strategy was born.

During the past year the State Government's Local Government Reform program has caused us to reconsider the priorities outlined in our action plans. This change in business focus and the addition of new indicators has meant that many of the KPIs across the key focus areas of governance, society, economy and the environment are still in progress.

Particular emphasis has been given to Governance, with improvements noted in the safety, health and wellbeing of our workforce, as well as the 'liveability' of our neighbourhoods.

Measures to improve environmental management also saw bushland revegetation and carbon emission reduction targets being met.

The strength of our local economy has also improved with more businesses located in Cockburn, jobs available across a wider range of employment and more training opportunities available for those seeking to upgrade their skills.

All of this has seen resident satisfaction at an all-time high. While there will always be room for improvement, the City is genuinely pursuing the types of change that will make for a sustainable future.

Stephen Cain

Chief Executive Officer

Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014

### INTRODUCTION

The City of Cockburn's fourth annual *State of Sustainability Report* is a snapshot of the City's collective efforts in working towards a sustainable future for the 2013/14 financial year.

As a public sector organisation, governance is a critical extension of the traditional triple bottom line method of reporting for sustainability. For this reporting period, the City had 105 indicators for sustainability across the organisation. In comparison to the previous year of reporting, the number of indicators has almost doubled.

During 2013/14 Local Government reform caused a shift in priorities across the organisation with some projects deferred to 2014/15. This change in business focus and the addition of new indicators meant that many of the KPIs were still in progress.

The focus areas of Environment and Society have excelled in 2013/14 with a significant increase in the number of 'completed' KPIs in comparison to the previous year.

### REPORTING STRUCTURE

This report is structured according to the City's key focus areas for sustainability – Governance, Environment, Society and Economy. Each focus area is comprised of a number of sustainability principles, overarching objectives, actions and key performance indicators (KPIs) The City's progress in achieving its KPIs is illustrated through the use of a simple traffic light system, which is explained as follows:

- Indicates the City has achieved, or is on track to achieving, the KPI.
- Indicates while the City is making progress toward the achievement of a particular KPI, more work is needed.
- Indicates the City is not yet making progress toward the achievement of that particular KPI.



Governance Environment Society Economy



Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014



The City has 28 identified key performance indicators (KPIs) to measure its current progress towards achieving Governance Excellence.



21%

Achieved In Progress

Not Achieved

# **HIGHLIGHTS**

Improved safety, health and wellbeing of the workforce with a decrease in 'lost time injury' frequency rate (page 10).

Council adopted the corporate risk register (page 11).

Creation of new liveable, walkable and mixed use neighbourhoods (pages 12 and 14).

### Management, Accountability, Transparency and Engagement

Moving toward a sustainable future, the City recognises its role in leading while listening to the needs of the community. Being a progressive and responsible public sector organisation requires an approach that involves accountability and transparency.

### Strategic Community Plan Objective:

• Attract, engage, develop and retain our staff in accordance with a long term Workplace Plan (7.6.1)

Management, Accountability, Transparency and Engagement	
OVERARCHING OBJECTIVE - Go	v 1
acilitate employe etention through strategies, proces and training	

KPI No.	Annual Objective	Action	KPI	Progress 2013/14
Gov 1.1	To attract, engage, develop and retain employees in accordance with a long term WorkPlace Plan.	Implement the City's long term Workforce Plan.	No significant adverse trends identified in employee attraction and engagement.	The Staffing forecast section of the Workforce Plan has been reviewed due to Local Government reform.
Gov 1.2	Ascertain whether the City is offering an appropriate Employee Value Proposition (EVP) by measuring voluntary turnover and reporting it to the Executive.	Measure voluntary turnover annually and report to Executive.	Voluntary turnover for each financial year does not exceed the target set in the annual Business Plan.	Voluntary turnover is steady and well below target (this is positive as it means that turnover is less than expected).
Gov 1.3	Maintain sustainable and competitive base salary rates for employees.	Benchmark collective agreement rates with similar Councils annually and report to Executive.	Collective agreement salary increases are attractive and affordable.	Increases for this year are affordable and competitive.
Gov 1.4	Optimise the safety, health and wellbeing of the workforce.	Develop and promote a program of health and wellbeing activities.	Minimise the number of lost time injuries.	The lost time injury frequency rate is decreasing.

### Strategic Community Plan Objectives:

- Develop infrastructure provision and renewal strategies that direct investment in ongoing infrastructure provision and management (5.2.1).
- Continue to implement the long term Asset Management Plan to deliver sustainable asset management (7.5.1).
- Implement a long term Financial Plan to deliver a sustainable financial future (7.5.2).

SUSTAINABILITY PRINCIPLE

Management, Accountability, Transparency and Engagement

### OVERARCHING OBJECTIVE - Gov 2

Adopt best practice in sustainable procurement and asset management

KPI No.	Annual Objective	Action	KPI	Progress
Gov 2.1	Develop mechanisms which support best practice sustainable procurement.	Review status of sustainability clauses in tender documents.	100% of tenders contain a 10% sustainability weighting.	For 2013/14 sustainability was used as a criteria on 32% of tenders
Gov 2.2	Asset Consumption Ratios for the AMPs adopted Based on Department of Local Government Framework (DLGF) <sup>1</sup> .	Annual report to determine average proportion of "as new" condition remaining of assets.	Between 50% and 75%	Buildings 56.54% Drainage 80.91% Fleet 60.49% Footpaths 71.09% Parks 61.80% Roads 69.02%
Gov 2.3	Asset Sustainability Ratios for the AMPs adopted Based on DLGF.	Annual report to determine if assets are being replaced at the rate they are wearing out.	Between 90% and 110%	Buildings 100.34% Drainage 9.90% Fleet 78.07% Footpaths 25% Parks 29% Roads 24.43%
Gov 2.4	Asset Renewal Funding Ratio's for the AMPs adopted based on DLGF.	Annual report to determine if there is sufficient future funding for renewal and replacement of assets.	Between 95% and 105%	Buildings 84.29% Drainage 97.44% Footpaths 92.26% Parks 97% Roads 103.06%

'A Department of Local Government, Asset Management Framework and Guidelines, May 2011. Available at: http://integratedplanning.dig.wa.gov.au/

### Strategic Community Plan Objectives:

- Establish and maintain effective communication channels and processes (7.1.1)
- Ensure appropriate governance systems are in place (7.3.2)

KPI No.	Annual Objective	Action	KPI	Progress
Gov 3.1	Incorporate sustainability into the City's annual report.	Include a summary of sustainability performance in the City's annual report.	Summary of State of Sustainability included.	Complete
Gov 3.2	Ensure sustainability is considered in every strategic report prepared by the City.	Align strategic reports with the City's sustainability strategy.	Strategic Documents to consider sustainability according to focus areas identified in Sustainability Strategy.	In Progress

### Strategic Community Plan Objectives:

- Develop and manage relationships with key stakeholders (7.2.2).
- Ensure active compliance with relevant legislation, policy and guidelines (7.7.2).
- Determine community requirements and report on performance and outcomes (7.3.1).
- Identify and implement initiatives to improve customer service, business processes and innovation in service delivery (7.4.1).
- Develop a framework for continuous business process improvement (7.4.2).
- Identify and manage corporate risk (7.7.1).

KPI No.	Annual Objective	Action	KPI	Progress	
Gov 4.1	Continuously improved feedback in customer service surveys.	Monitor and report annual customer survey results.	Initiatives identified and implemented annually to maintain or improve service outcomes.	Annual Customer Service Surveys postponed (except for Cockbum Community Care), due to Local Government Reform work.	•
Gov 4.2	To be a leader among local government in service delivery.	Identify and respond to key areas of concern as identified by the community in the annual Perceptions Survey.	Initiatives identified and implemented.	Actioned	•
Gov 4.3	Identify and manage corporate risk.	Develop and maintain Corporate Risk Register.	Risk register for each service unit prepared.	Endorsed by Audit Committee November 2013. Adopted by Council December 2013	•
Gov 4.4	Ensure active compliance with relevant legislation, policy and guidelines.	Complete annual compliance return.	100% compliance.	100% compliance reported for 2013.	

# SUSTAINABILITY **PRINCIPLE** Management, Accountability, Transparency and Engagement OVERARCHING **OBJECTIVE - Gov 3** Ensure sustainability forms an integral part of corporate strategic planning. SUSTAINABILITY PRINCIPLE Management, Accountability, Transparency and Engagement OVERARCHING **OBJECTIVE - Gov 4** Enhance sustainability through regular updates of strategies, policies, reports and training

#### Sustainable Planning and Development

The City is actively pursuing a lower resource-intensive style of development, which simultaneously assists the pursuit of community development and more liveable neighbourhoods. This will be supported through the pursuit of higher density and mixed use areas of development.

#### Strategic Community Plan:

- Ensure our strategic land use planning embraces sustainable development principles and reflects the values held by the community (1.1.1).
- Apply structure planning for new development areas which embrace best practice and community creation (1.2.2).
- Ensure that neighbourhoods are interconnected physically, economically, socially and technologically, to minimise energy dependency (1.3.2).
- Ensure our strategic land use planning in the form of: the Local Planning Strategy, Town Planning Scheme, revitalisation strategies and structure plans, achieves a robust planning framework delivering adequate housing supply and diversity in housing choice (1.4.1).
- Enhance the City's public transport advocacy programs (6.1.2).
- Develop and implement walkway, bike and trails master plans (6.2.1).
- Develop and promote the City's TravelSmart initiative (6.2.2).
- Develop a transport network that effectively caters for demand and growth across various modes (6.3.2).
- Work with stakeholders to provide and support end of journey facilities (6.5.1).

SUSTAINABILITY	
PRINCIPLE	

Sustainable Planning and Development

#### OVERARCHING OBJECTIVE - Gov 5

Support increased walking, cycling and public transport use through the development of neighbhourhoods with mixed housing types and densities.

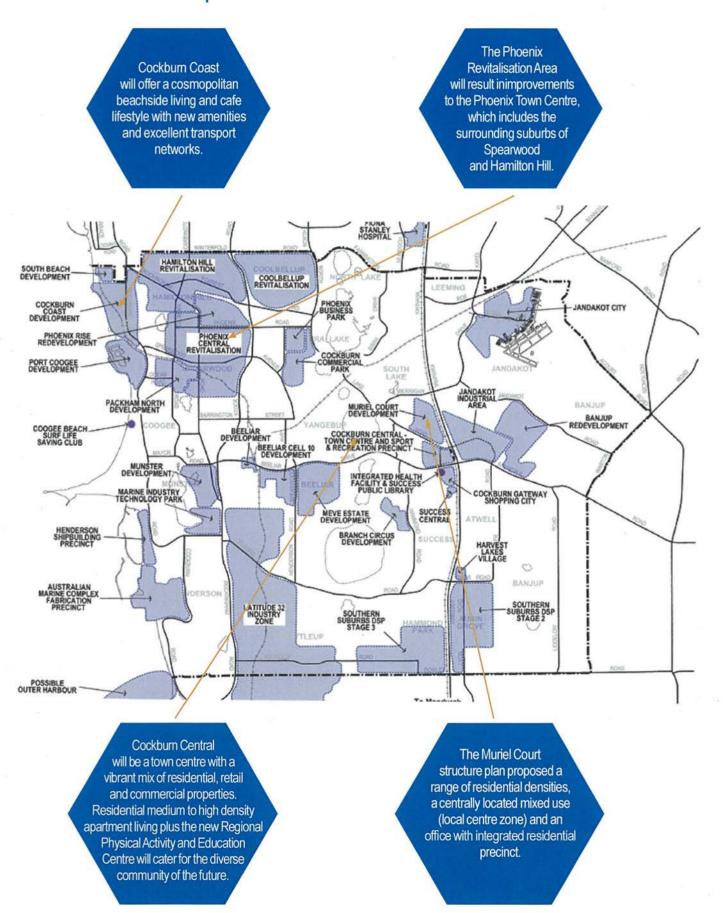
KPI No.	Annual Objective	Action	KPI	Progress	
Gov 5.1	To plan the efficient size, shape and composition of neighbourhoods, based upon a 5 minute (400m) walk from the neighbourhood's centre to its perimeter.	Incorporate Element 1 of Liveable Neighbourhoods into all structure plans <sup>2</sup> .	100% of structure plans comply with Element 1 of Liveable Neighbourhoods.	All structure plans continue to be assessed according to Liveable neighbourhoods principles. The City has also taken an active role in providing input to the WAPC's review of Liveable Neighbourhoods document. Analysis of structure plans undertaken over the last 12 months reveal continued objectives for mixed use walkable neighbourhoods to be achieved.	
Gov 5.2	To plan each neighbourhood with a focal point, which comprises a minimum mix of uses which come together to form a community focus.	Incorporate Element 7 of Liveable Neighbourhoods into all Structure Plans.	Each structure plan contains a minimum mix of uses and should include urban open space, community facilities, retail uses, postal facilitate and public transport stops.	Structure plans have been based upon 400m walkable neighbourhoods, with neighbourhoods comprising a central focus in which to help support a local sense of place. The City has ensured that public transit potential is optimised through structure planning, maximizing densities along designated routes and ensuring transit features as a planned element of each structure plan.	
Gov 5.3	To plan neighbourhoods with a range of residential densities which increase towards the neighbourhood's centre.	Incorporate Element 3 of Liveable Neighbourhoods into all Structure Plans.	Minimum of three residential codings in each structure plan.	Structure Plans over the past 12 months have involved an excellent range of residential densities, with the objective of promoting greater housing choice especially in pursuing compatible objectives associated with housing affordability.	

<sup>3</sup> Liveable Neighbourhoods: a Western Australian sustainable cities initiative. Western Australian Planning Commission and the Department for Planning and Infrastructure, October 2007. Available at: http://www.planning.wa.gov.au/publications/919.asp



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#### **Areas Under Development**



- Continue with the development of existing urban revitalisation strategies and plan for new ones (1.2.1).
- Ensure that our neighbourhoods are designed to be more compact, attractive and energy efficient to accommodate a mixture of uses (1.3.2).
- · Work with stakeholders to establish, renew or expand commercial centres that increase diversity, accessibility, employment and amenity (1.5.2).

#### SUSTAINABILITY PRINCIPLE Sustainable Planning and Development **OVERARCHING OBJECTIVE - Gov 6** Support local employment, service provision and leisure opportunities through the delivery of mixed use neighbourhoods

KPI No.	Annual Objective	Action	KPI	Progress	
Gov 6.1	To plan new neighborhoods such that sufficient and appropriate sites are identified (and secured) in structure plans for local employment opportunities.	Incorporate Element 7 of Liveable Neighbourhoods into each structure plan.	Minimum of two non-residential land uses in each structure plan.	The City continues in its implementation of Liveable Neighbourhoods design principles as part of structure plans. This continues to focus on the provision of mixed use neighbourhoods, which provide capabilities for local service provision and in turn local employment.	•
Gov 6.2	To plan the layout and location of land for local employment and business uses as part of mixed use neighbourhood centres and collocated with the major transport networks (including public transport).	Incorporate Element 2 of Liveable Neighbourhoods into each structure plan.	Degree to which neighbourhood design complies with Element 2 of Liveable Neighbourhoods.	Structure planning continues to advance the integration of public transit into the centre framework as a key priority. Over the last 12 months evolution of structure planning within Cockburn Central has demonstrated the commitment to building activity and intensity uses in close proximity to transit stations.	
Gov 6.3	To implement the Phoenix Revitalisation strategy.	Review and progress the Phoenix Revitalisation Strategy.	Actions completed against timelines by service units across the organisation.	The City has continued implementation of the Strategy. Key achievements include the finalization of Scheme amendment 96 (dealing with the town centre and business rezonings); commencement of the town centre design guidelines local planning policy; advocating on behalf of all other business units the works that they have done in respect of implementing the strategy.	
Gov 6.4	To implement the Hamilton Hill Revitalisation strategy.	Review and progress the Hamilton Hill Revitalisation Strategy.	Actions completed against timelines by service units across the organisation.	The City has achieved excellent success over the past financial year, particularly in receiving final Ministerial approval for the rezonings. This will see all properties rezoned throughout the suburb, to provide opportunities for redevelopment to secure a greater choice in housing across the area. The City is also beginning to budget its responsibilities in respect of the public realm upgrades.	



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- Develop and implement strategies to facilitate the efficient and sustainable movement of people and goods (6.1.1).
- Enhance the City's public transport advocacy programs (6.1.2).
- Develop and implement walkway, bike and trails master plans (6.2.1).
- Identify and address safety issues across the transport networks (6.3.1).
- Develop a transport network that effectively caters for demand and growth across various modes (6.3.2).
- Work with stakeholders to provide and support end of journey facilities (6.5.1).

KPI No.	Annual Objective	Action	KPI	Progress	MI P
Gov 7.1	Enhance the amenity of public streetscapes to facilitate walking.	Review the Footpath Strategy and Greening Plan.	Strategies reviewed.	Detailed footpath plan will be developed after the announcement of Local Government Reform boundary. Greening Plan to be incorporated into the POS Strategy.	•
Gov 7.2	Increase the opportunity for cycling through the City.	Implement the City's Bike Plan.	\$200,000 annual allocation to the Bike Plan.	Implementation of Plan is in progress; allocation in 2013/14 was more than \$500,000.	•
Gov 7.3	Improve modal transport opportunities.	Identify suitable routes for the potential development of rapid bus/light rail within the City.	Preparation of a Plan for endorsement by Council.	Discussions with the State Government continue to ensure that the City does everything possible to have the necessary supporting infrastructure delivered with the new Aubin Grove Train Station. The City has also achieved adoption of the Draft Cockburn Central Activity Centre Strategy for advertising. This deals with great focus upon transit orientated development, which will lead to improved modal opportunities.	
Gov 7.4	Encourage commercial/ business developments to incorporate end of trip facilities.	Preparation and endorsement of a local planning policy to ensure appropriate end of trip facilities.	Adoption by Council.	A modification to Local Planning Policy APD 71 Industrial Development is currently being progressed to incorporate end of trip facilities. The policy modifications have been advertised and the revised policy is due to be endorsed by the DAPPS committee in August and then full Council in September 2014.	

#### SUSTAINABILITY PRINCIPLE

Sustainable Planning and Development

#### OVERARCHING OBJECTIVE - Gov 7

Facilitate opportunities for sustainable transport

Adopt best practice management for our natural environment (4.2.1).

JSTAINABILITY	KPI No.	Annual Objective	Action	KPI	Progress	
ISTANCIPLE  JUSTAINA PLANNING  JUSTAINA PROPERTY OF THE STAINA PROPE	Gov 8.1	Ensure significant natural areas are identified and documented in all new structure plans for the purposes of long-term retention.	Develop a definition of a significant natural area for inclusion in the Bushland Retention Plan for the purpose of environmental conservation.	Definition developed and included in Plan.	Bushland Retention Plan not proceeding given the minimal amount of area left in Cockburn available for development. Bushland retention will be considered on a case by case basis.	
	Gov 8.2	Ensure significant natural areas are identified and documented in all new structure plans for the purposes of long-term retention.	Develop a Bushland Retention Plan, to be included in the Natural Area Management Strategy, which identifies significant natural areas and develops measures, procedures and actions to protect these areas both on public and private lands.	Plan included in Natural Area Management Strategy in 2013/14 financial year.	Bushland Retention Plan not proceeding given the minimal amount of area left in Cockburn available for development. Bushland retention will be considered on a case by case basis. Measures to protect natural areas have been included in the Natural Area Management Strategy.	
	Gov 8.3	Safeguard long term protection of the City's actively managed natural areas.	Undertake an audit of the City's actively managed natural areas to ensure that each has been identified with a reserve purpose and management order that is consistent with the aim of conservation as mandated in the Land Administration Act 1997.	All natural areas managed by the City are identified with a reserve purpose and management order consistent with the aim of conservation reserve.	An audit was undertaken and each managed natural area was found to have the appropriate purpose and management order.	





Photo credit: Daniel Carson | dcimages.org



Photo credit: Daniel Carson | dcimages.org









59%

Achieved

30%

11%

In Progress

Not Achieved

#### **HIGHLIGHTS**

7.46 hectares of bushland rehabilitated in 2013/14 (page 21).

Increase in renewable energy generation with a 99kW PV system installed on the Success Integrated Health and Community Centre plus the development of a 'Solar PV Implementation Plan' (page 24).

Council is on track to achieving its 2020 emissions reduction targets (page 25).

#### **Environmental Management**

The City recognises the role that its natural area play in ecosystem health, amenity for residents, visitors and sustainability. As custodian of these areas the City is committed to maintaining, conserving and enhancing its natural areas for present and future generations.

#### Strategic Community Plan Objectives:

- Adopt best practice management for our natural environment (4.2.1)
- Develop a coastal area management strategy (4.2.2)
- Actively pursue remediation and adaptation strategies in areas where the natural environment is at risk (4.2.3)

SUSTAINABILITY	KPI No.	Annual Objective	Action	KPI	Progress
PRINCIPLE Environmental Management  OVERARCHING OBJECTIVE - Env 1  Maintain, conserve and enhance ecosystems for present and future generations.	Env 1.1	Manage coastal environments for the long term benefit of the community.	Develop a Coastal Adaptation Plan.	Draft Adaptation Plan Developed.	The CSCA project has provided as at June '14 outline adaptation actions for the coastal areas at threat from CC induced erosion and inundation. The next stage more detailed adaptation plan development is occurring in the next stage of the project scheduled for October'14-Jan'15. This will feed into Coastal Management Strategies going forward.
	Env 1.2	Increase the condition of vegetation within bushland reserves.	Compare the condition of vegetation within bushland reserves by mapping 25% of the bushland area annually (100% over a 4 year period) and reviewing the condition against previous surveys.	Vegetation in good or better condition is increasing against base year figure of 62% in 2010.	The percentage of bushland in good condition has decreased by ½ of one percent. However bushland in very good to excellent condition has increased by a similar margin.
	Env 1.3	Reduce the prevalence of invasive weed species in the City.	To control and manage environment weeds within Council managed natural areas.	A reduction in high priority weeds identified within reserves.	Recent weed mapping and anecdotal evidence from Bushland Management Staff indicates a reduction in high priority weeds within conservation areas.
	Env 1.4	Increase investment in the City's natural areas.	Annual increase in natural area funding as detailed in the Natural Area Management Strategy.	Increase in annual funding per hectare.	Funding increased from \$1,482 per hectare in 2012/13 to \$1,588 per hectare in 2013/14. Note that this takes into consideration additional funding allocated for bushfire mitigation works.

• Adopt best practice management for our local environment (4.2.1)

KPI No.	Annual Objective	Action	KPI	Progress
Env 2.1	To ensure the ongoing rehabilitation of degraded natural areas.	Plan to revegetate a minimum of 2.5 hectares annually.	Complete 2.5 hectares of revegetation annually with an emphasis on enhancing ecological corridors linking natural areas.	A total of 7.46 hectares of bushland was rehabilitated in 2013/14.
Env 2.2	To maintain genetic diversity and genetic viability across natural areas.	Develop incentives, develop information packages and offer training to private landowners and residents to encourage management of natural areas on private property and the use of local species within gardens.	Annual increase in the number of private landowners participating in incentive programs and number of training workshops delivered by the City.	In 2013/14 a total of 21 landowners were successful in receiving funding via the Landowner Biodiversity Grants. This is 4 more than last year. A Feral Animal Control workshop and Weed Control Workshop were also held.
Env 2.3	To create streetscapes that enhance the ecological viability and aesthetic appeal of road network.	Develop a native species list for streetscapes.	An increase in the number of local native species being used in land streetscape design and enhancement programs.	Native species list under development Local native species utilised in streetscapes, i.e. Hammond Rd & Spearwood Ave.
Env 2.4	To support local residents in increasing the urban biodiversity value of their properties.	Promote and subsidise the purchase of local native plants by property owners.	Minimum 5% annual increase in funding for this program.	The Native Plant Subsidy Scheme Funding has increased from \$5000 per annum to \$6000 per annum. A Residential Habitat Creation Subsidy Program has also been funded to the tune of



Environmental Management

OVERARCHING OBJECTIVE - Env 2 Establish and enhance ecological corridors.







\$5,000.

- Actively pursue remediation and adaptation strategies in areas where the natural environment is at risk (4.2.3).
- Implement human health risk management strategies (4.3.1).

#### SUSTAINABILITY PRINCIPLE

Environmental Management

#### OVERARCHING OBJECTIVE - Env 3

Identify, manage and minimise risks to human health.

KPI No.	Annual Objective	Action	KPI	Progress
Env 3.1	Monitor local urban air quality.	Investigate complaints relating to air pollution including dust and odour	Reduction in number of air pollution complaints (per capita).	There's been an increase in complaints from 2012/13 to 2013/14 of 32%. Probably attributable to increased development in general (mainly due to dust complaints).
Env 3.2	Minimise risks to human health through food.	Conduct health assessments of all food premises.	Reduction in the number of improvement notices served on food premises.	Increase in improvement notices by 15%.
Env 3.3	Ensure all City public buildings are safe for the community.	Conduct health assessments of all public buildings in the City.	Reduction in the number of non- compliant public buildings.	No major non compliances
Env 3.4	Monitor and manage incidence of pests in the City.	Investigate complaints associated with vectors/pests.	Reduction in number of vector/pest complaints across the City (per capita).	Increase in pest complaints by 20%.



- Actively pursue remediation and adaptation strategies in areas where the natural environment is at risk (4.2.3).
- Implement human health risk management strategies (4.3.1)

KPI No.	Annual Objective	Action	KPI	Progress
Env 4.1	Improve the vegetation condition within natural areas.	Undertake community planting events.	Conduct a minimum of three events annually.	7 planting events completed in 2013 and 3 community planting events scheduled for June 2014.
				Several community weeding activities undertaken through 2013.
Env 4.2	Build environmental action partnerships.	Develop partnerships with external agencies; corporate, NGO or state government	Develop and implement a minimum of two programs annually.	7 partnerships and programs developed with a number of external agencies including: DPaW, Water Corporation, Turtle Watch, AAEE, Little Green Steps, Murdoch and Curtin Universities
Env 4.3	Enhance community participation in environmental action.	Develop and implement community training programs.	Deliver a minimum of two community training activities annually.	7 Community training activities undertaken including workshops on: seed collection, feral animal control, weed control, composting, worm farming, Turtle Watch volunteer training.
Env 4.4	Promote environmental awareness to promote environmental stewardship in the community.	City Environmental Services to have a presence in public events.	Attend two events annually.	8 events attended including Coogee Beach Festival, Spring Fair, Harvest Hoo Ha, Festival of the Lakes, Port Coogee Xmas Fair, Rotary Spring Fair, Garage Sale Trail, Teddy Bears Picnic.









#### Efficient settlements and use of resources

The City understands that a commitment to sustainability necessitates the long term management of natural areas and resources. This approach will require ongoing investment in preservation of natural areas, reduction in resource use, emissions reduction and education for sustainability.

#### Strategic Community Plan Objectives:

• Implement sustainable resource management strategies (4.1.1).

	RINCIPLE
	ifficient Settlements and lse of Resources
	VERARCHING BJECTIVE - Env 5
W	nplement best practice ater management trategies.

KPI No.	Annual Objective	Action	KPI	Progress
Env 5.1	To decrease potable and non-potable water use across the City.	Implement local water action plan.	To reduce community per capita and corporate scheme water consumption by 5 percent below 2007/08 levels by 2017/18.  To improve efficiency in corporate groundwater use by reducing consumption to 10 percent below the 2007/08 Department of Water allocations per hectare by 2017/18.	Local water action planbeing implemented. Milestones 1 – 4 completed. Re-inventory due at Milestone 5. Note: the Water campaign program is under review following funding cuts to ICLEI in 2013.
Env 5.2	Demonstrate leadership in water conservation.	Complete Waterwise Council criteria.	Waterwise Council status achieved.	Waterwise Council status maintained.
Env 5.3	To improve the urban environment — water quality.	Conduct samples of water from beaches, public swimming pools and businesses without scheme water.	Reduce the number of substandard water samples taken.	No major non compliances.

#### Strategic Community Plan Objectives:

• Implement energy management strategies (4.5.2)

Efficient S	Settlements ar
Use of Re	esources
OVERAF	RCHING
OBJECT	IVE - Env 6
Increase	the use of
renewabl	e energy

KPI No.	Annual Objective	Action	KPI	Progress
Env 6.1	Continued investment in renewable energy generation.	Implement the City's renewable energy target.	20% renewable energy generation by 2020.	There are 1022 Solar Photovoltaic panels installed across 11 community buildings and three wind turbines. A 99kW PV system was installed on the City's new Integrated Health and Community Centre in Success. A PV Implementation Plan has been developed. 2014/15 budget allocation of \$200k provided for PV installs at highest priority sites.
Env 6.2	Strategically plan the City's investment in renewable energy.	Develop an overall renewable energy implementation plan.	Council endorsement of renewable energy implementation plan.	Renewable Energy Implementation Plan developed.



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#### Strategic Community Plan:

- Implement programs to reduce and manage the City's and community's carbon footprint (4.5.1)
- Implement energy management strategies (4.5.2)

KPI No.	Annual Objective	Action	KPI	Progress
Env 7.1	Reduce Greenhouse Gas Emissions (GGE) from electricity and fuel	Implementation of Greenhouse Gas Emission Reduction	Electricity and gas 20% below 2008/09 levels by 2020.	Electricity and gas emissions are 3% below 2008/09 levels.
	consumption.	Strategy Action Plan.	Streetlighting 10% below 2008/09 levels by 2020.	Streetlighting emissions are 11% above 2008/09 levels.
			Zero emissions fleet program.	Fleet emissions are 100% offset.
Env 7.2	Minimise GGE from waste at Henderson Waste Recovery Park (HWRP).	Implementation of waste minimisation and management actions.	No more than 45% above 2008/09 levels by 2020.	Emissions from waste are currently 43% above 2008/09 levels.
Env 7.3	Facilitate community greenhouse gas emissions reduction.	Develop a business case for the construction of a sustainable home in the City.	Business case developed.	Financial analysis undertaken by eTool in 2013.

#### Strategic Community Plan Objectives:

- Review the Strategic Waste Management Strategy (4.4.1)
- Investigate and implement appropriate waste minimisation programs and new technologies (4.4.2)

KPI No.	Annual Objective	Action	KPI	Progress	
Env 8.1	Increase the recovery rate of re-useable materials at HWRP.	Deploy two excavators to the active face.	Increase total recovery to 4%.	2nd Excavator deployed under dry hire contract. Recovery now 6.5%	•
Env 8.2	Commercial Materials Recovery Facility (CMRF)	Budget for the Scoping, Design and Documentation of CMRF.	Business Case Approval.	EOI Completed. RFT awaiting approval to advertise. Business case to be developed by tenderer.	•
Env 8.2	Promotion of waste separation and recycling.	Waste Education officer to deliver waste education programs.	Reduce MSW tonnages by 2%	Allowing for annual growth of 1,093T pa a reduction of 3.3% was achieved.	•

#### SUSTAINABILITY PRINCIPLE

Efficient settlements and use of resources

#### OVERARCHING OBJECTIVE - Env 7

Reduce greenhouse gas emissions

#### SUSTAINABILITY PRINCIPLE

Efficient Settlements and

#### OVERARCHING OBJECTIVE - Env 8

Reduce waste and increase recycling.





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Our people – from our residents, ratepayers and businesses, to schools, visitors and employees – inform the way we develop now and into the future.

The City has identified 28 KPIs to measure its current progress towards achieving a more socially equitable, diverse and inclusive community.



Achieved

In Progress Not Achieved

#### **HIGHLIGHTS**

Council adopted the final designs for the new Regional Aquatic and Recreation Centre (page 29).

Health promotion officer employed to deliver Healthy Lifestyle initiatives (page 29).

Community Engagement Framework adopted by Council which compliments the diverse range of initiatives and events offered to the Cockburn community (page 32).

#### Sense of Place and Healthy Communities

The City is populated with a vibrant, diverse and culturally rich community who have access to a range of high class services and facilities that support an excellent quality of life. Residents of the City of Cockburn have their needs met through tailored service provision.

#### Strategic Community Plan Objectives:

- Develop local community plans across the City that create cohesiveness and embrace diversity (2.1.1)
- Facilitate equal access for our community to facilities and services (2.4.1)
- Recognise, engage, include and celebrate the significance and richness of local Indigenous and diverse multicultural groups (2.7.1)

PRINCIPLE PRINCIPLE
Sense of Place and

Sense of Place and Healthy Communities

#### OVERARCHING OBJECTIVE - Soc 1

Enhance social inclusion, equity and diversity.

KPI No.	Annual Objective	Action	KPI	Progress
Soc 1.1	Facilitate an equitable and inclusive Community, particularly for those who experience disadvantage.	Implement the Disability Access and Inclusion Plan.	90% of annual Disability, Access and Inclusion Plan (DAIP) actions completed.	85% of actions were completed.
Soc 1.2	Provision of inclusive and accessible community services and leisure activities to meet diverse community needs.	Provide the community services, leisure activities and facilities contained in the Age Friendly Strategic Plan, The Children's Services Strategic Plan, the Youth Services Strategic Plan, the Disability Access and Inclusion Plan, the Reconciliation Action Plan and the Recreation Services Strategic Plan.	90% of Actions contained within the Strategic Plans are implemented in accordance with identified time frames each year.	93.4% of actions completed.
Soc 1.3	To assist those who are most vulnerable in our Community.	Develop and implement a Social Cohesion Plan.	Social Cohesion Plan adopted by Council. Implementation commenced.	Grant and Fee Funded Human Services Strategic Plan 2013- 2018 (Social Cohesion Plan) has been adopted. Implementation has commenced.



- Develop and promote the City's TravelSmart initiative (6.2.2).
- Advocate for the needs of the community and continue to progress opportunities for the City (7.2.1).
- Provide and facilitate quality community services that meet diverse recreational, cultural and community needs of all age groups (2.2.1).
- Provide and facilitate community activities, events and programs that draw a wide cross-section of the community (2.3.1).
- Provide and promote activities, services and recreational facilities that encourage our community toward an active and healthy lifestyle (2.6.1).
- Develop multi-use facilities that cater for all ages, abilities and cultures to promote community interaction (5.1.2).

KPI No.	Annual Objective	Action	KPI	Progress
Soc 2.1	Increase the capacity of the City to develop and deliver Healthy Lifestyle initiatives	Employ a qualified health promotion officer.	Officer employed in the 13/14 financial year.	Officer employed in 2013.
Soc 2.2	Provide information, incentives and ongoing and support and motivation to encourage people to be more active and travel less by car.	Implement the ActiveSmart/ TravelSmart program in targeted areas.	Walking trips increased by 20%     Cycling trips increased by 50%	"Your Move" program being implemented for 10,000 households in Cockburn. KPI will be evaluated in 2014/15.
Soc 2.3	To centrally locate health and community facilities for residents on the eastern side of the municipality.	Complete Detailed Design for the Cockburn Regional Aquatic and Recreation Community Facility.	Adopted by Council.	At the OCM held in June 2014, the Council adopted the final designs for the new Regional Aquatic and Recreation Centre.

#### SUSTAINABILITY PRINCIPLE

Sense of Place and Healthy Communities

#### OVERARCHING OBJECTIVE - Soc 2

Provide well located community services and facilities to meet identified community needs and facilitate healthy lifestyles

#### Strategic Community Plan Objectives:

- Provide and facilitate initiatives that improve safety for our communities (2.5.1)
- Identify and address safety issues across the transport networks (6.3.1)

KPI No.	Annual Objective	Action	KPI	Progress
Soc 3.1	To ensure the City responds to the Community's safety concerns in a timely manner.	Ensure the response times of CoSafe Officers are within 15minutes of original call being placed.	85% of call outs responded to within 15 minutes.	92% of responses were within 15 minutes.
Soc 3.2	To reduce the likelihood of criminal offence for at-risk youth in the community.	Meet the annual targets of engagement as part of the City's Youth Diversion Program.	168 youth engaged in the program annually.	228 youth engaged in 13/14.
Soc 3.3	Increase the sense of security at identified sites within the City.	Review the implementation of priorities identified in the City's CCTV Strategy.	CCTV Implementation Strategy funded.	Strategy funded through grant and municipal funding. CCTV installed at the Coogee Beach surf Life Saving Club.
Soc 3.4	Incorporate crime prevention through environmental design into the City's development processes.	Develop a Crime Prevention through Environmental Design Policy.	Policy adopted.	Matter on hold.

## SUSTAINABILITY PRINCIPLE Sense of Place and Healthy Communities OVERARCHING OBJECTIVE - Soc 3 Develop safe communities.

- Recognise, engage, include and celebrate the significance and richness of local Indigenous and diverse multicultural groups (2.7.1).
- Protect the heritage of the City through advocacy, statutory controls, promotion and education (2.8.1).

#### SUSTAINABILITY PRINCIPLE

Sense of Place and Healthy Communities

#### OVERARCHING OBJECTIVE - Soc 4

Protect and promote the City's cultural heritage and diversity

KPI No.	Annual Objective	Action	KPI	Progress
Soc 4.1	To value and celebrate Indigenous culture, heritage and participation.	Implement the Reconciliation Action Plan.	90% of actions contained within the plan are implemented within the required timeframe.	100% complete
Soc 4.2	Promote Indigenous Community Development.	To seek ongoing sources of funding to increase the role of the Aboriginal Community Development Officer from part time to full time.	Funding secured and officer employed as a full time staff member in the 2013/14 financial year.	Funding secured and officer now employed full-time.
Soc 4.3	Celebrate and promote cultural diversity.	Identify funding for the development of a multicultural strategy and officer.	Funding sourced identified.	Commonwealth Grant funding application submitted for a part-time officer.
Soc 4.4	Safeguard the protection of City heritage sites.	Regularly update the City's Heritage List.	Review of list no longer than 12 months.	The City has continued with effective management of the Local Government Inventory. This again saw the City secure its annual update of the inventory, both on time and budget. The City has also continued dealing with landowner requests regarding the inventory and adding new places.





#### Community Involvement

The City recognises the need to engage with residents and has developed a range of processes, policies, services and facilities to enable this. The City is responsive to the needs of its community and tailors its activities accordingly.

#### Strategic Community Plan Objectives:

• Provide and facilitate community activities, events and programs that draw a wide cross-section of the community (2.3.1)

KPI No.	Annual Objective	Action	KPI	Progress
Soc 5.1	Provide annual events in response to identified community needs.	Undertake research in 2012/13 to determine what the community wants events-wise and use this information to develop an Events Strategy.	Adoption of Events Strategy in the 13/14 financial year.	Complete.
Soc 5.2	Promote City sponsored events widely in the community.	Develop comprehensive marketing plan including social media.	Annual increase in community attendance at major City events.	Actioned.
Soc 5.3	Ensure City events are accessible across the community.	Work with the Disability, Access and Inclusion (DAI) Officer to increase accessibility across City events.	All event planning in the 13/14 financial year to include a checklist for disability access and inclusion.	Ongoing.
Soc 5.4	Implement a strategic approach to increasing community awareness of City events, activities, services, facilities, strategies.	Implement a Corporate Communications Strategy.	100% of actions met against target in Strategy.	50% of actions met against target in Strategy. Local Government Reform delayed some projects such as create a "live work play" video. Three actions were moved to next financial year.





- Provide and facilitate community activities, events and programs that draw a wide cross-section of the community (2.3.1)
- Promote sustainable practices within the community (4.1.2).

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2	241	NCI	121		
JBI	277	2	1,191,	323	

Community Involvement

#### OVERARCHING OBJECTIVE - Soc 6

Develop a strategic approach to community engagement and education.

KPI No.	Annual Objective	Action	KPI	Progress
Soc 6.1	Adopt a strategic approach to community engagement.	Develop a Community Engagement Strategy.	Strategy adopted in the 2013/14 financial year.	Community Engagement Framework adopted by Council April 2014
Soc 6.2	Deliver a minimum of 10 environmental education for sustainability initiatives and events.	Deliver a range of diverse environmental education initiatives and events to the community.	Complete minimum number of events.	Well in excess of 10 events were delivered including get wild about wetlands school holidays program, and the Sustainable September event series.
Soc 6.3	Deliver a minimum of 10 social and/or cultural education initiatives.	Deliver a range of social and/or cultural awareness events and initiatives to the community.	Complete minimum number of events.	Well in excess of 10 initiatives were completed including 5 Aboriginal focused, 1 CaLD focused, 1 Celebrate Ability, 15 educational parenting groups, and 1 Mental health forum.

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- Support the development of local community associations and other advocacy groups (2.3.2).
- Develop and implement the branding strategy of the City across all our communities and services (5.4.1).
- Maintain urban art investment and other initiatives that create interesting community places and encourage creativity (5.4.2).

KPI No.	Annual Objective	Action	KPI	Progress	
Soc 7.1	To support the development of vibrant community spaces through investment in urban art.	Maintain a constant investment in public art.	Annual investment in public art.	Achieved.	
Soc 7.2	To ensure the City of Cockburn primary brand is used consistently in all marketing, communication and service points.	Update the City's Corporate Style Guide.	Up to date Style Guide adopted by Council.	Style Guide updated. Council endorsement not required.	
Soc 7.3	Promote the City's response to recognised community priorities.	Monitor and report on results from perceptions survey.	Perceptions survey results.	Achieved	B

# SUSTAINABILITY PRINCIPLE Community Involvement OVERARCHING OBJECTIVE - Soc 7 Enhance a sense of community ownership and promote Cockburn as an attractive place to live, work and visit.

#### Strategic Community Plan Objectives:

- Develop local community plans across the City that create cohesiveness and embrace diversity (2.1.1)
- Provide and facilitate quality community services that meet diverse recreational, cultural and community needs of all age groups (2.2.1)
- Support the development of local community associations and other advocacy groups (2.3.2)

KPI No.	Annual Objective	Action	KPI	Progress
Soc 8.1	Strengthen the capacity of community groups.	Monitor the % of completed projects for community groups in the City through the community grants program.	% of completed projects against grants received.	54% completed on 13 projects
Soc 8.2	Strengthen networks between community groups.	Facilitate linkages between community groups in the City.	Increased number of joint projects between community groups.	Network strengthened through joint Project "Save Cockburn"
Soc 8.3	Facilitate partnerships between business and community groups.	Host an annual business and community group networking event.	80% capacity attendance at the event.	Over 100% capacity attendance at the 2013 Get Connected Expo.
Soc 8.4	Actively encourage volunteering in the City of Cockburn.	Market and promote volunteering opportunities in the City.	Annual increase in the number of registered volunteers.	No of registered volunteers increased 10%

# SUSTAINABILITY PRINCIPLE Community Involvement OVERARCHING OBJECTIVE - Soc 8 Build community resilience through strengthened community groups, relationships and linkages.



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A strong economy underpins the City's sustainable development and must be robust and resilient in the face of future uncertainty and risk. The City's economy is integrated with its society and environment.

The City has 22 identified key performance indicators (KPIs) to measure its current progress towards achieving best practice financial management.



32%

Achieved

O 36%

In Progress

0070

Not Achieved

#### **HIGHLIGHTS**

Commenced development of an Economic Strategy (page 36).

Continued support for local business operators in the municipality (page 38).

Partnerships secured with a tertiary education facility and continued support for Challenger Institute of Technology (pages 36 and 40).

#### **Economic Development**

The City recognises the importance of pursuing strong fiscal policy, aimed at underpinning the rapid growth experienced in recent years and supporting a transition toward sustainability into the future. In so doing, the City understands that balanced economic development is an important component of its journey towards sustainability.

#### Strategic Community Plan Objectives:

- Engage stakeholders on the delivery of industrial, commercial and infrastructure projects (3.2.1).
- Facilitate and promote economic development aligned to business centre growth (3.3.1).
- Work with stakeholders to identify a holistic regional approach to freight management (6.4.1).

## FOCUS AREA Economic Development OVERARCHING

mplement a strategic approach to economic tevelopment

OBJECTIVE - Eco 1

KPI No.	Annual Objective	Action	KPI	Progress
Eco 1.1	Pursue a strategic approach to economic development.	Develop an economic development strategy for the City of Cockburn.	Strategy to be adopted by Council.	Council adopted Draft Economic Development Directions Strategy for public comment. This sets the framework for how the City will grow its role and relationship with local economic development.
Eco 1.2	Implement Economic Development in the City.	Determine the priority for an economic development officer.	An economic development officer is identified in the Workforce Plan.	Economic Officer yet to be identified in the Workforce Plan.
Eco 1.3	Consider what role tourism will play for the City.	Determine whether tourism should be incorporated into an economic development strategy or as a standalone strategy.	Identified within the Economic Development Strategy.	Council adopted the new Events Strategy for the City which has a clear association with tourism promotion. The City's Draft Economic Development Directions Strategy also deals with the future role of a tourism strategy for the region.
Eco 1.4	Consider what future role the tertiary education sector will occupy in the City's economic development.	The tertiary education sector should be considered in an economic development strategy.	Identified within the Economic Development Strategy.	Tertiary Education Industry Profile has been included in the Economic Development Strategy. Council has secured partnerships with Curtin University in respect of both the new Integrated Health Facility and the proposed Regional Sports Facility. This will provide a visible tertiary sector basis within Cockburn for the benefit of local students particularly.

- Ensure that the City's sustainable development framework drives and enables diverse business investment and activities (3.2.2).
- Develop and implement a City infrastructure plan that meets current and future needs (5.1.1).
- Develop and implement strategies to facilitate the efficient and sustainable movement of people and goods (6.1.1).
- Develop and manage relationships with key stakeholders (7.2.2).

KPI No.	Annual Objective	Action	KPI	Progress
Eco 2.1	Ensure the City continues to attract business investment through the construction of an enhanced road network.	Ensure funds are available to meet the Road development program as outlined in the Long Term Financial Plan.	Number of projects completed against target.	2013/14 Budget Actual \$18.7m CAPEX Expenditure \$8.96m (45%) 2013/14 Total roads projects (127) Total completed roads projects (82) — 64%
Eco 2.2	Lobby for greater investment in public transport within the City of Cockburn.	Continue to advocate for the construction of the Success Railway Station and car parking facilities.	Report of advocacy efforts to achieve this objective.	Success rail station is committed. Currently lobbying for improved network connectivity and better congestion management as a result of station.
Eco 2.3	Identify gaps in strategic infrastructure which inhibit business investment in the City.	Survey business to determine gaps in strategic infrastructure.	Report received.	Completed in the 2014 Catalyse Survey of the business community.

#### FOCUS AREA

Economic Development

#### OVERARCHING OBJECTIVE - Eco 2

Attract business investment through the facilitation of strategic infrastructure.



- Facilitate and promote economic development aligned to business centre growth (3.3.1)
- Work in partnership with Federal and State Government and other key stakeholders to provide infrastructure (5.3.1)

	KPI No.	Annual Objective	Action	KPI	Progress	35
FOCUS AREA Economic Development  OVERARCHING OBJECTIVE - Eco 3  Facilitate the development of local enterprise.	Eco 3.1	To relieve traffic congestion in Cockburn Central.	Seek a commitment from the appropriate stakeholders for the timely construction of the North Lake Road Freeway Overpass, and the upgrades to the surrounding road network, which have been identified in the City's Major and Regional Road Network Strategy.	Report on agency responsibility, and proposed timeframes, for upgrades to the network as identified in the Major and Regional Road Network Strategy.	Land acquisition on east side of Freeway completed. Funding allocated in 14/15 to complete design. Continue to lobby for State Government commitment to North Lake Rd bridge.	•
	Eco 3.2	Facilitate the development of vibrant local activity centres.	Implement the Local Commercial and Activity Centres Strategy.	% of actions within the Plan complete against target.	Council adopted the Cockburn Central Activity Centre Strategy, which sets out the vision for how Cockburn Central will evolve as the City's key activity centre into the future. This sets the framework for coordinated action across both local and state government to ensure the centre grows to fulfill its true potential.	
	Eco 3.3	Support local enterprise in the City.	Engage with the Melville Cockburn Chamber of Commerce, South West Group and Business Foundations Group to determine the needs of existing businesses within the City.	Bi-annual meeting with stakeholder groups.	The City continues to hold regular meetings with each of these business groups and has hosted a number of their functions throughout the year. The City has also commenced development of an Economic Strategy, with input to be sourced from business stakeholders as part of the strategy's development.	



- Promote sustainable practices within the community (4.1.2)
- Provide and facilitate community activities, events and programs that draw a wide cross-section of the community (2.3.1)

KPI No.	Annual Objective	Action	KPI	Progress
Eco 4.1	Promote Cockburn as the most attractive place to live, work, visit and invest in the Perth Metropolitan area.	Develop a registry of the City's key natural, cultural and commercial features.	Registry developed.	Registry not complete.
Eco 4.2	Support the continued establishment of the Sustainability Precinct at Bibra Lake.	Complete the architectural designs for the construction of the Sustainability Centre and to enable grant funding to be sourced.	Design drawings completed and consultation for user groups concluded.	Matter on hold during 13/14 due to Local Government Reform priorities.



#### FOCUS AREA

Economic Development

#### OVERARCHING OBJECTIVE - Eco 4

Grow tourism in Cockburn through the management, improvement and promotion of the City's key natural, cultural and commercial features.

#### **Employment Opportunities**

The City will continue to support the creation and growth of business and industry, which will enable it to facilitate the aspirations of its community. The City will continue to provide training opportunities to assist with these aims.

#### Strategic Community Plan Objectives:

- Work with stakeholders to ensure serviced and accessible industrial land incorporating technology and education is planned and delivered (1.5.1).
- Identify initiatives and incentives to broaden the range of educational facilities, programs and partnerships (3.4.1).

#### **FOCUS AREA**

Employment Opportunities

#### OVERARCHING OBJECTIVE - Eco 5

Support Cockburn residents accessing local high value jobs through targeted programs of training and development.

KPI No.	Annual Objective	Action	KPI	Progress
Eco 5.1	Support the development of Vocational Education and Training Educational Institutions in the City of Cockburn.	Advocate for increased funding and resources for Challenger TAFE from State and Federal Government.	Report from Challenger TAFE on funding achievements.	Challenger Institute was allocated \$15M in the FY14/15 State Budget to relocate its Applied Engineering faculty to the ACEPT site in Henderson. This will consolidate all technical training on this site and deliver more opportunities for industry to partner with the Institute. [This objective is now complete]
Eco 5.2	Support further education facilities in the City of Cockburn.	Continue discussions with Curtin University to locate a Department in Cockburn Central West.	An agreement is resolved between the City and Curtin University.	Agreement expected to be signed by the end of 2014

#### Strategic Community Plan Objectives:

Attract, engage, develop and retain our staff in accordance with a long term Workplace Plan (7.6.1).

KPI No.	Annual Objective	Action	KPI	Progress	
Eco 6.1	Continue to maintain a strong trainee development program.	Maintain the funding to facilitate the trainee program.	Continue to provide a minimum of five trainee positions annually.	Complete	•
Eco 6.2	Enhance the trainee development program In the City of Cockburn.	Seek additional external funds to employ more trainees.	External funding received.	No longer achievable given the state government changes to traineeships and the change in the TAFE sector resulting in prices being doubled and tripled for courses.	•
Eco 6.3	Maintain the City's Employee Development Policy.	Secure consistent annual funding for this program.	Annual investment in Employee Development Policy maintained.	Complete	•

#### **FOCUS AREA**

Employment Opportunities

#### OVERARCHING OBJECTIVE - Eco (

Maintain the City's Employee Development Program

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- Engage stakeholders on the delivery of industrial, commercial and infrastructure projects (3.2.1).
- Ensure that the City's sustainable development framework drives and enables diverse business investment and activities (3.2.2).
- Work in partnership with Federal and State Government and other key stakeholders to provide infrastructure (5.3.1).

KPI No.	Annual Objective	Action	KPI	Progress
Eco 7.1	Enhance access to public transport via a paid parking facility for non-commuter uses of the rail facility.	To seek partners for the potential development of a paid parking station at Cockburn Central.	Partnership established — Yes/No	PTA have introduced paid parking for their assets. Business Case does not yet support a paid parking station.
Eco 7.2	Enhance existing retail precincts.	To work with Perron Group for the next stage of the Gateway Precinct and construction of the associated infrastructure.	Development plans finalised and road network designs improved.	No formal detail on further Gateways expansion at this stage.
Eco 7.3	Work with the State Government, LandCorp and associated stakeholders in the delivery of the Latitude 32 and Australian Marine Complex Precincts.	Continue to engage with all stakeholders regarding planning and development of these precincts.	Precinct Structure Plan finalised in the 13/14 financial year.	The City has had an active role in shaping the upcoming Wattleup Structure Plan (Development Area 2). This is the next phase in the Latitude 32 project.

#### Employment Opportunities

FOCUS AREA

#### OVERARCHING OBJECTIVE - Eco 7

Develop and promote strategic partnerships with stakeholders involved in the industrial/ commercial precincts

#### FOCUS AREA

Employment Opportunities

OVERARCHING OBJECTIVE - Eco 8

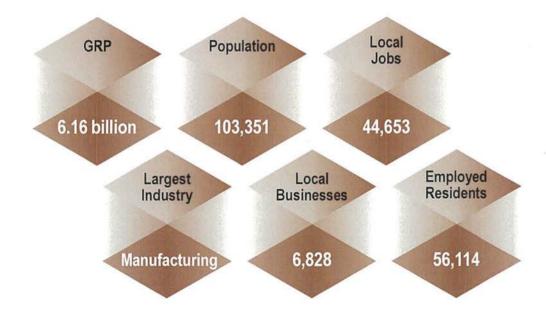
Promote the small business sector in Cockburn through key strategic alliances.

#### Strategic Community Plan Objectives:

• Facilitate and promote economic development aligned to business centre growth (3.3.1).

KPI No.	Annual Objective	Action	KPI	Progress
Eco 8.1	Support for business operators within the municipality.	Continue to support and co-fund the Melville Cockburn Chamber of Commerce (MCCC).	Report from MCCC on activities held within the municipality.	Additional support provided by Council. OCM June 2014.
Eco 8.2	Promote small businesses in the City of Cockburn.	Establish a ' Cockburn Business Corner' page on the City's website promoting local business	Website page established.	No Progress

#### **IMPORTANT STATISTICS**



#### REPORT SUMMARY AND FEEDBACK

State of Sustainability Reporting is a complex and evolving process.

In the 2013/14 Financial Year, the City had 105 indicators for sustainability across the organisation.

During 2013/14 Local Government reform caused a shift in priorities across the organisation with some projects deferred to 2014/15. This change in business focus and the addition of new indicators meant that many KPIs were still in progress during 2013/14. The focus areas of Environment and Society have excelled in 2013/14 with a significant increase in the number of completed KPIs in comparison to the previous year.

Year	2011	2012	2012/13	2013/14
Governance	Total KPIs: 11	Total KPIs: 19	Total KPIs: 19	Total KPIs: 28
KPIs Achieved	6	12	14	16
KPIs Making Progress	5	5	4	6
KPIs Not Achieved	0	2	1	6
Environment	Total KPIs: 11	Total KPIs: 14	Total KPIs: 14	Total KPIs: 27
KPIs Achieved	5	5	10	16
KPIs Making Progress	6	4	3	8
KPIs Not Achieved	0	5	1 Equipment	3
Society	Total KPIs: 6	Total KPIs: 17	Total KPIs: 16	Total KPIs: 28
Society KPIs Achieved	Total KPIs: 6	Total KPIs: 17	Total KPIs: 16	Total KPIs: 28
		100000000000000000000000000000000000000	A COMPANY TO SECURIOR	A ARTHOUGH CONTROL OF THE CONTROL OF
KPIs Achieved	4	11	12	22
KPIs Achieved KPIs Making Progress	2	11	12	22
KPIs Achieved KPIs Making Progress KPIs Not Achieved	0	11 5 1	12 2 2	5 1
KPIs Achieved KPIs Making Progress KPIs Not Achieved Economy	4 2 0 Total KPIs: 6	11 5 1 Total KPIs: 16	12 2 2 Total KPIs: 16	5 1

The Sustainability Action Plan 2014/15, which is the basis for the next sustainability report, has been adopted by Council and can be viewed at www.cockburn.wa.gov.au/sustainability

Thank you for taking the time to read the City of Cockburn's fourth annual State of Sustainability Report. We welcome your feedback on this initiative.

Contact the City at customer@cockburn.wa.gov.au or phone (08) 9411 3444.



Version: 1, Version Date: 04/12/2014

#### Cockburn Central Town Centre - Photographs of on-street parking

Photo 1: View west along Junction Boulevard near Cockburn Central Station







Photo 3: View south along Linkage Avenue, just Signal Terrace



Photo 4: View east along Stockton Bend, at Midgegooroo Avenue





#### **CITY OF COCKBURN**

### COCKBURN CENTRAL TOWN CENTRE PARKING STRATEGY

**JUNE 2007** 

### Introduction:

The Cockburn Central town centre is part of the new Regional Centre planned for the City of Cockburn. Cockburn Central is intended to become a significant mixed-use Transit Oriented Development (TOD). Planning for the town centre is substantially under way, with one of the key aspects requiring consideration being the appropriate provision for car parking.

The purpose of this document therefore is to outline a strategy that enables the town centre to evolve commensurate with providing for car parking in a manner reflecting the characteristics of the town centre and nature of the uses anticipated.

Consultants were engaged who assessed:

- 1. what car parking standards should apply to future development with Cockburn Central;
- 2. whether the proposed plan of subdivision, when related to the underlying town centre concept, facilitates the provision of the required car parking;
- 3. parking provisions in other TOD areas.

## Cockburn Central Parking Strategy Principles:

The following principles were established to guide the development of the Cockburn Central Parking Strategy:

- 1. Recognise that Cockburn Central is a Transport Oriented Development (TOD) which requires a strategic approach to addressing car parking issues to ensure short and long term parking needs can be accommodated.
- 2. Develop a strategy that is easy to administer, flexible and responsive to changing land uses and the needs of the community.
- 3. Differentiate parking requirements for TOD related land uses and non-TOD related land uses
- 4. Ensure an appropriate balance is achieved between parking supply and demand, while taking care not to over provide and unduly encourage use of motor vehicles.
- 5. Consider alternative approaches to managing car parking in Cockburn Central and the implications of each.

#### Car Parking Demand:

As Cockburn Central is a TOD, it is expected a significant proportion of visitors will utilise public transport in the form of bus and train services. However, it is not expected that all rail commuters will use public bus transport. To this extent, provision has been made for all day parking of vehicles of public transport commuters. Two cells for "park and ride" car parking have been provided close to and easily accessible from the town square, railway station entry and public transport interchange. The southern of

Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014 the two parking areas may be security fenced and patrolled. Owned by the Public Transport Authority, it is possible the parking in these areas may be regulated by the City of Cockburn. It is not expected that these areas will be available for the needs of non-commuters during business hours on weekdays.

It is envisaged that Cockburn Central will accommodate a range of uses including medium to high density residential (approximately two thirds), offices, retail, entertainment, civic and showroom uses. The establishment and operation of these land uses will generate car and service vehicle traffic from those who choose to drive to Cockburn Central.

Cockburn Central is considered likely to establish initially as a village centre, which will grow over time to become the Regional Centre for the municipality of Cockburn. It is therefore expected that parking demand will change as land uses establish and change and the town centre evolves over time.

In addition, being a TOD with the town centre developed around public transport infrastructure, there is a strong argument to suggest that parking demand within Cockburn Central will not be as great as for traditional forms of development elsewhere.

The parking strategy therefore needs to ensure an appropriate balance between parking supply and demand can be achieved in the long term.

## **Background Studies:**

The City commissioned consultants to evaluate the parking requirements of Cockburn Central, which resulted in the preparation of the following reports:

- Cockburn Central: Parking Review for Proposed Subdivision (Final Report October 2005) by Bruce Aulabaugh, Traffic Engineering, Transport Planning; and
- Cockburn Central Subdivision Assessment from a Car Parking Perspective (September 2005) by Shrapnel Urban Planning.

The studies were based upon the latest information available, provided from Cardno BSD, which included <sup>1</sup>:

- Cockburn Central Parking Analysis (June 2005) by Cardno BSD, including various land use assumptions;
- Cockburn Central Draft Design Guidelines (May 2005) by Cardno BSD;
- Proposed plan of subdivision for Cockburn Central (July 2005) by Cardno BSD;
- Proposed Cockburn Central Town Centre Structure Plan (August 2005) by Cardno BSD.

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<sup>&</sup>lt;sup>1</sup> It is acknowledged that the Bruce Aulabaugh report relies largely on the land use assumptions and data contained in the Cockburn Central Parking Analysis (June 2005) by Cardno BSD, which was the primary source of information available at the time of writing.

The study produced by Bruce Aulabaugh analysed parking standards, benchmarked various developments (including TOD's) around Perth, and concluded<sup>2</sup>:

- mixed use town centres in Western Australia generate weekday parking demand between approximately 2.5-4.5 bays per 100m<sup>2</sup> GFA.
- an average parking demand in the range of 3-4 bays /100m² floor area of commercial development is proposed as a reasonable 'target' for Cockburn Central;
- Subiaco Redevelopment Authority (SRA) parking ratios for specific land use categories are proposed as the most suitable for Cockburn Central:
- a review of the proposed subdivision was also undertaken in terms of a range of parking policy objectives. The results show that the proposed subdivision does not adequately protect the ownership, capacity, location, access or design of a public car parking facility;
- the policy review also shows that the proposed building footprints and laneway configuration will affect visibility of on-site car parking (from the street) and may have a negative impact on the ability to implement reciprocal parking rights across the centre.

The report also tested various land use scenarios which concluded that the SRA parking rates are the most appropriate for Cockburn Central commercial uses.

The study by Shrapnel Urban Planning (SUP) built on the results of the Bruce Aulabaugh study by developing a parking model for Cockburn Central and analysing the parking requirements on a precinct basis as well as for across town centre as a whole. The SUP results:

- indicated that Bruce Aulabaugh's assessment that the SRA's parking standards for Subi Centro would be appropriate for Cockburn Central is generally accepted, but with the following modifications:
  - a) The standards should not include on-street parking because:
    - o the SRA standards themselves assume that on-street parking is additional to the parking requirements as calculated by the standards;
    - Subjaco is by no means oversupplied with parking;
    - o Cockburn Central is less "central" than Subiaco.
  - b) The parking standard for Showrooms should be 2 bays/100m² of gross floor area in Cockburn Central rather than 1.0 bays/100m² on the basis that:
    - Subi Centro does not have many showrooms, so the standard is untested;

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<sup>&</sup>lt;sup>2</sup> For all the reported conclusions refer to the report by Bruce Aulabaugh "Cockburn Central: Parking Review for Proposed Subdivision".

- o the existing standard for Cockburn is one bay per 50m², which is a more appropriate standard for an outer suburb;
- assumes four broad land use types establishing in the town centre: Residential, Office, Retail & Showroom. While a wide range of land uses are anticipated in the town centre, given the scale of the town centre it is expected that all land use proposals can fall within these broad land use categories without unduly influencing the parking balance.
- assume that the entire town centre (with the exception of the blocks adjoining Beeliar Drive) is conveniently located to the public transport node to benefit from the TOD influence, which justifies the relaxation of parking standards accordingly.
- indicate that the following parking standards would be appropriate for general application within Cockburn Central:

o Residential: 1 bay/100m² of GFA;

o Office: 2.5 bays/100m² GFA;

o Retail: 4 bays/100m² GFA;

Showroom: 2 bays/100m<sup>2</sup> GFA.

- assume that all parking generated by residential development is contained within the building envelopes and does not extend into any neighbouring at-grade parking areas (i.e. undercroft parking), while parking for mixed use, office & retail is provided centrally in the street blocks, behind the built form.
- assumes the amount of floorspace to be occupied at the various levels within the building envelope. These assumptions are made as closely as practicable on the description of the intended land uses in the proposed Town Centre Structure Plan.
- conclude that the parking analysis indicates:
  - o a total of 928 non-residential parking bays would be required;
  - outdoor parking area surpluses are produced in Blocks 1, 2, 5, 8, 10
     & 12. With the exception of Blocks 2 and 10, all these blocks are located in the western one-third of the town centre, comprising the Park Precinct:
  - o all the other blocks show some shortfall in available parking area and the resulting number of bays that could be established:
  - o a theoretical surplus of 222 bays is estimated for the town centre as a whole:
  - the average standard for Office bays (for dedicated office space only) is 2.5 bays/100m² GFA;
  - the average standard for Retail bays across the town centre as a whole is 4.1 bays per 100m² GFA;
  - the average standard for Mixed Use (combined Office & Retail uses at ground floor, where buildings are designed to facilitate change of uses) bays is 3.3 bays/100m² GFA;
  - o the results of the model indicate that although parking issues are sensitive to land use decisions, there are no significant problems with the proposed subdivision design itself from a car parking perspective.

The sensitivity of the modelling to land use decisions and future detailed proposals for more intense development provides further justification for the Council to own/control land for public parking should it be required in the future.

## Alternative Approaches:

- Do nothing. Have no parking requirements for Cockburn Central. This
  is not likely to be acceptable to the community or future developers,
  owners, residents or tenants, as there is a general expectation that
  sufficient parking should be available to meet the needs of the various
  stakeholders.
- 2. Apply standard Town Planning Scheme parking standards across the town centre. This is not considered appropriate as:
  - TPS standards are not reflective of the nature of TOD's;
  - TPS standards are generic and do not necessarily represent the best standard to apply in all instances. As a result, variations from parking standards are likely to be frequently requested.
  - TPS standards would result in ad-hoc planning decisions being made where variations are sought from the standard parking requirements, which may result in less than optimum planning outcomes.
  - TPS standards do not allow for easy land use conversion over time.
- 3. Allow for a consistent discounted approach to the provision of car parking warranted by the TOD elements of Cockburn Central, and standardize the parking requirements for the non-TOD elements.
- 4. Adopt a cash-in-lieu approach by not requiring any onsite car parking for developments and concentrate vehicle parking in public parking precincts. This approach, in itself, is not considered appropriate as:
  - Developers are likely to prefer maintaining a degree of control over onsite parking;
  - Onsite parking enhances the marketability of the development Lots:
  - Public parking precincts can be costly to construct, administratively complex to manage and may give rise to security and liability issues for Council and nearby landowners;
  - The distribution of parking opportunities across the Cockburn Central town centre may not be the most efficient or address the needs of the various street precincts.
  - Residents prefer to have car parking available in close proximity to residential dwelling units for functional and security reasons.

Advantages to a cash-in-lieu approach include:

- Providing an opportunity to increase offsite parking in response to increased demand and/or where development intensifies and site constraints prevent the 'development of additional onsite parking.
- Provides flexibility to enable the Council to consider a combination of initiatives such as discounting car parking requirements as described above.
- 5. Allow for reciprocal parking rights between developments on private land and/or public land (including on-street) & other privately owned land for complimentary land uses. This approach is not favoured as:
  - Administering the application of reciprocal parking between different sites and land uses, particularly given the changing nature of the latter, make this a potentially complex approach to manage.
  - Enforcing parking reciprocity is a complicated matter.
  - Westrail does not support reciprocal parking in regards to the station park-n-ride facilities.
  - SRA standards (recommended in previous studies) assume that on-street Parking is additional to the parking requirements as calculated by the standards.

#### RECOMMENDATION:

A combination of Options 3 & 4 is recommended incorporating additional provisions for convertible units and the service bay requirements:

#### Standards

- A uniform standard for car parking applies for residential dwelling units based upon a minimum of 1 car bay and maximum of 2 car bays per dwelling unit as per follows:
  - a) 1 car bay for one or two bedroom dwellings; and
  - b) 2 car bays for three (or more) bedroom dwellings.

Car bays will need to be constructed in close proximity to the dwelling units, which given the builtform proposed on each street block, probably may necessitate the construction of undercroft or decked parking. The standard for visitor car parking is to be a minimum of 10% of the total residential carparking requirement and be provided in addition to the required residential carparking.

- The standard for showroom is based upon 2 bays per 100m<sup>2</sup>
   GFA.
- The standards applying for car parking associated with "Retail", "Office" and "Mixed use" land uses are as follows:

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- o "Retail", where the built form does not facilitate an easy transition to "Office" uses: 4 bays/100m² GFA;
- o "Office", where the built form does not facilitate an easy transition to "Retail" uses: 2.5 bays/100m².
- "Mixed Use", where the built form facilitates alternative opportunities for "Office" and "Retail" uses: 3 bays/100m<sup>2</sup> GFA.
- A uniform standard for "Convertible Units" is based upon the residential use. No further bays will be required at the time of conversion from residential to commercial.
- A uniform standard of 2 service bays per development applies to each super lot. This facilitates the car parking provision for service vehicles such as vehicles for tradesmen, cleaners and removalists. The dimension of a service bay shall be in accordance with the Australian Building Codes.

# Cash-in-Lieu Car Parking

• Cash-in-lieu of parking will be required where site constraints prevent the construction of required (or additional) onsite parking. Any cash-in-lieu received will be applied as per Town Planning Scheme No. 3 requirements (Clause 5.9.6) for the construction of public car parking facility.

#### Car Parking Management

- It is recommended that street signs be erected within the Town Centre to limit time with on-street parking and public carparks (eg. 2 hours limit) which will restrict commuters from using onstreet parking or public carparks for long term parking purpose. This is to ensure that on-street parking and public carparks are used for short term parking purpose by customers and visitors to businesses and residential uses within the Town Centre.
- Ticket parking may be introduced incorporating Local Parking Laws at a later stage depending upon the situation of car parking demand in the town centre.

## Notification of TOD Principles

 That any developer within the Cockburn Central Town Centre provide, at point of sale, information clearly outlining the TOD principles that the development has been undertaken on (including but not limited to TravelSmart and car parking limitations).

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City of Cockburn

# BUSHFIRE RISK MANAGEMENT PLAN 2014 – 2019







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# **Document Control**

# **Document History**

Version	Date	Author	Section
1.0	2013	OBRM	Template sections as per WESTPLAN Fire 2.1.1
1.2	01/2014	M. Emery/T. Wegwermer	Project Framework / section 3.1.6
1.3	07/2014	M. Emery	Key Findings from Community/stakeholder engagement
1.4	07/2014	C. Beaton/ M. Emery	3.1.3 and 7.5
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1.6	07/2014	M. Emery	Asset Risk Register, Treatment Schedule and Maps added
1.7	07/2014	M. Emery	Draft A for August OCM council meeting
1.8	12/09/14	M. Emery	Amend draft after public feedback was obtained – Creation of 'DRAFT – B'
1.9	06/10/2014	M. Emery	Minor amendments to Chapter 7 & 8

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# **Glossary**

**Asset** A term used to describe anything valued by the community that may

be adversely impacted by bushfire. This may include residential houses, infrastructure, agriculture, industry, environmental, cultural

and heritage sites.

Bushfire Unplanned vegetation fire. A generic term which includes grass fires,

forest fires and scrub fires both with and without a suppression

objective.

**Bushfire hazard** The potential or expected behaviour of a bushfire burning under a

particular set of conditions, i.e. the type, arrangement and quantity of fuel, the fuel moisture content, wind speed, topography, relative

humidity, temperature and atmospheric stability.

**Bushfire Risk** The chance of a bushfire igniting, spreading and causing damage to

the community or the asset/s they value.

**Bushfire risk** 

A systematic process to coordinate, direct and control activities relating to bushfire risk; with the aim of limiting the adverse effects of management

bushfire on the community.

**Bushfire Threat** The threat posed by the hazard vegetation. Based on the vegetation

category, slope and separation distance.

The outcome or impact of a bushfire event. Consequence

Likelihood The chance of something occurring. In this instance, the chance of a

bushfire igniting, spreading and reaching the asset.

**Recovery Cost** The capacity of an asset to recover from the impacts of a bushfire.

The informed decision to accept a risk, based on the knowledge Risk acceptance

gained during the risk assessment process.

Risk analysis The application of consequence and likelihood to an event in order to

determine the level of risk.

Risk assessment The systematic process of identifying, analysing and evaluating risk.

Risk evaluation The process of comparing the outcomes of risk analysis to the risk

criteria in order to determine whether a risk is acceptable or tolerable.

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Risk identification

The process of recognising, identifying and describing risks.

Risk treatment

A process to select and implement appropriate measures undertaken to modify risk.

**Treatment** 

An activity undertaken in order to modify risk, e.g. conducting a prescribed burn.

Treatment Strategy

The broad approach assigned to an asset which specifies the type to treatment activities that will be implemented to modify risk, e.g. fuel management.

Vulnerability

The susceptibility of an asset to the impacts of bushfire.

Hazard Management Agency A public authority which, because of legislative responsibility or specialised knowledge, expertise and resources. Such organisations are detailed in State-level emergency management plans.

# Prescribed Burning

.Is low level cool and control fire within bushland for purposes of clearing ground fuel loads. These burns are conducted generally during the winter period to reduce any potential risks of the fire becoming out of control. Within WA prescribed burns are conducted by Bush Fire Brigades and the Department of Parks and Wildlife.

## **Tenure Blind**

A term used to encompass all different land ownerships, whether government or private.

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<sup>&</sup>lt;sup>1</sup> Australasian Fire and Emergency Service Authorities Council 2012, AFEC Bushfire Glossary, AFAC Limited, East Melbourne, Australia

# **Common Abbreviations**

APZ	Asset Protection Zone
BFARG	Bush Fire Advisory Reference Group
BRMP	Bushfire Risk Management Plan
ВоМ	Bureau of Meteorology
BFTA	Bushfire Threat Analysis
CBFCO	Chief Bush Fire Control Officer
CBD	Central Business District
DEMC	District Emergency Management Committee
DFES	Department of Fire and Emergency Services
DPaW	Department of Parks and Wildlife
FMP	Fire Management Plan
HSZ	Hazard Separation Zone
LEMA	Local Emergency Management Arrangements
LEMC	Local Emergency Management Committee
LG	Local Government
LMZ	Land Management Zone
OBRM	Office of Bushfire Risk Management
SEMC	State Emergency Management Committee
UCL	Unallocated Crown Lands
UMR	Unmanaged Reserves
WAPC	Western Australian Planning Commission

# **Executive Summary**

Bushfire is a real threat to the safety of residents and property within the coastal plains of Perth. A contributing factor to bushfires and their severity is governed by the amount of fuel available to burn. This Bushfire Risk Management Plan (BRMP) provides a basis for treating and reducing the risk of fire, reducing the fuel load and increasing community awareness of the risks associated with bushfire. Cockburn Sound is especially susceptible to build up of fuel loads by wet winters creating ground vegetation growth, and hot dry summers which dries growth and subsequently turning it into ground fire fuel commonly referred to as fuel load. The combination of reduced rainfall and warmer temperatures brought about by climate change and increasingly high fuel loads indicate an unprecedented bushfire risk, which within the last decade has seen a significant increase in the number, size and severity of bushfires in Western Australia (Department of the Environment). Management of this risk effectively and efficiently is required due seasonal timings of bushfires, increase of residents living in urban interfacing areas of bush land and treatment resources (both financial and resource) required to reduce the threat of bushfire.

Methods of measuring the risk were taken from a number of sources. Part of the BRMP development was to undertake physical fuel loading assessments across the City of Cockburn. The findings related to these fuel load assessments were factored into the overall risk assessment process that included data obtained by the Department of Fire and Emergency Services of bushfire historical trends, response times and water availability. The risk management process that underpins the BRMP is based on the AS/NZS ISO 31000:2009 Risk management – Principle and guidelines. Such an approach is consistent with the policies of the State Emergency Management Committee (SEMC).

Results of the fuel loading assessment carried out during the development of the BRMP, indicated fuel loads within the City of Cockburn Conservation Reserves were mostly consistent with what is considered typical for the type of vegetation measured. This assessment was compared to the DFES Visual Fuel Load Guide and the Forest Fire Behavior Tables for Western Australia commissioned by the Department of Conservation and Land Management (now Department of Parks and Wildlife). Partial areas of land outside of the legislative control of the City of Cockburn, has been considered at a higher risk due to remiss fire mitigation works in the past by non-prescribed departments of public service as defined under the *Bush Fires Act 1954*.

During the development of the BRMP, the City carried out an examination in areas at risk of bushfire and categorized the assets into four key areas; human, economic, environmental and cultural. Defining these categories gives this BRMP the ability to ensure the likelihood and consequence of a bushfire were accurately considered in relation to the specific asset.

Following the determination of the overall risk for each asset, the BRMP then assigns a treatment strategy which utilizes a tiered level approach. This allows for the appropriate escalation of treatments if a risk is not effectively mitigated whilst ensuring financial constraints on fire mitigation by all stakeholders is considered. The treatment tiers used within the BRMP are made up of common used mitigation types recommended by the Office of Bushfire Risk Management.

Once a treatment tier has been selected, this is then incorporated into the treatment register for completion by the appropriate land owner. The treatment register is a dynamic document 8

Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014 that is continually updated when the City is notified of completed treatment works by the relevant landowner.

Current legal limitations of the *Bush Fires Act 1954* do not give Local Government Authorities the authority to enforce mitigation works on state agencies referred to under the act as non-prescribed departments of public service. It is conceived there will be changes to this legal ambiguity in the future, with the current consideration of amalgamating several Acts into one Emergency Services Act that will bind state agencies to implanting mitigation works.

The BRMP does make a number of recommendations, most notably;

- Treatment recommendations on crown land
- Tier level treatment strategy
- Fire Control Order use on private and commercial land
- Community Engagement of bushfire awareness

The BRMP outlines key agencies involved in the implementation of this report, however, no memorandum of understanding or endorsement was sought at the completion of the BRMP. Specific information contained with the BRMP was provided to the City of Cockburn by the Department of Fire and Emergency Services, the accuracy of this information has been in verified by the City of Cockburn to the best of its abilities.

# **Chapter 1 Introduction**

## 1.1 Background

In the pursuant of the *Emergency Management Act 2005* the State Emergency Management Committee has the legislative requirement to compile hazard specific State emergency plans. The State Emergency Management Plan for bushfire (*Westplan - Fire*) instructs the requirements for an integrated Bushfire Risk Management Plan (BRMP) to be developed for each local government area. The BRMP should detail the treatment of bushfire related risk across all land tenures (State Emergency Management Committee, 2013). This BRMP has been prepared by the City of Cockburn in accordance with the requirements of *Westplan - Fire* and the Bushfire Risk Management Planning - Guidelines for preparing a Bushfire Risk Management Plan developed by the Office of Bushfire Risk Management (OBRM). The risk management process that underpins this Plan is based on the *AS/NZS ISO 31000:2009 Risk management - Principle and guidelines*. Such an approach is consistent with the policies of the State Emergency Management Committee (SEMC).

The BRMP is a strategic document that identifies assets valued by the community that are at risk of bushfire and details a recommended five (5) year program of coordinated multiagency treatments to address this risk. A suite of treatment strategies and actions have been incorporated (Appendix 1) into the BRMP to ensure that bushfire related risks are reduced across the City of Cockburn district.

The works programs identified within the BRMP *Treatment Schedule* (Appendix 3) should be undertaken by the landowner or relevant land manager(s). Whilst developing this BRMP, extensive consultation was undertaken with landowners and key agencies responsible for the implementation of the treatment strategies.

The City did not seek endorsement from individual agencies at the time of writing the BRMP. All treatment strategies related to crown land are a recommendation due to the limits of the current *Bush Fires Act of 1954 (as amended)*.

# 1.2 Aim and Objectives

The aim of the BRMP is to document a coordinated and efficient approach towards the identification and treatment of assets exposed to bushfire related risk within the City of Cockburn.

The objective of the BRMP is to effectively reduce bushfire related risk within the City of Cockburn in order to protect people and asset. Specifically, the objectives of this plan are to:

- Guide and coordinate a (tenure blind) bushfire risk management/mitigation program over a five (5) year period;
- Review the Treatment Schedule (appendix 3) annually;
- Document the process used to identify, analyse and evaluate risk, determine priorities and develop a plan to systematically treat risk;
- Facilitate the effective use of the financial and physical resources available for bushfire risk management activities;
- Integrate bushfire risk management into the business processes of the City of Cockburn, land managers and other agencies;

- Facilitate interaction between stakeholders in relation to bushfire mitigation;
- Clearly and concisely communicate risk in a format that is meaningful to stakeholders and the community; and
- Monitor and review the implementation of the BRMP, to ensure enhancements are made on an on-going basis.

# 1.3 Limits of Authority

Enforcement of the BRMP *Treatment Schedule* (Appendix 3) is limited by the *Bush Fires Act of 1954 (as amended)*. Current limitations within the act do not allow the City of Cockburn to enforce mitigation works on Crown Land owned by non-prescribed Departments of Public Service.

During the implementation of the BRMP, the City of Cockburn worked with State Agencies and relevant interested party's listed within the *Stakeholders List* (Appendix 4) to ensure all treatment strategies recommended were achievable without the need for compliance with enforcement.

At time of writing the BRMP, Department of Fire and Emergency Services is reviewing a possible amalgamation of the *Fire Brigades Act 1942, Bush Fires Act 1954* and the *Fire and Emergency Services Act 1998*. As part of this review the new Emergency Services Act may give Local Governments' the power to ensure land owners comply with mitigation works prescribed by the relevant Local Government Authority.

# 1.4 Authority to Develop a Bushfire Risk Management Plan

The authority for the development of the BRMP is detailed within *Westplan – Fire*, which details that the development of the BRMP for a Local Government Authority. During the planning process of the BRMP, advice was provided by the Department of Fire and Emergency Services – Office of Bush Fire Risk Management.

The City of Cockburn maintains a Bush Fire Advisory Reference Group (BFARG) to provide technical knowledge to the City's Elected Members and Officers. The BFARG will provide advice on the effectiveness and opportunities of improvement for the BRMP on a continuing basis.

The City of Cockburn Local Emergency Management Committee (LEMC) is established under Section 38 of the Emergency Management Act 2005. The LEMC is to advise and assist the Local Government with emergency management activities, reducing risks within the community and ensure that Local Emergency Management Arrangements (LEMA) are established for the Local Government area. The BRMP is considered a support plan which compliments the LEMA. Members of the City of Cockburn LEMC were given the opportunity to contribute where relevant.

# 1.5 Scope of the Bushfire Risk Management Plan

The BRMP strategically addresses bushfire related risk within the City of Cockburn. The outcome of the Strategic Risk Assessment provided in chapter 4 sets the context for the

Bushfire Risk Planning Area Risk assessments. The area covered by this BRMP encompasses all areas within the municipal boundaries of the City of Cockburn, exclusive of Carnac and Rottnest Island on recommendation by the Office of Bushfire Risk Management (Department of Fire & Emergency Services - Office of Bushfire Risk Management, 2014). Any assets identified during the Bushfire Risk Planning Area Risk Assessments and the subsequent treatment strategies developed are detailed within the Asset Risk Register (Appendix 2), Treatment Schedule (Appendix 3) and Maps (Appendix 7).

## 1.6 The Project Framework

A *Project Framework* was created to provide guidance during the conception of the BRMP. The *Project Framework* outlines the responsibility for development and key milestones to be achieved. The *Project Framework* is attached in Appendix 5.

# 1.7 Policy, Standards and Legislation

The following policy, standards and legislation were considered to be applicable to the development and implementation of the BMRP.

#### **1.7.1 Policies**

- State Emergency Management Policy 2.5 Emergency Management in Local Government Districts
- State Emergency Management Policy 2.9 Management of Risks
- State Emergency Management Plan Fire (WESTPLAN Fire)
- State Planning Policy
- Planning for Bushfire Protection Guidelines Edition 2
- City of Cockburn Community Engagement Framework
- City of Cockburn Local Emergency Management Arrangements 2011
- City of Cockburn Community Emergency Management Risk Management Plan 2009
- City of Cockburn Fire Control order (as amended)
- City of Cockburn Permit To Set Fire To The Bush (Fire Permit) (as amended)
- Local Planning Policy Bushfire Prone Areas (yet to be endorsed by council)
- City of Cockburn Policy Street Verge Improvements (AEW1)

#### 1.7.2 Standards

- AS/NZS ISO 31000:2009 Risk Management Principles and Guidelines
- AS 3959-2009 Construction of buildings in bushfire-prone areas
- City of Cockburn Town Planning Scheme No.3 (as amended)

 Bushfire Risk Management Planning – Guidelines for preparing a Bushfire Risk Management Plan (2014)

## 1.7.3 Legislation

- Bush Fires Act 1954
- Conservation and Land Management Act 1984
- Emergency Management Act 2005
- Environmental Protection Act 1986
- Fire Brigades Act 1942
- Fire and Emergency Service Act 1998
- Local Government Act 1995
- Wildlife Conservation Act 1950
- Bush Fires Regulations 1954
- Emergency Management Regulations 2006
- Land Administration Act 1997
- Rottnest Island Authority Act 1987
- Aboriginal Heritage Act 1972



# **Chapter 2 Risk Management Process**

The risk management processes followed in the development of the BRMP are in accordance with the international standard for risk management, AS/NZS ISO 31000:2009. This process is outlined in Figure 1.

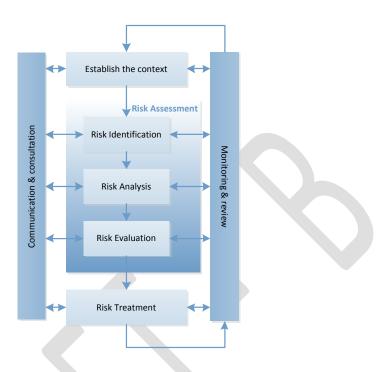


Figure 1 - An overview of the risk management process (AS/NZS ISO 31000:2009).

## 2.1 Communication & Consultation

As indicated in Figure 1, communication and consultation throughout the risk management process are fundamental to the preparation of an effective BRMP. The City's BRMP has been developed in consultation with the stakeholders identified in Appendix 4.

Stakeholder consultation with land owners and the community was facilitated through workshops and individual meetings with major land owners and managers within the City of Cockburn.

Public workshops were carried out for residents to provide feedback on how they perceive the City's mitigation strategies should be implemented. Key findings from the public workshops ware documented and provided as Appendix 6 of the BRMP.

## 2.1.1 Communication Strategy

To ensure that appropriate and effective engagement and communication occurred with relevant stakeholders, the following overarching strategies' were implement for the development of the BRMP:

- Ensure that specific and targeted communications occurs between the City of Cockburn, internal departments, land owners/managers and the community throughout the development of the BRMP;
- Ensure that relevant stakeholders who are essential to the BRMP process, or can supply the information required for the risk assessment process are identified, engaged and have a clear understanding of the BRMP;
- Ensure prominent stakeholders and land managers do not make judgements on the acceptability of a risk based on their own individual perception;
- Provide opportunity for the local Volunteer Bush Fire Brigades to provide input into the BRMP process;
- Improve the community's understanding of bushfire risk, the BRMP process and their appreciation of the way bushfire is managed across the City of Cockburn; and
- Ensure that the community's concerns and perception of bushfire risk are identified, understood and documented.

The views, concerns and issues expressed during the development of this BRMP, along with the subsequent actions taken, have been documented in an *Issues Register*. Any significant issues that remain unresolved have also been noted in the *Issues Register* for the City's officers to address as and when appropriate. The *Issues Register* was not released within the BRMP on advice from the Office of Bushfire Risk Management (Department of Fire & Emergency Services - Office of Bushfire Risk Management, 2014).

# **Chapter 3 Establishing the Context**

# 3.1 Description of the Bushfire Risk Management Plan Area

## 3.1.1 Location, Boundaries and Land Tenure

The City of Cockburn is located in Perth's outer southern suburbs approximately 15 kilometres from the Perth CBD. The City of Cockburn is bounded by the Cities of Fremantle, Melville to the north and the Cities of Canning and Armadale to the east, the City of Kwinana to the south and the Indian Ocean to the west. The City of Cockburn Local Government boundaries includes Rottnest Island and Carnac Island, located 18 and 10 kilometres retrospectively off shore to the west.

The Rottnest Island Authority is a statutory non-government agency established by the Western Australian State Government to maintain day to day operation of the island. Carnac Island is an un-inhabited island and is principally managed by Department of Parks and Wildlife.

The City of Cockburn comprises of the suburbs of Atwell, Aubin Grove, Banjup, Beeliar, Bibra Lake, Cockburn Central, Coogee, Coolbellup, Hamilton Hill, Hammond Park, Henderson, Jandakot, Leeming (part of), Munster, Port Coogee, North Coogee, North Lake, South Lake, Spearwood, Success, Wattleup and Yangebup.

The City of Cockburn land ownership by State Agencies makes up a total of approximately 41.84 per cent of the total land holdings within the City of Cockburn, the balance remaining is made up of private and corporate freehold land. Due to the ongoing expansion of urban areas no current percentile of residential vs. rural areas would be correct for the lifetime of the BRMP. Table 1 lists the top seven agencies by land holding size. The Department of Parks and Wildlife manage land on behalf of the Conservation Commission of WA.

Relevant Agency	Percentile of Land Managed within the BRMP Area		
City of Cockburn	9.83 (approximately)		
Conservation Commission of WA (DPaW)	8.80		
WA Planning Commission	6.52		
Commonwealth of Australia (Jandakot Airport)	4.18		
WA Land Authority	2.40		
Department of Lands	2.37		
Water Corporation	1.62		

Table 1 - Overview of government Agency Land Tenure within the City of Cockburn

#### 3.1.2 Climate and Bushfire Season

Perth is characterised as having a mediterranean climate as it experiences warm dry summers and cool wet winters. Table 2 shows the monthly rainfall for the past 4 years and clearly shows the pattern of wet winters and dry summers. Chart 1 shows the historical average (1900 – 2013) of rainfall within the Perth metropolitan district. The predominant winds in the summer months are generally easterly to north easterly changing to southwesterly in the afternoon (Bureau of Meteorology, 2014).

In Perth and surrounding coastal areas, the fire risk is greatest from summer through autumn, when the moisture content in vegetation is low. Summer and autumn days with high temperatures, low humidity and strong winds are especially conducive to the spread of fire (Blanchi, 2010). This risk of bushfires is enhanced if thunderstorms develop, accompanied by lightning with little or no rain.

The Bureau of Meteorology (BoM) states that extreme fire weather conditions in the Perth region typically occur with strong easterly or north easterly winds associated with a strong high to the south of the state and a trough offshore. Easterly winds represent about 60 per cent of extreme fire weather days, compared to less than 5 per cent associated with southerly winds (Bureau of Meteorology, 2014).

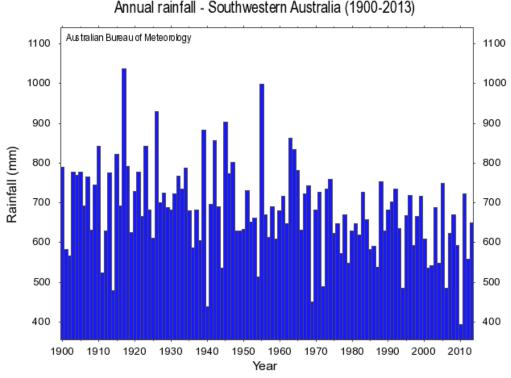
Extreme weather conditions often follow a sequence of hot days and easterly winds that culminate when the trough deepens near the coast and moves inland. Winds can change from easterly to northerly and then to westerly during this sequence of climatic events (Blanchi, 2010).

Jul Mar Aug Sep Nov Year Jan Feb Apr May Jun Oct Dec Annual **2010** 0.2 0.0 36.6 49.8 91.0 65.6 106.8 74.6 32.4 21.4 6.6 10.8 495.8 2011 31.4 0.0 0.0 34.2 85.6 203.2 181.0 136.2 114.4 59.0 31.6 39.0 915.6 2012 12.8 16.6 0.2 69.4 53.6 168.4 34.6 100.6 114.2 17.4 67.8 28.8 684.4 2013 51.2 165.2 173.2 6.4 1.6 61.6 19.2 164.2 194.6 40.4 9.4 2.0 889.0

Table 2 - Rainfall average within the City of Cockburn

(Bureau of Meteorology, 2014)

Chart 1 - Annual rainfall - South West Land Division - Western Australia



Annual rainfall Courthurs at arm Australia (1000, 2012)

(Bureau of Meteorology, 2014)

#### 3.1.3 Vegetation

The City of Cockburn is located within the South West Botanical Province of Western Australia which is recognised as one of the world's top 25 biodiversity hotspots (Natural Heritage Trust, 2003). Biodiversity hotspots are areas that support natural ecosystems that are largely intact and where native species and communities associated with these ecosystems are well represented. They are also areas with a high diversity of locally endemic species, which are species that are not found or are rarely found outside the hotspot (Department of Environment, 2014).

South West Botanical Province of Western Australia has been recognised as globally significant not only because of the wide diversity of plants, animals and habitat types that are highly endemic but because of the multiple threats they are exposed to. (Natural Heritage Trust, 2003)

Within the City, contains a population of *Caladenia huegelii* (a rare orchid), in addition of nine species considered to be 'significant flora' by the Department of Parks and Wildlife. Significant flora is defined as species at varying risks of extinction, depending on their classification. (City of Cockburn, 2000)

There is a range of vegetation types and floristic communities within the City's boundaries. Within the City six different vegetation complexes are represented. The most western section supports coastal vegetation and coastal heath underlain by limestone outcrops. (City of Cockburn, 2012)

Numerous wetlands are found throughout the City and support *Melaleuca* (Paperbark) and native sedge vegetation communities. The eastern parts of the City support predominantly *Banksia Eucalypt* Woodlands which are highly diverse in their floristic makeup and an example of a Priority Ecological Community. Vegetation which supports several threatened flora and fauna species, such as *Carnaby Black Cockatoos*, are also located within the City's reserves. Thomson and Banganup Lakes are in very good condition with an intact vegetation structure, more than 80 per cent native vegetation coverage and limited signs of disturbance. Smaller remnants with greater boundary to area ratios are generally more disturbed. (City of Cockburn, 2012)

See Map 0:02 for site specific overview of environmental areas activity managed by the City of Cockburn.

## 3.1.4 Population and Demographics

Between 2011 and 2031, the population for the City of Cockburn is forecast to increase by 36,000 persons (27.48 per cent growth), at an average change of 1.62 per cent per annum (Forecast Id, 2014).

The City of Cockburn has as an aging population, 14.1 per cent of residents are over 60 years of age. The City's younger residents of 14 years and under represent 21.4 per cent (Australian Bureau of Statistics Census 2011). Combining these figures indicate the ratio of at risk residents that may be more likely to fall susceptible to smoke related illness during bushfires or controlled burns (Department of Health (Victoria), 2012). At risk populations have also been noted to need special consideration during emergency events similar to that of bushfires (Cornell, 2014).

The City of Cockburn includes residents from Cultural and Linguistically Diverse (CALD) backgrounds, of which over 18 per cent of all residents living within the City of Cockburn were born in countries where English is not their first language (Forecast Id, 2014).

Table 3 - Population by suburb Table 4 - Population by suburb

Area	2011	2016	2021	2026	2031	Total change	Avg. annual % change
City of Cockburn	95,315	109,173	119,840	126,856	131,428	+36,113	1.6
Atwell	9,146	9,196	8,686	8,358	8,151	-995	-0.6
Aubin Grove - Banjup	5,875	8,015	9,002	8,847	8,570	+2,695	1.9
Beeliar	6,266	8,336	8,749	8,674	8,502	+2,236	1.5
Bibra Lake	6,370	6,449	6,448	6,455	6,519	+149	0.1
Coogee/ North Coogee	4,973	6,914	9,524	11,509	13,206	+8,233	5.0
Coolbellup	5,246	5,322	5,310	5,363	5,421	+175	0.2
Hamilton Hill	10,519	10,756	10,918	11,173	11,843	+1,324	0.6
Hammond Park - Wattleup - Henderson	3,133	5,597	8,338	9,414	9,253	+6,120	5.6
Jandakot	2,895	2,874	2,930	2,972	3,008	+113	0.2
Leeming (part)	2,284	2,167	2,133	2,097	2,105	-179	-0.4
Munster	3,711	4,504	5,132	5,535	5,667	+1,956	2.1
North Lake	1,345	1,428	1,520	1,527	1,531	+186	0.6
South Lake - Cockburn Central	7,129	7,862	9,551	12,205	14,605	+7,476	3.7
Spearwood	9,678	10,084	10,660	11,113	11,278	+1,600	0.8
Success	9,033	11,116	12,019	12,659	12,877	+3,844	1.8
Yangebup	7,589	8,416	8,785	8,822	8,764	+1,175	0.7

(Australian Bureau of Statistics, 2012)

# 3.1.5 Economic Activities and Industry

The City of Cockburn is a growing residential area, with substantial rural-residential areas, significant industrial and commercial areas. Most rural land is used for market gardening and hobby farming, much of which is located over the Jandakot Ground Water Mound (Map 0:04).

State Planning Policy 2.3 stipulates the types of protection, usage and clearing that can be undertaken within the Jandakot Ground Water Mound.

Key employment sectors within the City of Cockburn, are manufacturing, retail and education. Ship building and limestone quarrying are other important industries, with major industrial areas located in Bibra Lake, Cockburn Central, Henderson, Jandakot Airport and North Coogee. The suburb of Henderson is home to the Australian Marine Complex, one of the largest ship building precincts in Australia. The City has three main retail centres (Cockburn Gateway, Lakelands and Phoenix shopping centres) and one tertiary institution (Challenger TAFE) located in Henderson.

## 3.1.6 Bushfire Frequency and Causes of Ignition

The City of Cockburn contains a variety of native vegetation types. The majority of which is banksia eucalypt woodland. Much of this vegetation has become degraded due to past land uses resulting in weed invasion by non-native species. The majority of the non-native species are grasses which significantly increase the bushfire risk. These grasses increase the risk of fast moving and intense bushfires that threaten life, property and the environment. (Dr. D Simberloff, 2011)

Ignition frequency of unplanned fires can vary from seasonal conditions and location. It is believed a majority of fires within the City of Cockburn may have been contributed to human interference relating to arson. Most events of arson within the City are believed to be carried out within or close too residential areas. However, the frequency of arson within semi-rural areas may be higher than what is expected due to the difficultly in identifying fires ignition causes within these areas.

The presence of grasses in bush land areas, road reserves and public open spaces also adds to the likelihood of fires being started by accidental, deliberate or through natural causes. There is an on-going need to effectively manage grass fuels to help minimise the risk of fire (Attorney-General's Department, 2014).

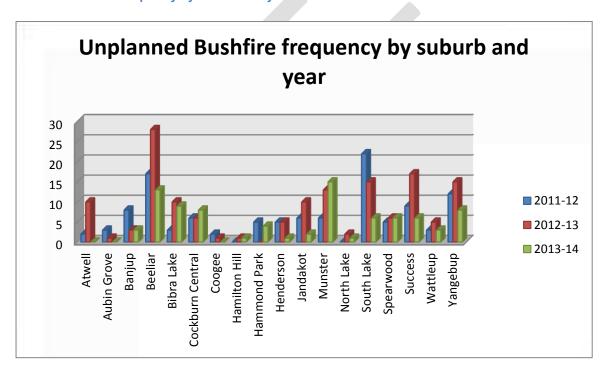


Chart 2 - Bushfire Frequency by suburb and year

Planned fires, utilising the City's Fire Control Order and permit system accounts for the majority of fires within the City's rural land holdings. The permit system is heavily utilised by many residents, with 532 permits issued within the 2012/2013 financial year by the City's Rangers Department. With the newly prescribed allowance on non-permit lawful burns of fuel load piles less than 1 cubic metre, it is expected the number of permits may drop over the restricted burning period, however the number of fires (especially less than 1 cubic metre) will increase.

# **Chapter 4 Strategic Risk Assessment**

A Strategic Risk Assessment has been undertaken across the entire City of Cockburn. This assessment was used to identify the order of which the bushfire risk planning areas were prioritised for a treatment strategy to be implemented.

# 4.1 Strategic Risk Assessment

In order to undertake the Strategic Risk Assessment, the City of Cockburn was divided into six bushfire risk planning areas. These areas are identified as being vulnerable to bushfire and require more detailed assessment using the bushfire risk assessment process.

The Strategic Risk Assessment Table (table 4) was used to conduct a broad scale assessment of each bushfire risk planning area to determine their priority for further assessment.

Table 4 - Strategic Risk Assessment Table

	Low	Minor	Moderate	Major	Catastrophic
BFTA: Combined Layer Fire Behaviour Layer Ignition Risk Layer Response Times Values at Risk	Average is LOW Average is LOW Average is LOW Average is LOW Average is LOW	Average is MINOR Average is MINOR Average is MINOR Average is MINOR Average is MINOR	Average is MODERATE	Average is MAJOR Average is MAJOR Average is MAJOR Average is MAJOR Average is MAJOR	Average is CATASTROPHIC Average is CATASTROPHIC Average is CATASTROPHIC Average is CATASTROPHIC Average is CATASTROPHIC
Previous Bushfire Risk Planning	Final plan in place Coordinated treatment works have been completed	Final plan in place Coordinated treatment works progressively being implemented	Draft plan Uncoordinated treatment works undertaken	No plan of any type Uncoordinated treatment works undertaken	No plan of any type No treatment works implemented
Population vulnerable to Fire	1-100	101 – 1,000	1,001 – 10,000	10,001 – 100,000	>100,000
Topography	Flat Dry terrain No vehicle access issues	Gentle slope or undulation No issues for 4WDs or machinery	Moderate slope or undulation Minor access issues for 4WDs	Significant slope or undulation Severe issues for 4WDs Some machinery limited or impeded	Steep terrain or large wet, boggy areas No access for 4WDs Machinery severely impeded
Access	Multiple access roads All sealed roads, duel carriageways	2 or more access roads that are sealed, duel carriageways	Single access road that is a sealed duel carriageway	Single lane sealed road/s only access to and from community	Limited or no access.
Water Supply	Reliable reticulated water supply	Reticulated water supply, limited pressure or feed issues	Alternative water supply located in close proximity	Alternative water supply located a some distance away	No emergency water supply
Fuel Loads	Low fuel loads	Moderate fuel loads Good APZs and HSZs implemented	Moderate fuel loads	High fuel loads Limited APZs or HSZs implemented	High fuel loads No APZs or HSZs implemented

Bushfire risk has been identified using a combination of the State-wide Bushfire Threat Analysis (BFTA) - February 2013 maps provided by the Department of Fire and Emergency Services and using accredited physical fuel load assessment techniques. The Fuel loading results are available in Appendix 9 & 10 of the BRMP. The risk ratings have been developed in accordance with AS/NZS ISO 31000:2009 Risk Management Principles and Guidelines (Figure 1).

The following analyses from the DFES BFTA assessments were taken into consideration:

- Combined Likelihood and Consequences
- Fire Behaviour

- Ignition Risk
- Response Times
- Values at Risk

The BFTA defines risk in terms of the likelihood of occurrence of a bushfire, and the subsequent consequences should the event of bushfire occur. The analysis applies both quantitative and qualitative assessments based on the best available data.

Using the results of the Strategic Risk Assessment outlined in table 4 the bushfire planning areas were organised into a list or priority areas, these areas are listed within Table 5 below.

Table 5 – Bushfire Planning Area Order of Priority

Bushfire Risk Planning Area	Priority Assigned
Banjup/Atwell (Planning area 1)	1
North Lake – Yangebup Lake (Planning area 6)	2
Jandakot / Banjup north (Planning area 2)	3
Beeliar Regional Park (Planning area 4)	4
Southern Coast to Hammond Park (Planning area 3	5
Coastal strip (planning area 5)	6
Indiscriminate Pocketed Hazards (planning area 7)	7

Map (0:01) indicates the boundaries of those bushfire risk planning areas identified within the City of Cockburn.

# Chapter 5 Bushfire Risk Planning Area Risk Assessment

## 5.1 Bushfire Risk Planning Area Risk Assessment

The results of the Bushfire Planning Area Risk Assessments undertaken to date are shown in the *Asset Risk Register* and *Treatment Schedule*, attached as Appendix 2 and 3 retrospectively. Further assets and treatments may be added to the Asset Risk Register and Treatment Schedule as the BRMP progresses.

#### 5.2 Asset Identification

All assets identified during the BRMP planning process have been added to the City's Geographic Information System (GIS) - Emergency Management Layer to support the City's Emergency Management staff provide key information to Hazard Management Agencies in the event of a bushfire or other emergency events within the planning area of the BRMP.

#### **5.2.1 Human Settlement**

Human settlement assets have been identified, mapped and listed in the *Asset Risk Register* including:

- Residential areas, including rural properties and urban interface areas;
- Places of temporary inhabitants including commercial and industrial areas locations.
- Special risk and critical facilities such as aged care facilities, schools and childcare facilities, tourist accommodation and facilities, designated evacuation centres, fire stations and police stations.

#### 5.2.2 Economic

Economic assets have been identified, mapped and listed in the *Asset Risk Register*, including:

- Agricultural including pasture, livestock, and other farming;
- **Commercial and industrial** sites including major industries, waste treatment plants, mills and processing/manufacturing facilities;
- **Critical infrastructure** including power lines and substations, water and gas pipelines, telecommunications infrastructure, railway lines,
- Tourist and recreational sites;
- Drinking water catchments.

#### **5.2.3 Environmental**

Environmental assets have been identified, mapped and listed in the *Asset Risk Register*, including:

- **Endangered**, Rare and threatened flora and fauna, ecological communities and protected wetlands;
- Vulnerable, fire sensitive species and ecological communities; and

• **Locally important**, nature conservation and research sites, habitats, species and communities considered to be of local importance.

#### 5.2.4 Cultural

Cultural assets have been identified, mapped and listed in the *Asset Risk Register*, including:

- Aboriginal heritage, places of indigenous significance;
- Non-indigenous heritage, places of non-indigenous significance; and
- Other cultural assets, community cultural assets such as halls, community centres, clubs, places of worship and recreation facilities.

# 5.3 Assessing Likelihood

The likelihood of bushfire risk for all assets is defined as the chance of a bushfire igniting, spreading and reaching the asset. The assessment methodology used to determine the likelihood rating is the same for each asset category; Human Settlement, Economic, Environmental and Cultural. The process for determining the likelihood rating for all asset categories is detailed below.

There are four possible likelihood ratings: unlikely, possible, likely and almost certain.

**Table 6 Likelihood of Fire** 

	Fires are not expected to spread and reach assets	· · · · · · · · · · · · · · · · · · ·
Fires occur frequently	Possible	Almost certain
Fires occur infrequently	Unlikely	Likely

Due to the challenges in obtaining consistent Fire history data (ignition), the use of local knowledge and an understanding of the landscape were used to determine the likelihood of a bushfire occurring. Where data is not available, subjective estimates were used which reflect the degree of belief that a bushfire will occur. The Likelihood rating within this BRMP should be considered in the context of longer term planning and not simply if a bushfire is likely to occur in the next few years.

# **5.4 Consequence Rating**

For the purpose of the BRMP, consequence is described as the outcome or impact of a bushfire event. The assessment methodology used to determine the consequence rating is different for each asset category; Human Settlement, Economic, Environmental and Cultural.

## **5.4.1 Human Settlement**

The methodology for determining the consequence rating for human settlement assets is detailed below. To determine the consequence rating for a human settlement asset, the following must be considered:

## Threat

The threat posed by the hazard (vegetation); and

#### Vulnerability

The vulnerability of the asset.

#### **Threat**

The bushfire threat category for an asset is calculated using a quantified bushfire threat assessment model. The model uses a process similar to the existing bushfire attack assessment methodology for the calculation of a Bushfire Attack Level (BAL)(AS3959). The methodology is based on a set of bushfire behaviour and radiant heat flux prediction models, incorporating recent bushfire research findings.

To enable the bushfire threat assessment model to calculate the bushfire threat category for a human settlement asset, the following information was taken into consideration:

## Vegetation category

The vegetation categories have been taken from the Australian Standard AS3959-2009 Construction of buildings in bushfire prone areas. The descriptions for each category are provided in Appendix 8 of the BRMP.

#### Slope category

As fire travels slower down a hill, all classified vegetation that is upslope will assume a value of  $0^{\circ}$  (i.e. flat land). Where the slope is considered to be a down slope, the degrees will need to be measured. The slope of the land under the classified vegetation was considered more important than the slope of the land between the edge of the classified vegetation and the asset, as the slope of the land under the classified vegetation has a direct influence on the potential fire behaviour.

When determining the slope category there are two (2) areas where the slope was considered; the effective slope in the land under the classified vegetation, and the slope of the land between the asset and the classified vegetation.

There are five (5) slope categories considered (table 7), as per recommendation from the Office of Bushfire Risk management (Department of Fire & Emergency Services - Office of Bushfire Risk Management, 2014).

**Table 7 - Slope Category** 

Slope Categories	Description of degrees
Upslope: All upslope and flat land	No degrees
Downslope: 0 – 5 degrees	Level ground
Downslope: > 5 – 10	degrees Easy to walk, but cycling is difficult—moderate to walk, too steep for cycling
Downslope: > 10 – 15	degrees Moderate to walk, too steep for cycling—hard climb, limit of 2WD roads
Downslope: > 15 degrees	Difficult to climb

### Separation distance.

Separation distance was based on the distance to the nearest point of the vegetation that has been assessed as the hazard. For assets such as suburbs where there are multiple houses being assessed together and there is a range of distances between the houses and the hazard, use the distance of the closest house(s).

Once the vegetation category, slope category and separation distance information have been determined the assessment methodology for the calculation of a Bushfire Attack Level (BAL)(AS3959) can be used to calculate the threat category. There are four (4) categories of threat: low, medium, high and very high.

**Table 8 Overall Threat** 

Threat	Low	Medium	High	Very High

#### **Vulnerability**

The vulnerability of human settlement assets is based on the susceptibility of an asset to the adverse effects of a bushfire. Vulnerability was determined using Table 9 below. There are three categories of vulnerability: low; moderate and high. The vulnerability category which best describes the estimated vulnerability of the asset should be selected.

**Table 9 Vulnerability of human settlements** 

Category	Description
Low vulnerability	<ul> <li>Area has had targeted community education programs.</li> <li>Properties are prepared (e.g. APZs are maintained, gutters are cleaned, and flammable objects are located away from hazards and buildings).</li> <li>Adequate access and egress.</li> </ul>

Category	Description			
	<ul> <li>Residents/owners likely to be able to</li> </ul>			
	defend their own property.			
	Adequate water supply.			
	The majority of homes/structures meet			
	current construction standards for building in			
	bushfire prone areas.			
	Note: Special Risk and Critical Facility assets			
	will not be assessed as low vulnerability.			
Moderate	• Area has had targeted community			
vulnerability	education programs.			
	Properties are not prepared.			
	Adequate access and egress.			
	Residents/owners likely to be able to			
	defend their own property.			
	Adequate water supply.  Note: Special Disk and Critical Facility assets.			
	Note: Special Risk and Critical Facility assets			
	must have fire relocation plans in place to be assessed as moderate vulnerability.			
High	No recent or targeted community education			
vulnerability	programs or programs have been ineffective.			
valliciability	Properties are not prepared.			
	Inadequate access or egress.			
	<ul> <li>Residents/owners unlikely or unable to</li> </ul>			
	defend their own property.			
	<ul> <li>Inadequate water supply.</li> </ul>			

During the development of the BRMP several occasions arisen where, using the examples outlined in Table 9, an asset will fall into more than one vulnerability category. For example, an asset may have targeted community education programs (low and moderate vulnerability categories) but have inadequate water supply (high vulnerability category). In these cases it was determined which vulnerability category was the most applicable.

The category with the most number of relevant examples was chosen. For instance, if an asset fits four (4) of the examples in the low vulnerability and two (2) in the moderate, the vulnerability was determined as low. If there is a 50/50 split between two categories, then the highest valued category was applied (i.e. if split between low and moderate, then moderate was applied). If the vulnerability was split between low and high, then a half-way point may be chosen and a moderate rating applied. A precautionary approach was taken and where in doubt the higher vulnerability category selected.

#### **Consequence**

The consequence rating for human settlement assets is determined using Table 10 once the threat and vulnerability categories have been determined. There are four (4) categories for consequence: minor, moderate, major and catastrophic.

**Table 10 Consequence Assessment** 

Threat	Low	Medium	High	Very High
Vulnerability				
High Vulnerability	Moderate	Major	Catastrophic	Catastrophic
Moderate Vulnerability	Minor	Moderate	Major	Catastrophic
Low Vulnerability	Minor	Minor	Moderate	Major

#### 5.4.2 Economic

The methodology to be used to determine the consequence rating for economic assets is detailed below. There are four (4) possible consequence ratings: minor, moderate, major and catastrophic. To determine the consequence rating for economic assets, the following must be considered:

## Level of Impact

The relative importance of the asset and the implications on the economy; and

## Recovery Costs

The capacity of the asset to recover from the impact of a bushfire.

# Level of impact

The level of impact refers to the relative importance of the asset and the implications on the economy as a result of bushfire impact. There are three (3) categories: Local, Regional and State. Table 11 provides descriptions for the level of impact categories across five (5) key sectors: people (P), infrastructure (I), public administration (PA), environment (En) and economy (E).

**Table 11 Level of impact table** 

Level	Scope	Description of impact	
	State	P Health system unable to cope. General displacement of people beyond capacity of the State. State personal support systems unable to cope. 10+ lives lost as a direct result of bushfire, hundreds injured, 300+ houses damaged or destroyed, 500+ people displaced, 10,000+ livestock lost, significant loss of breeding stock.	
		Loss of critical infrastructure and/or services for 24–48 hours to the Perth metropolitan area. Loss of services to a major regional centre or several suburbs for up to 1 week.	
		PA Significant state-wide outrage. Formal inquiry commissioned at State level or above leading to changes in policy and practice.	

Level	Scope	Description of impact	
_LCVCI		En	Permanent total loss of one or more ecosystems or critical habitat
			elements. Extinction of a species or significant increase in the likelihood
			of extinction to "almost certain" meaning that intervention measures
			such as captive breeding programs are required. Loss of significant
			State cultural assets.
		Е	Total costs of \$1B or 30% of State Revenue. Damage costs including
			legal action and/or industry impacts (tourism, forestry, wine and grapes
			etc) to the value of more than \$300M.
2	Regional	Р	Health system operating at surge capacity; under severe pressure.
			Displacement of people within capacity of the State to cope. State
			personal support systems operating at maximum capacity. 5–10
			fatalities as a direct result of the bushfire event, large number of people
			affected by smoke or trauma, 100+ homes damaged or destroyed, 200+
			people displaced and 3,000–10,000 livestock lost.
		I	Loss of critical infrastructure and/or services for up to 2–5 hours to the
			Perth metropolitan area. Loss of services to a major regional centre or
			several suburbs for 3–4 days.
		PA	Some outrage at local and regional levels.
		En	Long term disturbance to one or more ecosystems or critical habitat
			elements. National response and/or support for animal welfare. Loss of
		_	regionally significant cultural asset.
		Е	Damage costs including legal action and/or industry impacts (tourism, businesses etc) to the value of more than \$100M.
1	Local	Р	Health systems operating at optimum capacity levels. Displacement of
•	Local		people within regional capacity to cope. Personal support needs being
			met. Single fatality and/or multiple serious injuries requiring
			hospitalisation as a direct result of the bushfire event, up to 30 houses
			damaged or destroyed, 50+ people displaced and up to 3,000 livestock
			lost.
		I	Loss of critical infrastructure and/or services for up to 1 hour to the
			Perth metropolitan area. Loss of services to a major regional centre for
			1 day. Loss of services to a community for a week.
		PA	Local outrage and concern.
		En	Temporary disturbance to one or more ecosystems or critical habitat
			elements. Local response and/or support for animal welfare.
		Е	Damage costs including legal action and/or industry impacts (tourism/
			businesses etc) to the value of more than \$30M or complete loss.

## **Recovery Cost**

Recovery is described as the capacity of the asset to recover from the impacts of a bushfire event. This includes expenses associated with re-establishment, repair or rebuilding, lost production time or downtime, service disruption, lost revenue, decreased activity, provision of support and recovery services or any other recovery activities that incur a cost to the economy.

There are three (3) categories of recovery costs: low, moderate and high. Table 12 provides a description of the recovery costs categories.

**Table 12 Recovery cost table** 

Category	Time Period	Description
High Recovery Costs	Months to years	Recovery is difficult without significant financial support over an extended period of time (approximately to the value of more than \$300M).
Moderate Recovery Costs	Weeks to a month	Additional financial support required for a short time period (approximately to the value of more than \$100M).
Low Recovery Costs	Hours to days	Minimal financial support required within a couple of hours (approximately to the value of more than \$30M or complete loss).

## Consequence

The consequence rating for economic assets is determined using Table 13 once the level of impact and recovery costs have been determined. There are four categories for consequence: minor; moderate; major; and catastrophic.

**Table 13 Consequence - Economic** 

Level of Impact Recovery Cost	Local	Regional	State
High Recovery Cost	Major	Major	Catastrophic
Moderate Recovery Cost	Moderate	Major	Major
Low Recovery Cost	Minor	Moderate	Moderate

#### 5.4.3 Environmental

The methodology to be used to determine the consequence rating for environmental assets is detailed below. There are four possible consequence ratings: minor, moderate, major and catastrophic.

To determine the consequence rating for an environmental asset, the following must be considered:

#### Vulnerability

The vulnerability of the asset, based on its conservation status and the geographic extent; and

#### Potential impact of fire

The potential impact of a bushfire event or fire regime.

#### **Vulnerability**

The vulnerability of an environmental asset to an impact from bushfire is based on its conservation status and the geographic extent.

#### **Conservation Status**

The conservation status provides an indication of the relative importance of an environmental asset and is based on the identification of the asset subcategory as determined in Table 14.

#### Geographic Extent

The geographic extent or distribution provides an indication of the uniqueness or rarity of a particular environmental asset. Species or communities which occur only in one or two local government areas state-wide are considered to warrant a more cautious approach and more investment of resources than species or communities which occur more frequently.

The geographic extent of environmental assets is determined using Table 14. There are three (3) categories of geographic extent: highly restricted, restricted and widespread.

**Table 14 Geographic Extent** 

Category	Description
Highly	The species or community is found in one (1) local government state-
Restricted	wide.
Restricted	The species or community is found in two (2) to four (4) local
	governments state-wide.
Widespread	The species or community is found in five (5) or more local government
	state-wide.

Table 15 should be used to determine the vulnerability of an environmental asset. The vulnerability rating refers to the susceptibility of an asset to the adverse effects of bushfire.

**Table 15 Environmental Vulnerability** 

Conservation Status Geographic Extent	Locally Important	Vulnerable	Endangered
Highly Restricted	Moderate	High	Very High
Restricted	Low	Moderate	High
Widespread	Low	Low	Moderate

## **Potential Impact of Fire**

The potential impact of a bushfire or fire regime is classified into three (3) categories: Fire sensitive, fire influenced and fire dependent. Table 16 explains in detail the characteristics associated with each regime category.

**Table 16 Characteristics of fire impact** 

Fire Degime	Fire Feelery Characteristics	Typical Fire Behaviour
Fire Regime Category	Fire Ecology Characteristics	Typical Fire Behaviour
Fire Sensitive/ Exclude Bushfire	Most species in 'Fire Sensitive' Ecological Vegetation Classes (EVCs) do not require fire for the maintenance of their ecological values. EVCs in this category that do require fire, only require fire at very long intervals (100+ years). Fire can damage these EVCs and recovery takes many years. When fires occur too frequently in these EVCs ecological values are lost and the EVC may be replaced by other EVCs.	Generally only burn under extreme fire conditions or following prolonged drought conditions. May act as a natural firebreak. Generally very difficult to burn under typical planned burning conditions.
Fire Influenced/ Restrict Bushfire	Many, but not all, species in 'Fire Influenced' EVCs require fi re to maintain their ecological values and species diversity; however fi re is generally only required at long intervals. These EVCs can tolerate fi re and will recover, however recovery takes longer than in 'Fire Dependent' EVCs. Repeated relatively frequent burning in these EVCs is likely to compromise ecological values and may change the EVC to another EVC.	May support high fuel hazard but only become available to burn under higher FDI conditions or during drier periods. Generally more difficult to burn than 'Fire Dependent' EVCs.
Fire Dependent/ No Conditions	Many species in 'Fire Dependent' (EVC) are fi re cued and require fire relatively frequently for their regeneration and persistence. In the absence of fire these EVCs are likely to decrease in species diversity and may change to another EVC. These EVCs recover quickly following a fi re. They can tolerate relatively frequent burning without compromising ecological values.	Generally burns readily under a wide range of weather conditions. Fuels generally dry out faster in these EVCs than others. Well suited to planned burning.

#### **Consequence**

The consequence rating for environmental assets is determined using Table 17, once the vulnerability and potential impact of fire have been established. There are four (4) categories for consequence: minor, moderate, major and catastrophic.

**Table 17 Environmental Consequence** 

Vulnerability	Low	Moderate	High	Very High
Potential Impact of Fire				
	Madanata	Maian	Maian	Cataatranlaia
Fire Sensitive/ Exclude	Moderate	Major	Major	Catastrophic
Fire				
Fire Influenced/ Restrict	Minor	Moderate	Moderate	Major
Fire				,
Fire Dependent/ No	Minor	Minor	Minor	Moderate
Conditions				

#### 5.4.4 Cultural

The methodology to be used to determine the consequence rating for cultural assets is detailed below. There are four (4) possible consequence ratings: minor, moderate, major and catastrophic. To determine the consequence rating for a cultural asset, the following must be considered:

#### Threat

The threat posed by the hazard (vegetation); and

#### Vulnerability

The vulnerability of the asset.

#### **Threat**

The bushfire threat category for an asset is calculated using a quantified bushfire threat assessment model. The model uses a process similar to the existing bushfire attack assessment methodology for the calculation of a Bushfire Attack Level (BAL)(AS3959). The methodology is based on a set of bushfire behaviour and radiant heat flux prediction models, incorporating recent bushfire research findings. To enable the bushfire threat assessment model to calculate the threat category for a cultural asset, the following information must be provided:

- Vegetation category;
- Slope category; and
- Separation distance

#### **Vulnerability**

The vulnerability of cultural assets is a measure of the susceptibility of the asset to the impact of fire and considers the asset's composition and structure. Assets that are unlikely to be affected by bushfire such as and stone remnants and indigenous importantly lakes were

still assessed within the BRMP; however the effect of vulnerability would be considered minimal.

**Table 18 Cultural Vulnerability** 

Category	Description	Aboriginal Heritage Examples	Non-indigenous Heritage Examples	Other Cultural Asset Examples
Low Vulnerability	The asset is likely to withstand most bushfires and/ or post fi re remediation is possible.	Aboriginal grinding grooves Water holes Artefact Stone arrangement Archaeological deposit Ceremonial Dreaming site Burial Conflict site	Stone buildings Stone bridges Cemetery	Stone buildings
Moderate Vulnerability	The asset is likely to be partially damaged by a bushfire. Postfire remediation not possible.	Aboriginal hearth Aboriginal art sales Ceremonial ring	Historic homesteads (involving wattle and daub as building material)	Community hall (involving wattle and daub as building material)
High Vulnerability	The asset is likely to be destroyed by bushfire.	Aboriginal habitation structure Modified tree	Historic homesteads (involving wooden material) Wooden bridges	Scout hall (involving wooden materials)

## Consequence

The consequence rating for cultural assets is determined using Table 19 once the threat and vulnerability have been completed. There are four categories for consequence: minor, moderate, major and catastrophic.

**Table 19 Cultural Consequence** 

Threat	Low	Medium	High	Very High
Vulnovohilitu				
Vulnerability				
High Vulnerability	Minor	Moderate	Major	Catastrophic
Moderate	Minor	Moderate	Moderate	Major
Vulnerability				·
Low vulnerability	Minor	Minor	Moderate	Moderate

# **5.5 Assessing the Consequence**

There are four (4) possible consequence ratings: minor, moderate, major and catastrophic. Table 20 provides a general description of each consequence rating for all asset categories.

**Table 20 Consequence Rating** 

Consequence Rating	Descriptions
Minor • No fatalities.	<ul> <li>Some minor injuries with first aid treatment possibly required.</li> <li>No persons are displaced.</li> <li>Little or no personal support (physical, mental, emotional) required.</li> <li>Inconsequential or no damage to an asset.</li> <li>Little or no disruption to community.</li> <li>Little or no financial loss.</li> </ul>
Moderate • Medical treatment required but no fatalities. Some hospitalisation.	<ul> <li>Localised displacement of persons who return within 24 hours.</li> <li>Personal support satisfied through local arrangements.</li> <li>Localised damage to assets that is rectified by routine arrangements.</li> <li>Community functioning as normal with some inconvenience.</li> <li>Local economy impacted with additional financial support required to recover.</li> <li>Small impact on environment/cultural asset with no long term effects.</li> </ul>
Major • Possible fatalities.	<ul> <li>Extensive injuries, significant hospitalisation.</li> <li>Large number of persons displaced (more than 24 hours duration).</li> <li>Significant resources required for personal support.</li> <li>Significant damage to assets that requires external resources.</li> <li>Community only partially functioning, some services unavailable.</li> <li>Local or regional economy impacted for a significant period of time with significant financial assistance required.</li> <li>Significant damage to the environment/cultural asset which requires major rehabilitation or recovery works.</li> <li>Localised extinction of native species (this may range from loss of a single population to loss of all of the species within the BRMP area (for a species which occupies a greater range than just the BRMP area).</li> </ul>

## **Catastrophic** • Significant fatalities. Large number of severe injuries. Extended and large number requiring hospitalisation. General and widespread displacement of persons for extended duration. Extensive resources required for personal support. Extensive damage to assets. Community unable to function without significant support. Regional or State economy impacted for an extended period of time and significant financial assistance required. Permanent damage to the environment. Extinction of a native species in nature (this category is most relevant to species that are restricted to the BRMP area, or also occur in adjoining BRMP areas and are likely to be impacted upon by the same fi re event). In

#### 5.6 Assessment of Bushfire Risk

A risk assessment using the methodology described within 5.4 and 5.5 of the BRMP has been undertaken for each asset identified during the Bushfire Risk Planning Area Risk Assessments (Department of Fire & Emergency Services - Office of Bushfire Risk Management, 2014). For each asset, the consequence and likelihood ratings have been determined and the subsequent risk rating calculated. *The Asset Risk Register* (Appendix 2) shows the consequence and likelihood ratings assigned to each asset identified.

captivity.

nature means wild specimens and does not

include flora or fauna bred or kept in

# **Chapter 6 Risk Evaluation**

#### 6.1 Evaluating Bushfire Risk

The risk ratings determined for each asset have been evaluated to confirm that the:

- Rating reflects the relative consequences of the bush fire risk to each asset;
- Likelihood and consequence ratings assigned to each asset are appropriate; and
- Local issues have been considered.

#### **6.2** Treatment Priorities

The treatment priority for an asset is linked to the risk rating the asset receives during its assessment. The consequence and likelihood ratings assigned to each asset have been used to determine the treatment priority for all the associated treatments linked to the asset. The treatment priority for each asset identified has been recorded in the *Asset Risk Register* (Appendix 3).

**Table 21 Treatment Priorities** 

Consequence	Minor	Moderate	Major	Catastrophic
Likelihood				
Almost Certain	3D	2C	1C	1A
Likely	4C	3A	2A	1B
Possible	5A	4A	3B	2B
Unlikely	5C	5B	4B	3C

Within the above (table 21) matrix, the risk ratings are identified numerically from one (1) to five (5) with priorities from highest (1) to lowest (5). One (1) represents an extreme risk which has the highest priority. Where there is a need to prioritise within the risk rating a letter is used to indicate the higher priority. For example, an asset with a treatment priority of 2A is higher than an asset with a priority of 2C, even though both assets have been assessed to have the same risk rating—very high.

## 6.3 Risk Acceptability

Risks of Medium and Low level were not considered to require specific treatment during the life of this plan, treatments were assigned as a best practice. These assets will be managed by routine local government wide controls and monitored in case of any significant change in risk. The annual review of this BRMP will take into account all factors that may change the risk outcome. Any asset that has a risk rating change during this review will be assigned a relevant treatment priority and mitigation strategy in consultation with the appropriate state land owner.

In most circumstances risk acceptability and treatment will be determined and/or carried out by the agency or agencies responsible for managing the land. However, as a general rule, the following courses of action have been adopted.

**Table 22 - Risk Acceptability** 

Risk Rating	Course of Action
Extreme	Immediate attention required (priority action required before the BRMP first annual review). Affected Community must be warned of the risk. Treatment of risk will be prioritised within the City's Fire Mitigation budget (on CoC Lands).
Very High	Action will be required during the period of this document (5 yrs.). Community at risk should be warned of the risk.
High	Actions may be required during the life of this document (5 yrs.).
Medium	Action may not be required during the life of this document (5 yrs.)
Low	Need for action is unlikely. Treatment solution to be provided as an option

The Risk acceptance noted in Table 22 was based on evidence of stakeholders' ability to reduce the risk across the City within their individual capacities of staffing and financial constraints.

Community feedback was sought through workshops. Residents attended and provided feedback based on their individual views of bushfire risk acceptability. The outcome appeared that most residents would like risk treated within acceptable financial, environmental and resource constraints.

## **Chapter 7 Bushfire Risk Treatment**

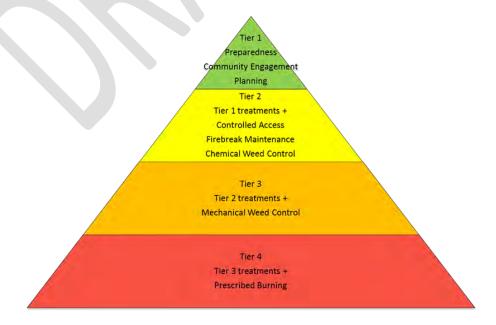
#### 7.1 Local Government Wide Controls

The following controls are currently in place across the City of Cockburn to assist in the strategic management of bushfire related risk:

- Enforcement of the *Bush Fires Act 1954*, including applicable fuel management measurement regimes, firebreak standards and annual inspection programs;
- Declaration of Prohibited Burn Times, Restricted Burn Times and Total Fire Bans for all land within the City of Cockburn;
- Public education campaigns including those developed by the City of Cockburn,
   DPAW and DFES state-wide programs tailored to suit local needs;
- Supporting a state-wide arson prevention programs developed in conjunction with WA Police and DFES;
- Setting of appropriate land subdivision and building standards in line with DFES,
   Planning Commission (WAPC) and Building Commission policies and standards;
- Performance monitoring and reporting of BRMP outcomes to the City of Cockburn Council and the Office of Bushfire Risk Management (OBRM) as required by Westplan - fire and the BRMP Guidelines;
- Effective management of bush land reserves vested with the City of Cockburn utilising a balance of treatment strategies to complement public safety and the environment where ever possible; and
- Undertaking audits on road reserves and other lands not strategic to the environment but reserved for other unspecified purposes under the management of the City of Cockburn.

## 7.2 Asset Specific Treatment Strategies

There are four tier specific treatment strategies that have been utilised to manage the bushfire risks identified in the Bushfire Risk Planning Area Risk Assessments, these are identified in image 1 (below).



**Figure 2 Treatment chart** 

#### Tier 1 Treatments

- Preparedness Treatments focus on providing suitable access and water supply arrangements that will assist the fire fighting operations.
- Community Engagement Treatments that seek to build relationships, raise awareness and change behaviours relating to the management of bushfire related risks within the community.
- Planning Treatments relate to the development of plans that will improve the ability
  of fire fighters and the community to respond to bushfire

#### Tier 1 Objectives

Tier 1 treatments objectives are to promote community awareness of bushfire within areas assigned this treatment strategy and continue the review of development plans for new subdivisions. Engagement activities will be reviewed annually and randomised community perception surveys will be distributed during this period. The City of Cockburn administration staff will oversee bushfire related community engagement activities. Development sites requiring a bushfire management plan will be approved by the City's planning department in consultation with the City's Chief Bushfire Control Officer. Relevant developer's plans will be assessed and a report submitted to the City's Strategic and/or statutory Planning Department's by the City's Chief Bush Fire Control officer for review. Community Engagement activities will be carried out on a continue basis leading up to and during the prohibited burning season.

#### Tier 2 Treatments

- Tier 1 treatments plus:
- Controlled Access Restricting unauthorised vehicle access by fencing, earth bunds or other control measures.
- Firebreak maintenance Installation of firebreaks to relevant standards including the use of limestone and bitumen.
- Chemical Weed Control Using approved herbicides to control weeds including Veldt Grass to reduce fuel loads.

### Tier 2 Objectives

In addition to tier 1 treatments and objectives, tier 2 treatments are carried in areas identified within the treatment schedule attached to the BRMP. The BRMP annual review of the treatment schedule with the appropriate State land managers will be carried out to establish an indicator of progress made. All City of Cockburn conservation reserves will have individual fire management plans updated by 1 November, each fire season. Fire management plans are to include firebreak maps and areas of chemical weed spraying has taken place. Land holdings enforceable by the *Bush Fires Act 1954* will be inspected by the City's Rangers to ensure all works prescribed within the *Fire Control Order* are completed to the standard outlined.

#### Tier 3 Treatments

- Tier 1 & 2 Treatments plus:
- Mechanical Weed Control Using mechanical means such as chainsaws, mowers and other appropriate equipment to control weeds and reduce fuel loads.

#### Tier 3 Objectives

In addition to tier 2 treatments and objectives, tier 3 treatments are carried in areas identified within the treatment schedule attached to the BRMP. The BRMP annual review of the treatment schedule in conjunction with the appropriate State land managers will be carried out to establish an indicator of progress made. Private, Commercial and prescribed departments (under the *Bush Fires Act 1954*) will be inspected by the City's Rangers to ensure all works prescribed within the *Fire Control Order* are completed to the standard outlined.

#### Tier 4 Treatments

- Tier 1, 2 &3 treatments plus:
- Prescribed mosaic burning Slow, cool burns in appropriate seasons to reduce fuel loads while maintaining ecological function. Sites are generally re-burnt every 10-12 years.

#### Tier 4 Objectives

In addition to tier 3 treatments and objectives, tier 4 treatments are carried in areas identified within the treatment schedule attached to the BRMP. The BRMP annual review of the treatment schedule in conjunction with the appropriate State land managers will be carried out to establish an indicator of progress made. Prescribed burning will only be undertaken if other measures to control fuel loads are deemed to be unsatisfactory by the City's Chief Bushfire Control Officer. Prescribed burning must be completed outside of the prohibited burning period, unless approval has been gained by the Minister for Emergency Services.

Smoke from prescribed burns can cause local air pollution and which has the potential to impact surrounding residents particularly those that suffer from respiratory problems. Ongoing prescribed burning in areas of close proximity to residential housing may require a targeted and specific community program.

#### 7.2.1 Evaluation of Treatments

Once a treatment is carried out by the applicable land owner or manager, it is important to ensure the overall risk has been reduced to an acceptable level. Land subjected to the *Fire Control Order* will be inspected by the City's Rangers during the prohibited burning season. Land own/managed by State Departments will be reviewed by the Chief Bushfire Control Officer or his delegate prior to the annual review of the BRMP.

Lands subject to the *Fire Control Order* will follow the Firebreak inspection policy approved by Council (*Completion of Firebreaks ACS5*). Lands not subject to the Order will have individual consultation between the City and Relevant Agency to attempt to reduce the risk and carried out the works required.

# 7.3 BRMP Community Engagement

The BRMP aim is not to outline each specific community engagement activity relating to bush fire. The BRMP outlines the type of engagement to be implemented during the BRMP lifetime. Engaging the community in the BRMP process and increasing awareness of bushfire amongst the community will increase the likelihood residents will be more prepared to reduce the risk of bushfire within the community.

Community engagement activities will follow the City of Cockburn's Community Engagement Framework as outlined in table 23.

**Table 23 Community Engagement Strategy** 

Strategy	Description	Goal	City of Cockburn
			Examples
Information	Mostly one-way, information flow in which the City of Cockburn disseminates and communicates information to stakeholders.	To provide stakeholders with information about decisions, policies, plans, events and issues.	advertisement within the Cockburn Gazette or email (where the Gazette is not delivered) Articles in the Cockburn Soundings The City provides information workshops to residents relating to bushfire and disaster
			preparedness
Consultation	A two-way consultative relationship between the City of Cockburn and its stakeholders in which the City invites and receives feedback on specific issues, policies, plans and events.	To capture stakeholder input and feedback to better inform decisions.	Community Perceptions Survey State Land Managers treatment schedule Survey Community dialogue workshops conducted at resident group meetings Community feedback and comments invited on proposed bushfire
Active Participation	A mutual and active partnership between the City of Cockburn and stakeholders, whereby stakeholders actively engage and shape policy while acknowledging that the final responsibility rests with the City.	To work jointly with stakeholders to shape policies, plans, events and issues.	Supporting community- led initiatives i.e. Volunteer Bushfire Brigades Bushfire Advisory Reference Group to advise on treatment solutions required or addition requirements to be undertaken.

#### 7.3.1 Guiding Principles for engagement

#### Commitment

Strong organisational commitment within the City of Cockburn to informing, consulting and facilitating active participation.

#### Resources

Adequate financial, human and technical resources to enable effective information, consultation and active participation. Where resources are limited, stakeholders to whom the policy, project, event or issue impacts the most are provided the greatest opportunity to access information, be consulted and actively participate.

#### Time

Adequate time, planning and preparation are provided to enable information, consultation and active participation. Ideally, stakeholders want early notification, advanced warning and adequate time to prepare, process and respond so that they can be informed, consulted and actively participate in matters that impact their lives.

#### Feedback

That the City of Cockburn accounts for the use it makes of stakeholders' input through the delivery of feedback.

#### Inclusive

That access to information, consultation and active participation accommodates minority and hard to reach groups.

#### Information

Access to information that is sufficiently detailed and appropriately pitched so that stakeholders have the capacity to be informed and understand the impact of policies, projects, events or issues. Both internal and external stakeholders feel that unless explanations and analyses of policies, plans, events and issues are provided, the opportunity to engage may be lost.

#### Purpose

Objectives for and limits to information, consultation and active participation are clear from the outset so that expectations and boundaries are clear. Regardless of the level of engagement, it is the City of Cockburn that is ultimately the responsible governing body.

#### Reflection

That the City of Cockburn maintains a consultation register and reporting system to ensure that it learns from community engagement activity.

#### Community Engagement is not about:

- promising to meet community needs and expectations all the time, because decisionmakers cannot keep everyone happy all the time;
- consulting on every single decision, because this may not be possible or feasible due to time constraints, budget restrictions or other factors; or
- assuming that everyone in the community will want to be engaged all of the time on every issue.

#### 7.3.2 Community Engagement Activity Examples

The below examples outlined within Information, Consultation and Active Participation have been provided as a guide on types of activities intended to be used during the life of the BRMP.

## **Information**

- Information guide to bushfire and BRMP for residents and smaller stakeholders
- Bushfire prevention information relating to rural property owners and occupiers
- Provide advice to residents on weed control
- Provide advice on how to comply with the City of Cockburn Fire Control Order
- Provide advice on fire retardant trees and the use of living firebreaks
- Provide advice to residents on the creation of Fire ready groups

#### **Consultation**

- Public Comment on the proposed Fire Control Order
- Public Comment on the Fire Permit system
- Provide bushfire advice to residents before the fire season of each year
- Establish a mechanism for community review of mitigation works undertaken
- Community surveys on fire related matters

#### **Active Participation**

- Ongoing use of the Bushfire Fire Advisory Reference Group and attendance by key volunteers of the City of Cockburn Volunteer Bushfire Brigades.
- Promote the recruitment of members into the City's Volunteer Bush Fire Brigades
- Attend local resident group meetings (when applicable) to discuss fire related matters.

## 7.4 Private/commercial land Fire treatment strategy

Fire mitigation on private and commercial land is enforced by the Council endorsed *Fire Control Order*. Prescribed works within the Order are to be completed by 1 November each year. In pursuant of *Section 33* of the *Bush Fires Act 1954*, failure to comply with the Order may result in an infringement, and a sub-contractor appointed to carry out the required works and reimbursement sought by the City to ensure a property is compliant to the *Fire Control Order*.

The City of Cockburn Council has endorsed *Completion of Firebreaks ACS5*, this policy outlines the inspection process, issuing of infringements and (if required) the appointment of contractors to carry out mitigation works.

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Variations of the *Fire Control Order* can be sought if the property owner is unable to comply with the Order. These variations must be approved by the City before 1 October if accepted. No retrospective approval process is in place by the City.

## 7.5 Verge Maintenance treatment strategies

Road verges in the City of Cockburn occupy an area equivalent to 25% of all City's parks combined.

During the development of the BRMP, available DFES data was analysed to assess the historical trends of verge fires and the approximate size of these fires prior to extinguishing. Results from this analysis, suggested ignition within these areas were predominantly via human interference. Reducing the stored fuel load on verges to a level of removing the threat of ignition (mineral earth) would be un-resourceful, aesthetical unappealing and reduce their use as ecological corridor for native fauna.

Rural grass verges maintained by the City of Cockburn, will have their fuel loads reduced prior to every prohibited burning season. Fuel loads should not exceed 0-5 Tonnes per Hectare for verges with sparse or no vegetative overstory.

Assets identified within the BRMP were assessed taking into account the fuel load levels of neighbouring verges when assessed during the development of the BRMP.

Ongoing monitoring during the prohibited burning period by the City's Fire Control Officers, Rangers and complaint by residents, will initiate a review of area specific verge hazards, relating the threat of bushfire.

#### 7.6 Treatment Selection Considerations

The Order of works recommended by the BRMP is the highest risk ratings identified within the *Asset Risk Register*, not by geographical area. Individual assets identified by the BRMP have been assigned appropriate treatment strategies taking into account the basic criteria set out in table 24 to ensure all treatment strategies' have assigned with a holistic view beyond personal perception.

**Table 24 Treatment criteria** 

Criteria	Consideration
Acceptability	The strategy is accepted by relevant stakeholders.
Administrative efficiency	The strategy easy to implement or will its application be neglected because of difficultly to administrate due to lack of expertise.
Capacity to undertake	The treatment option selected is achievable within the life span of the BRMP.
Compatibility	How compatible is the treatment strategy with others adopted by the BRMP.
Continuity of effects	Will the effects be continuous or short term and will the effects of this option be sustainable and if so at what cost.

Criteria	Consideration
Cost effectiveness	Will the treatment strategy be the most cost effective or could the same result be archived in a more cost effective manner by
	other means.
Economic and social	Ensuring the economic and social impacts of the treatment
effects	option is considered.
Effects on cultural assets	Assess the impacts on cultural assets.
Effects on the Environment	Will there be impacts on the environment. If so then alternative
	methods that will have less impact on the environment.
Judicial Authority	Do the stakeholders engaged have the authority to implement
	the treatment strategies.
Regulatory	Does the treatment strategy (or lack of) breach any regulatory
	requirements.
Political acceptability	Will the proposed treatment strategies be endorsed and acted
	upon by the relevant government authority
Public and relevant	Are there likely to be any reactions to the treatment strategies
community groups reaction	proposed.
Risk creation	Will the treatment strategy introduce new risks.
Timing	Will the beneficial effects be realised quickly.

Treatments itemised within the *treatment schedule* (Appendix 3) are listed as the highest priority treatment to be used for each asset. Assets with the risk rating of very high and above must be used in conjunction with additional treatment as specified in 7.2 - Asset Specific Treatment Strategies. This multiple treatment approach will allow for the risk to be reduced with consideration to resources available and budgetary constraints.

The City's environmentally managed reserves (Map 0:02) have the following additional treatment options to assist in reducing risk of bushfire in areas that require more than one treatment solution:

- Reserve specific fire responses plan;
- Chemical control Using herbicides to control and minimise weed growth;
- Mechanical Control Removal of fuel loads such as weeds and other vegetation by pruning, thinning and cutting back using equipment such as brush cutters, chainsaws and by hand. Vegetation may either be left to breakdown or be removed; and
- Prescribed burning Using slow cool burns to reduce fuel loads.

## 7.7 Annual Works Programs

The annual program of works is identified within the *Treatment Schedule* (Appendix 3). Responsible organisations are accountable for completing the treatments identified within the *Treatment Schedule* and will incorporate the works into their respective business plans, annual works programs and budgets.

As highlighted in section 1.3 of the BRMP the limitations of the *Bush Fires Act 1954 (as amended)*, the City of Cockburn cannot enforce compliance of the recommend treatment strategies prescribed within the *Treatment Schedule* (appendix 3) on crown land owned by non-prescribed Departments of Public Service.

## 7.8 Ecological consideration to prescribed burning

The Banksia Eucalypt Forests are made up of two different types of plants, obligate seeders and resprouters. Obligate seeders are plants that are killed by fire and new individuals can only return to the environment by germination of seed buried in the seed bank in the soil or held in the canopy in fire-resistant cones (e.g. Banksia sp and Rottenest Island Pine - Callitris preissi). Very hot fires can cause Banksia and Rottnest Island Pine populations to die. Resprouters can survive fire, they often lose some or all of their aboveground leafy biomass but they can regrow this biomass after the fire. Such plants have rootstocks, lignotubers, burls, thick trunks or branches containing heat-resistant buds which are not destroyed by fire. There is also a considerable store of energy reserves such as starch in these structures.

The time to first flowering after fire is relatively fast for seeders, usually within 1 to 4 years. For resprouters it is much slower, taking at least 8 to 10 years for many species. Once a seedling is fully mature it has been found that reproductive success of seeder species is much greater than resprouters. Seeder species relies on fast growth to reach early maturity to produce flowers and seed before the next fire is likely to pass through the area. For the resprouter species it is not such a high priority to ensure a good seed crop before the next fire as individuals are not killed by the fire. It must however produce some seed within its lifetime to ensure successful replacement for the time it dies of old age or one fire too many (Bell, n.d.).

The Fire ecology of many vegetation complexes within the bushland in the Perth area has not yet been studied sufficiently to determine the appropriate fire regime. However, in most areas of urban bushland, the fire regime has, in recent years, been of too frequent fires. Therefore minimisation of fires may be appropriate for some areas. Repeated fires may completely remove that plant species from the community (Thomas, 1999). It is important that fires, particularly within *Banksia Eucalypt* woodland, are not too frequent and ideally should occur at intervals of not less than 10 -12 years.

The *Treatment Schedule* (Appendix 3) indicates the use of hazard reduction burning, the City's environmental impact of this needs to be consider on an on-going basis prior to any works being carried out.

#### 7.9 Implementation

When the treatments identified in the *Treatment Schedule* (Appendix 3) are implemented there are a number of issues that need to be considered by the responsible organisation. Depending on the treatment, issues may include off target damage from herbicide, environmental damage, loss of vegetation and habitat through clearing, loss of amenity and the impacts of smoke on surrounding residents if prescribing burning is the chosen option.

Any decision to undertake any treatment strategies within the City's managed reserves (map 0:02) will be made in conjunction with the approval of the City's Environmental Manager.

Any hazard reduction burns describe within the *Treatment Schedule* (appendix 3) will be made in conjunction with the City's Chief Bushfire Control Officer. A Permit To Set Fire To

The Bush (Fire Permit) will be required to be issue for any prescribed burns undertaken within the City. All Local and State Laws relevant to the issuing of a fire permit will be met.

The Department of Parks and Wildlife will be responsible to ensure all fauna and flora environmental impact assessments are carried out on land owned or managed by the Department.



## **Chapter 8 Monitoring and Review**

Monitoring and review processes are in place to ensure that the BRMP remains current and valid. These processes are detailed below to ensure outcomes are achieved in accordance with the *Treatment Schedule* (appendix 3) and *Project Framework* (appendix 5).

#### 8.1 Review

A comprehensive review of this BRMP, including the Strategic and Bushfire Risk Planning Area Risk Assessments, must be undertaken at least once every five (5) years, from the date of endorsement by council. Significant circumstances that may warrant an earlier review of the BRMP would include:

- Changes to the BRMP area, organisational responsibilities or legislation;
- Changes to the bushfire risk in the area; or
- Following a major fire event.

Bushfire Risk Planning Area Risk Assessments will be undertaken and reviewed in accordance with the timeframes set in the *Project Framework* at Appendix 5.

## 8.2 Monitoring

The *Treatment Schedule* (Appendix 3) is a dynamic document and progression towards completion of the annual works program will be monitored and reviewed annually. The *Treatment Schedule* will be updated as treatments are progressed and completed.

Departments and organisations listed in Table 1 will be requested to submit a report to the City of Cockburn on an annual basis, updating progress towards implementation of the annual works program on all lands within their responsibility.

#### 8.3 Reporting

On-going correspondence will be submitted to all organisations responsible for land that holds a high and above risk rating. Residential areas fall within this category will be targeted by community engagement activities highlighted within section 7.3 BRMP Community Engagement.

Members of the community will be advised by community engagement activities highlighted within the BRMP to notify the City of any works they believe are at risk to public safety. These will be responded to in accordance to the City of Cockburn Customer Service Charter.

An annual works implementation forum will be held with all key State Agencies/ Crown land managers listed within BRMP Stakeholders list (Appendix 4). The implementation forum's will raise concerns gained through community engagement and highlight amendments to the BRMP. These meetings will be managed by the City's administrative staff. An annual report of the BRMP will be submitted to the Bush Fire Advisory Reference Group and the Office of Bushfire Risk Management for independent review.

Where applicable a post bushfire review may be undertaken to assess the effectiveness of the Bush Fire Risk *treatment Schedule* (Appendix 3). This report will be made available to relevant agencies for review.

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#### **Works Cited**

- Attorney-General's Department. (2014, July). *Bushfires Get the Facts Attorney-General's Department*. Retrieved from Attorney-General's Department: Attorney-General's Department.
- Australasain Fire and Emergency Service Authorities Council. (2012). *AFEC Bushfire Glossary*. Melbourne: AFAC Limited.
- Australasian Fire and Emergency Service Authorities Council. (2012). AFAC Bushfire Gloassary. East Melbourne: AFAC Limited.
- Australian Bureau of Statistics. (2012, May 24). *Year Book Australia, 2012*. Retrieved July 2014, from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1301.0~2012~Main %20Features~Australia's%20climate~143
- Bell, T. (n.d.). How do Plants Recover After Fire University of Melbourne. Retrieved from University of Melbourne: http://bird.net.au/bird/images/6/66/Plant\_recovery\_after\_fire.pdf
- Blanchi, R. L. (2010). *Meteorological conditions and wildfire-related house.* Melbourne: CSIRO Publishing.
- Bureau of Meteorology. (n.d.). *Bureau of Meteorology Data Tracker*. Retrieved July 2014, from Bureau of Meteorology Web Site: http://www.bom.gov.au/climate/change/#tabs=Tracker&tracker=site-networks
- City of Cockburn. (2000). Greening Plan. Perth: City of Cockburn.
- City of Cockburn. (2012). *Natural Area Management Strategy 2012 2022.* Perth: City of Cockburn.
- Cornell, V. C. (2014). Older people and disaster preparedness: a literature review. Retrieved July 2014, from Australian Emergency Management Institute: http://www.em.gov.au/Publications/Australianjournalofemergencymanagement/Pastls sues/Pages/AJEM27THREE/Olderpeopleanddisasterpreparednessaliteraturereview. aspx
- Department of Environment. (2014, July). *Department of Environment*. Retrieved from Department of Environment Biodiversity Hotspots:

  http://www.environment.gov.au/topics/biodiversity/biodiversity-conservation/biodiversity-hotspots
- Department of Fire & Emergency Services Office of Bushfire Risk Management . (2014). Bushfire Risk Management Planning . Perth: Department of Fire & Emergency Services .
- Department of Health (Victoria). (2012, April). *Bushfire Smoke*. Retrieved July 2014, from Better Health web site:
  http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Bushfire\_smoke

- Department of the Environment. (n.d.). Western Australia climate change impacts in WA.

  Retrieved July 11, 2014, from Department of the Environment Web Site:

  http://www.climatechange.gov.au/climate-change/climate-science/climate-change-impacts/western-australia
- Dr. D Simberloff, D. M. (2011). *Encyclopedia of Biological Invasions*. California: University of California.
- Forecast Id. (2014). *Forecast Id City of Cockburn*. Retrieved July 14, 2014, from Forecast Id: http://forecast.id.com.au/cockburn/
- Natural Heritage Trust. (2003). *Bushcare support 2003 Native Vegetation Management*. Canberra: Natural Heritage Trust.
- State Emergency Management Comittee. (2013). WESTPLAN FIRE. Perth: State Emergency Management Comittee.
- Thomas, L. (1999). *Bushfire Risk Management Planning in Managing Our Bushland*. WA: Urban Bushland Council WA inc.

# Appendices



# **Appendix 1 - Treatment Strategies list**

Treatment Strategy	Treatments							
Fuel Management	Maintain HSZ - Prescribed Burn							
· · · · · · · · · · · · · · · · · · ·	Install APZ – mechanical works							
	Install APZ – prescribed burn							
	Install HSZ – chemical works							
	Install HSZ – mechanical works							
	Install HSZ – prescribed burns							
	Maintain APZ – mechanical works							
	Maintain APZ – prescribed burn							
	Maintain HSZ – chemical works							
	Maintain HSZ – chemical works  Maintain HSZ – mechanical works							
	Maintain HSZ – mechanical works  Maintain HSZ – prescribed burns							
	Install APZ – prescribed burns  Install APZ – chemical works							
	Conduct chemical works							
	Conduct mechanical works							
	Conduct prescribed works							
	Undertake burn edging							
	Undertake weed management							
	Undertake chemical works along road verge							
	Undertake mechanical works along road verge							
	undertake burning along road verge							
	Undertake general site vegetation maintenance annually							
	Undertake vegetation management around electrical infrastructure							
Ignition Management	Lock gates at all times							
	Lock gates on days where a Total Fire Ban is in place							
	Lock gates on days where a fire danger is severe or above							
	Install locks on gates							
	Inspect locks monthly during the fire season							
	Implement an arson prevention program							
	Conduct inspections prior to issuing a permit to set fire to the bush							
	(fire Permit)							
	Perform patrols on Total Fire Ban days							
	Implement a Fire Control Officer duty foster of Volunteer Bush Fire							
	Brigade members							
	Install fire risk danger signage on roadsides							
Preparedness	Inspect APZ and maintain as required							
	Inspect HSZ and maintain as required							
	Install firebreak(s)							
	Upgrade firebreak(s) with limestone road base							
	Inspect firebreak(s)							
	Maintain firebreak(s)							
	Install fire access track(s)							
	Inspect fire access track(s)							
	Maintain fire access track(s)							
	Widen firebreak(s)							
	Widen fire access track(s)							
	Implement emergency preparedness strategy/plan							
	Conduct site inspections for fire crews							
	Recruit additional volunteer bush fire brigade members							
	Repair appliance/equipment of Volunteer Bush Fire Brigade							
	Replace appliance/equipment of Volunteer Bush Fire Brigade							
	Tropiace appliance/equipment of volunteer bush the brigate							

	Ungrade appliance/equipment of Volunteer Duck Fire Prigade
	Upgrade appliance/equipment of Volunteer Bush Fire Brigade
	Document fire access track location within the LGA area
Planning	Develop Emergency Management Arrangements
	Review Emergency Management Arrangements
	Implement a Fire Control Officer duty foster of Volunteer Bush Fire
	Brigade members
	Develop reserve fire management plans
Community	Conduct street meeting for areas of bushfire risk
Engagement	Install signage with targeted bushfire messages
	Attend community groups/residents association meeting
	Attend community events and shopping centres
	Conduct school visits
	Hold open day events at fire stations
	Conducted target community campaigns
	Publish media release(s)
	Publish joint media release
	Promote arson reward scheme in locations of arson risk
	Promote penalties for cigarette butt littering
	Promote Prepare Act Survive campaign
	Promote evaporative air conditioner factsheets

## **Definition of abbreviations**

#### Asset Protection Zone

An Asset Protection Zone (APZ) is a fuel reduced area (of ideally 2 t/ha) surrounding a built asset or structure. This can include any residential building or major building such as sheds, or industrial, commercial or heritage buildings. An APZ provides: a buffer zone between a bush fire hazard and an undefended asset.

## Hazard Separation Zone

A Hazard Separation Zone is an area between the asset protection zone and natural hazard, generally the hazard separation zone will have a reduced fuel load of 5 -15 T/Ha for bushland commonly seen within the City of Cockburn. Generally the distance is up to 80 metres. The Hazard separation zone will assist in reducing the intensity and rate of spread of a bushfire.

(Department of Fire & Emergency Services - Office of Bushfire Risk Management, 2014)

# Appendix 2 - Asset risk Register

Appendix 2 comprises of the following tables.

- Human Settlement Assets
- Economic Assets
- Environmental Assets
- Cultural Assets

N.B. Digital copies of the Asset risk register appendix to this BRMP is available by writing to the;

Emergency Management Coordinator PO Box 1215 Bibra lake DC WA 6965



					Likelihood Inputs		Consequer	100		
					Likeliilood iliputs	Threat	Consequer			
Map ID	Planning Area	Asset ID	Asset Name	Asset Location	Likelihood Rating	Threat	Vulnerability	Consequence Rating	Risk Rating	Comments/Notes
	Banjup / Atwell (Planning area 1)	CKBBAP1	urban interface 1	Lydon Blvd./ Mosedale Retreat	Possible	Very High	Moderate	Catastrophic	Very High (2B)	Increased awareness to residents will reduce risk rating
1:03	Banjup / Atwell (Planning area 1) Banjup / Atwell (Planning area 1)	CKBO2 CKBL3	Atwell Primary School Atwell Community Centre	160 Lydon Boulevard ATWELL 129 Lydon Boulevard ATWELL	Possible Unlikely	Very High Very High	Moderate Low	Catastrophic Major	Very High (2B) Medium (4B)	Welfare Centre
1:03		CKBP4	Urban interface 2	Lydon Blvd. / Lyon Rd	Possible	Very High	Moderate	Catastrophic	Very High (2B)	Increased awareness to residents will reduce risk rating
1:03	Banjup / Atwell (Planning area 1) Banjup / Atwell (Planning area 1)	CKBP5 CKBP6	Lyon Rd Shopping Centre urban interface 3	80 Lyon Rd Twilight Mews	Unlikely Unlikely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	High (3C) High (3C)	Increased awareness to residents will reduce risk rating
1:03	Banjup / Atwell (Planning area 1)	CKBP7	urban interface4	Aubin Grove Bush Fire interface	Possible	Very High	Moderate	Catastrophic	Very High (2B)	Increased awareness to residents will reduce risk rating
1:03	Banjup / Atwell (Planning area 1)	CKBL8	Aubin Grove Community Centre	71 Camden Boulevard	Unlikely	Very High	Moderate	Catastrophic	High (3C)	
1:03	Banjup / Atwell (Planning area 1) Banjup / Atwell (Planning area 1)	CKBO9 CKBP10	Aubin Grove Primary School Rural Living	85 Camden Boulevard AUBIN GROVE Armadale Rd / Gibbs Rd	Unlikely Almost Certain	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	High (3C) Extreme (1A)	
1:03	Banjup / Atwell (Planning area 1)	CKBBAO11	DCP Home	275 Liddelow Road BANJUP	Almost Certain	Very High	Moderate	Catastrophic	Extreme (1A)	
1:03	Banjup / Atwell (Planning area 1) Banjup / Atwell (Planning area 1)	CKBBAL12 CKBBAL13	Jandakot Fire Station Banjup Community Centre	41 Oxley Rd BANJUP 41 Oxley Rd BANJUP	Likely Likely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	Extreme (1B)	Very Prepared (OBRM prohibits as low vulnerability Very Prepared (OBRM prohibits as low vulnerability
1:03	Banjup / Atwell (Planning area 1)	CKBBAP14	Rural Living 2	Southern Part of Banjup	Almost Certain	Very High	Moderate	Catastrophic	Extreme (1A)	very Frepared (OBINIV profitors as low vulnerability
2:01	Jandakot / Banjup North (Planning area 2)	CKBJKP15	Rural Living	Jandakot Rd/ Owsten Court	Almost Certain	Very High	Moderate	Catastrophic	Extreme (1A)	
2:01	Jandakot / Banjup North (Planning area 2)  Jandakot / Banjup North (Planning area 2)	CKBJKP16 CKBJKP17	Rural Living Industrial complex interface	Jandakot Rd (sth of airport)  Armadale Rd next to Kwn Freeway	Almost Certain Unlikely	Very High High	Moderate Moderate	Catastrophic Major	Medium (4B)	
2:01	Jandakot / Banjup North (Planning area 2)	CKBJKO18	Western Power Site (Jandakot)	85 Prinsep Road JANDAKOT	Unlikely	Very High	Low	Major	Medium (4B)	
2:01	Jandakot / Banjup North (Planning area 2) Jandakot / Banjup North (Planning area 2)	CKBJKP19 CKBJKP20	Schaffer Corporation	27 Jandakot Road JANDAKOT  Glendale Crescent	Possible Almost Certain	Very High Very High	Low Moderate	Major Catastrophic	High (3B)	Large Clearing around building with good access
2:01	Jandakot / Banjup North (Planning area 2)	CKBJKP20 CKBJKP21	Glendale Crest rural interface Berrigan Dr urban interface	Berrigan Dr	Likely	High	Moderate	Major	Very High (2A)	
2:01	Jandakot / Banjup North (Planning area 2)	CKBJKP22	Merrit Loop Industrial area	Merrit Loop	Unlikely	Very High	Moderate	Catastrophic	High (3C)	
2:01	Jandakot / Banjup North (Planning area 2) Jandakot / Banjup North (Planning area 2)	CKBJKO23 CKBJKO24	Jandakot Airport - North of Eagle Dr Jandakot Airport - South of Eagle Dr	North Eagle Dr South - Eagle Dr	Unlikely Unlikely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	High (3C) High (3C)	Jandakot Airport Bush Fire Management Plan in place Jandakot Airport Bush Fire Management Plan in place
2:01	Jandakot / Banjup North (Planning area 2)	CKBJKO25	Western Power Site 2 (Jandakot)	450 Hope Rd Jandakot	Unlikely	Very High	High	Catastrophic	High (3C)	Access to site is limited by rail lines
3:01	Southern Coast to Hammond Park (Planning area 3)	CKBSCP26 CKBSCO27	Hammond Park Urban Interface	Hammond Park 25 Woodrow Avenue HAMMOND PARK	Likely	Very High	Moderate Moderate	Catastrophic	Extreme (1B)	
3:01 3:01	Southern Coast to Hammond Park (Planning area 3)  Southern Coast to Hammond Park (Planning area 3)	CKBSCO27 CKBSCP28	Hammond Park Catholic Primary School  Wattleup rural living area (along Wattleup Rd - south of Russell Rd )	25 Woodrow Avenue HAMMOND PARK  Wattleup Rd	Possible Possible	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	Very High (2B) Very High (2B)	
3:01	Southern Coast to Hammond Park (Planning area 3)	CKBSCP29	Industrial complex interface (Wattleup RD)	Wattleup Rd	Unlikely	Low	Moderate	Minor	Low (5C)	
3:01 3:01	Southern Coast to Hammond Park (Planning area 3)  Southern Coast to Hammond Park (Planning area 3)	CKBSCL30 CKBSCO31	Wattleup Community Centre Telstra exchange (Wattleup)	25 Marban Way WATTLEUP 1022 Rockingham Road WATTLEUP	Unlikely Likely	Low High	Moderate Moderate	Minor Maior	Low (5C) Very High (2A)	Welfare Centre
3:01	Southern Coast to Hammond Park (Planning area 3)	CKBSCP32	Ten Mile Well (Wattleup Teven)	1048 Rockingham Rd WATTLEUP	Likely	High	Moderate	Major	Very High (2A)	
3:01	Southern Coast to Hammond Park (Planning area 3)	CKBSCP33	53 Hurst Rd - industrial complex interface	53 Hurst Road WATTLEUP	Likely	High	Moderate	Major	Very High (2A)	
3:01 4:01	Southern Coast to Hammond Park (Planning area 3)  Beeliar Regional Park (Planning area 4)	CKBSCP34 CKBBEP35	Henderson Industrial Complex interface Emmanuel Catholic College	Cockburn Rd interfacing with bushland 122 Hammond Road SUCCESS	Almost Certain Unlikely	Very High Medium	Moderate Moderate	Catastrophic Moderate	Low (5B)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEP36	Beeliar Dr light industrial shopping complex	1/640 Beeliar Drive SUCCESS	Possible	High	Moderate	Major	High (3B)	
4:01 4:01	Beeliar Regional Park (Planning area 4) Beeliar Regional Park (Planning area 4)	CKBBEP37 CKBBEP38	Success (North) Urban Interface Hammond Rd rural interface	Hammond Rd - Wentworth Prde 210-222, 256, 272 - 304 Hammond Rd	Unlikely Likely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	High (3C)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEP39	Success (South) urban interface	North - Daviesa Turn / South - Mariposa Gdns	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEP40	Success (East) urban interface	Follow Wentworth Prde	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
4:01 4:01	Beeliar Regional Park (Planning area 4)  Beeliar Regional Park (Planning area 4)	CKBBEO41 CKBBEDFES42	Water Corp Site - Success Success Fire & Rescue Station	35271R Bartram Road SUCCESS 365 Hammond Road SUCCESS	Likely Unlikely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	Extreme (1B) High (3C)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEL43	Success Regional Sports Complex	Hammond Road SUCCESS	Unlikely	Very High	Moderate	Catastrophic	High (3C)	Welfare Centre
4:01 4:01	Beeliar Regional Park (Planning area 4) Beeliar Regional Park (Planning area 4)	CKBBEO44 CKBBEP45	Success Primary School	90 Wentworth Parade SUCCESS  Wentworth Prde / Oak Ridge Meander SUCCESS	Likely Likely	High Very High	Moderate Moderate	Major Catastrophic	Very High (2A)  Extreme (1B)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEP46	Boronia Park urban interface Baler Reserve urban interface (North)	North of Russell Road	Likely	Medium	Moderate	Moderate	High (3A)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEP47	Beeliar (suburb) Regional Park Urban Interface (East of rail line)	West of Beeliar Regional Park to Rail Line East	Almost Certain	High	High	Catastrophic	Extreme (1A)	
4:01 4:01	Beeliar Regional Park (Planning area 4)  Beeliar Regional Park (Planning area 4)	CKBBEP48 CKBBEP49	Beeliar Village Urban Interface Beeliar Market Gardens	Beeliar Village Urban Interface (west of rail line)  west of Spearwood Ave / south of Beeliar Dr	Unlikely Unlikely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	High (3C) High (3C)	
4:01	Beeliar Regional Park (Planning area 4)	CKBBEP50	Cockburn Cement (Mill)	Cement Works Quarry MUNSTER	Unlikely	Very High	Moderate	Catastrophic	High (3C)	
4:01 4:01	Beeliar Regional Park (Planning area 4)  Beeliar Regional Park (Planning area 4)	CKBBEO51 CKBBEP52	Water Corp Site - MUNSTER MUNSTER rural residential area	Lot 17 Lorimer Rd  North of Russell Rd / south of Beeliar Dr	Likely Almost Certain	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	Extreme (1B)	
	North Lake – Yangebup Lake (Planning area 5)	CKBNLP53	Mater Christi Catholic Primary School	340 Yangebup Rd YANGEBUP	Likely	Very High	High	Catastrophic	Extreme (1B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP54	Divine Mercy College	326 Yangebup Rd YANGEBUP	Unlikely	Very High	High	Catastrophic	High (3C)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP55 CKBNLP56	Yangebup Lake Urban Interface (west) Argyle Place Urban Interface	West of Yangebup Lake Argyle Place Yangebup	Likely Likely	High High	Moderate Moderate	Major Major	Very High (2A) Very High (2A)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP57	Levi Park Urban Interface	North of Plover Dr / South of Dotterel Way YANGEBUP	Likely	High	Moderate	Major	Very High (2A)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP58 CKBNLP59	Bibra Lake Industrial Interface (east)	West of North Lake Road / North of Rail Line	Likely	Very High Medium	Moderate	Catastrophic Moderate	Extreme (1B) Low (5B)	
5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP59 CKBNLP60	Adventure World - Ice skating arena Bibra Lake Retirement Village	Lot 26 Progress Dr BIBRA LAKE Lewington Gardens	Unlikely Unlikely	Medium	Moderate High	Major	Medium (4B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP61	Tamera Dr Industrial Interface	Tamera Dr COCKBURN CENTRAL	Unlikely	Medium	Moderate	Moderate	Low (5B)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP62 CKBNLP63	Lakes Shopping Centre South Lake Urban Interface	620 North Lake Rd SOUTH LAKE  Urban Interface with Blackburn Park / Yangebup Lake	Unlikely Unlikely	High High	Moderate Moderate	Major Maior	Medium (4B) Medium (4B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLL64	south lake leisure centre	106 South Lake Dr SOUTH LAKE	Unlikely	Medium	Low	Minor	Low (5C)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLO65 CKBNLP66	Lakelands Senior High School	106 South Lake Dr SOUTH LAKE  North Lake Dr / Bibra Dr Bibra Lake	Unlikely	Very High	Moderate Moderate	Catastrophic	High (3C)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP66 CKBNLP67	South Lake Urban Interface CVES Building Industrial Interface	North Lake Dr / Bibra Dr Bibra Lake Buckley St / Poletti Rd COCKBURN CENTRAL	Unlikely Unlikely	High High	Low	Major Moderate	Medium (4B) Low (5B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP68	Cockburn Central residential acreage lots	Muriel Court COCKBURN CENTRAL	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP69 CKBNLP70	South Lake Urban Interface (South) South Lake Urban Interface (West)	Berrigan Dr (South) Thomas St (North) SOUTH LAKE  Berrigan Dr (South) / Impson Garden (North) SOUTH LAKE	Unlikely Unlikely	Very High Very High	Moderate Low	Catastrophic Major	High (3C) Medium (4B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP71	Poletti Rd (South) Urban Interface	West of Poletti Rd Cockburn central	Unlikely	High	Moderate	Major	Medium (4B)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP72 CKBNLO73	South Lake / Bibra lake Urban Interface (West of Power lines)	South Lake / Bibra Lake (West of Power Lines and Roe Hwy on-ramp 29 Annois Rd BIBRA LAKE	Likely Unlikely	Very High Medium	Moderate Moderate	Catastrophic Moderate	Extreme (1B)	
5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLO73 CKBNLP74	Bibra Lake Primary School Bibra Lake Urban Interface	29 ANNOIS RO BIBRA LAKE Bibra Dr BIBRA LAKE	Unlikely Unlikely	Medium	Moderate Moderate	Moderate Moderate	Low (5B) Low (5B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLO75	Farrington Rd / Baker Court Industrial Complex	Lot 551 Baker Court BIBRA LAKE	Unlikely	Medium	Low	Minor	Low (5C)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP76 CKBNLP77	Murdoch Pines urban Interface IFAP Facility	East of Baker Crt / Along Peterborough Circle BIBRA LAKE 128 Farrington Rd BIBRA LAKE	Likely Likely	Very High High	Moderate Low	Catastrophic Moderate	Extreme (1B) High (3A)	IFAP Training Ground
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP78	Progress Dr / Malvolio Rd Urban Interface	Progress Dr / Mavolio Rd BIBRA LAKE	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP79	Deller Rd (South) Urban Interface	Daller Rd (North) / Phoenix Rd (South) BIBRA LAKE	Likely	Very High	Moderate Moderate	Catastrophic	Extreme (1B)	
5:01 5:01	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	CKBNLP80 CKBNLP81	Coolbellup (South) Urban Interface (Forrest Rd)  Good life Health Club	Forrest Rd (Coolbellup) BIBRA LAKE/COOLBELLUP 402 North Lake Rd BIBRA LAKE	Likely Likely	Very High High	Moderate Low	Catastrophic Moderate	High (3A)	
5:01	North Lake – Yangebup Lake (Planning area 5)	CKBNLP82	Perth Waldorf School	14 Gwilliam Dr BIBRA LAKE	Likely	Very High	High	Catastrophic	Extreme (1B)	Little Separation from Buildings to vegetation
5:01 6:01	North Lake – Yangebup Lake (Planning area 5)  Coastal Strip (planning area 6)	CKBNLP83 CKBCSO84	Adventure World Water Corp Site - Mt. Brown	351 Progress Dr BIBRA LAKE 837 Cockburn Rd MUNSTER	Unlikely Likely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	High (3C) Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP85	Austal Ship Yard	Lot 100 Clearance Beach Rd MUNSTER	Likely	Medium	Moderate	Moderate	High (3A)	
6:01 6:01	Coastal Strip (planning area 6)	CKBCSO86 CKBCSO87	Woodman Point Caravan Park	Woodman Point - Cockburn Road - MUNSTER  Woodman Point - Cockburn Road - MUNSTER	Likely Likely	Very High Very High	Moderate Moderate	Catastrophic Catastrophic	Extreme (1B)	One entry/exit point
6:01	Coastal Strip (planning area 6) Coastal Strip (planning area 6)	CKBCSU87 CKBCSL88	Woodman Point - Recreation Camp Integrated Beach Facility (Coogee Surf Club)	4 Powell Rd - COOGEE	Unlikely	Very High High	Moderate	Major	Medium (4B)	One entry/exit point One entry/exit point
6:01	Coastal Strip (planning area 6)	CKBCSL89	Coogee Caravan Park	Powell Rd -COOGEE	Unlikely	Very High	Moderate	Catastrophic	High (3C)	
6:01 6:01	Coastal Strip (planning area 6)  Coastal Strip (planning area 6)	CKBCSO90 CKBCSP91	John Graham Recreational Reserve Port Coogee Urban Interface	Woodman Point - Cockburn Road - MUNSTER  Perlinite View / Cockburn Rd	Unlikely Unlikely	Very High Medium	Moderate Low	Catastrophic Minor	High (3C) Low (5C)	
6:01		CKBCSO92	Old Power Station - Coogee	Lot 3 Robb Rd COOGEE	Unlikely	Medium	Moderate	Moderate	Low (5B)	Asbestos / Homeless Peron Site
6:01	Coastal Strip (planning area 6)	CKBCSP93	South East Industrial Complex	Ulidia Cove	Unlikely	High	Moderate	Major	Medium (4B)	
	Coastal Strip (planning area 6)	CKBCSP94	Troode St Urban Interface	485 Rockingham Rd MUNSTER	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01 6:01	Coastal Strip (planning area 6)	CKBCSP95	Market Garden Swamp Urban Interface	West of Pennlake Dr / East of Garden Rd MUNSTER	Likely	High	Moderate	Major	Very High (2A)	

					Likelihood Inputs		Consequen	ce		
						Threat				
Map ID	Planning Area	Asset ID	Asset Name	Asset Location	Likelihood Rating	Threat	Vulnerability	Consequence Rating	Risk Rating	Comments/Notes
6:01	Coastal Strip (planning area 6)	CKBCSP97	Market Grande South East Urban Interface	East of Hamilton Rd COOGEE	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP98	Coogee Urban interface (west)	East of Cockburn Rd COOGEE	Unlikely	Medium	Low	Minor	Low (5C)	
6:01	Coastal Strip (planning area 6)	CKBCSO99	Telstra exchange - Spearwood	89 Mell Rd SPEARWOOD	Unlikely	Medium	Moderate	Moderate	Low (5B)	
6:01	Coastal Strip (planning area 6)	CKBCSP100	Mell Rd Development (North)	Mell Rd SPEARWOOD	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP101	Amberley Aged Care	30 Mell Rd SPEARWOOD	Unlikely	High	High	Catastrophic	High (3C)	
6:01	Coastal Strip (planning area 6)	CKBCSP102	Pennlake Dr Urban Interface	Pennlake Dr MUNSTER	Likely	High	Moderate	Major	Very High (2A)	
6:01	Coastal Strip (planning area 6)	CKBCSP103	Munster Market Gardens	South Munster (West of Stock Rd)	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP104	146 Cockburn Rd Industrial Interface	146 Cockburn Rd NORHT COOGEE	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP105	Emplacement Crescent Industrial Interface	Along Emplacement Crt NORTH COOGEE	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSL106	Manning Park Homestead	Azelia Rd HAMILTION HILL	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP107	Delmatinac Cub	41 Azelia Rd HAMILTN HILL	Unlikely	Medium	Low	Minor	Low (5C)	
6:01	Coastal Strip (planning area 6)	CKBCSO108	Hamilton Hill Senior High School	8 Purvis Rd HAMILTON HILL	Unlikely	Medium	Moderate	Moderate	Low (5B)	
6:01	Coastal Strip (planning area 6)	CKBCSP109	Angus Ave - Blackwood Ave Urban Interface	Angus Ave to Blackwood Ave HAMILTON HILL	Likely	Very High	Moderate	Catastrophic	Extreme (1B)	
6:01	Coastal Strip (planning area 6)	CKBCSP110	Wheeler Rd - Purvis St Urban Interface	Wheeler Rd - Purvis St HAMILTON HILL	Unlikely	Very High	Moderate	Catastrophic	High (3C)	
6:01	Coastal Strip (planning area 6)	CKBCSP111	Hamilton Hill and Spearwood (West) Urban Interface	Ommaney St - Ferris Way HAMILTON HILL / SPEARWOOD	Unlikely	High	Moderate	Maior	Medium (4B)	

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Man ID	Diamina Area	Land Owner	Anne ID	Acces Name	Acces I continu	Accest Such Cost	Likelihood		nsequence	inputs	IDSah Dasias I	Comments/Notes
Map ID	Planning Area	Land Owner	Asset ID	Asset Name	Asset Location	Asset Sub Cat.	Likelihood Rating		Recovery	Consequenc	Risk Rating	Comments/Notes
1:04	Banjup / Atwell (Planning area 1)	Other Government Agency	0121	Perth - Bunbury Gas Pipeline	Baniup (south eastern side)	Critical Infrastructure	Almost Certain	Impact State	Costs Low	Moderate	Very High (2C)	
0:04	Banjup / Atwell (Planning area 1)		0121	Jandakot Water Catchment	Banjup (south eastern side)  Banjup	Drinking Water Catchments	Almost Certain	State	Low	Moderate	Very High (2C)	
1:04	Banjup / Atwell (Planning area 1)	Other Government Agency	0123	Water Pump 1	Hebble Loop BANJUP	Drinking Water Catchments	Possible	State	Low	Moderate	Medium (4A)	
1:04	Baniup / Atwell (Planning area 1)	Other Government Agency	0123	Water Pump 2	Lot 465 Bartrum Rd BANJUP	Drinking Water Catchments	Possible	State	Low	Moderate	Medium (4A)	
1:04	Baniup / Atwell (Planning area 1)	Other Government Agency	0125	Water Pump 3	Lot 464 Boronia Road BANJUP	Drinking Water Catchments	Possible	State	Low	Moderate	Medium (4A)	
1:04	Banjup / Atwell (Planning area 1)	Other Government Agency	0126	Water Pump 4	Denis De Young Reserve (LGA) Boundary	Drinking Water Catchments	Possible	State	Low	Moderate	Medium (4A)	
1:04	Banjup / Atwell (Planning area 1)	Local Government	L127	Denis De Young Race Track	Denis De Young Reserve	Tourist and Recreational	Almost Certain	Local	Low	Minor	High (3D)	
1:04	Banjup / Atwell (Planning area 1)	Private	P128	Lyon Blvd Shopping Village	80 Lyon Blvd ATWELL	Commercial/Industrial	Unlikely	Local	Low	Minor	Low (5C)	
2:02	Jandakot/Banjup North		0129	Jandakot Airport (airside)	Jandakot Airport	Critical Infrastructure	Unlikely	State	Moderate	Maior	Medium (4B)	
2:02	Jandakot/Banjup North		O130	Jandakot Airport (Hangers)	Jandakot Airport	Critical Infrastructure	Unlikely	State	High	Catastrophic	High (3C)	
2:02	Jandakot/Banjup North	0 /	0131	Western Power (Jandakot)	85 Prinsep Road JANDAKOT	Critical Infrastructure	Unlikely	Regional	Moderate	Maior	Medium (4B)	
2:02	Jandakot/Banjup North	Private	P132	Atco Gas Depot	81 Prinsep Road JANDAKOT	Commercial/Industrial	Unlikely	Regional	Moderate	Major	Medium (4B)	
2:02	Jandakot/Banjup North	Private	P133	Cockburn Central Industrial Complex	Armadale Rd JANDAKOT	Commercial/Industrial	Unlikely	Regional	High	Major	Medium (4B)	
2:02	Jandakot/Banjup North		0134	Jandakot Water Pumps	As Per Map 2:02	Drinking Water Catchments	Unlikely	State	Low	Moderate	Low (5B)	
3:02	South Coast to Hammond Park	<u> </u>	0135	Western Power High tension lines	West of Kwinana FWY	Critical Infrastructure	Unlikely	Regional	Moderate	Major	Medium (4B)	
3:02	South Coast to Hammond Park	<u> </u>	0136	Industrial Rail Line	West of Moylan Rd WATTLEUP	Critical Infrastructure	Unlikely	State	Moderate	Major	Medium (4B)	
3:02	South Coast to Hammond Park	Private	P137	Henderson Go-Cart Track	Gemma Rd HENDERSON	Tourist and Recreational	Unlikely	Local	Moderate	Moderate	Low (5B)	
3:02	South Coast to Hammond Park	Private	P138	Henderson Industrial Interface (EAST)	West of Cockburn Rd HENDERSON	Commercial/Industrial	Unlikely	Regional	Moderate	Major	Medium (4B)	
3:02	South Coast to Hammond Park	Other Government Agency	O139	Telstra exchange - Wattleup	1022 Rockingham Rd WATTLEUP	Critical Infrastructure	Unlikely	Regional	Moderate	Major	Medium (4B)	
3:02	South Coast to Hammond Park	Private	P140	Cockburn Cement quarry	Lot 241 Rockingham Rd WATTLEUP	Commercial/Industrial	Unlikely	Regional	Low	Moderate	Low (5B)	
3:02	South Coast to Hammond Park	Private	P141	Hurst Rd Industrial Complex	53 Hurst Rd WATTLEUP	Commercial/Industrial	Unlikely	Local	Low	Minor	Low (5C)	
3:02	South Coast to Hammond Park	Private	P142	Wattleup Market Gardens	Wattleup - WATTLEUP	Agricultural	Possible	Local	Low	Minor	Low (5A)	
3:02	South Coast to Hammond Park	Other Government Agency	0143	Model Car Club/Race tract	Gemma Rd HENDERSON	Tourist and Recreational	Almost Certain	Local	Low	Minor	High (3D)	
4:02	Beeliar Regional Park	<u> </u>	0144	Industrial Rail Line	East of Cockburn Cement Mill	Critical Infrastructure	Unlikely	State	Moderate	Major	Medium (4B)	
4:02	Beeliar Regional Park	Private	P145	Cockburn Cement Mill	Lot 88 Holmes Rd MUNSTER	Commercial/Industrial	Unlikely	Regional	Moderate	Major	Medium (4B)	
4:02	Beeliar Regional Park	Other Government Agency	0146	Water Corp Site - MUNSTER	HENDERSON RD MUNSTER	Critical Infrastructure	Unlikely	Regional	Moderate	Major	Medium (4B)	
4:02	Beeliar Regional Park	Private	P147	Cockburn Cement quarry 2	lot 888 Holmes Rd MUNSTER	Commercial/Industrial	Unlikely	Regional	Low	Moderate	Low (5B)	
4:02	Beeliar Regional Park		0148	Western Power High tension lines	West of Kwinana FWY - Success	Critical Infrastructure	Unlikely	Regional	Moderate	Maior	Medium (4B)	
4:02	Beeliar Regional Park	0 /	0149	Water Corp Site - SUCCESS	Bartrum Rd - SUCCESS	Critical Infrastructure	Unlikely	Regional	Moderate	Major	Medium (4B)	
4:02	Beeliar Regional Park		O150	Stock Rd - WATTLEUP/MUNSTER	Stock Rd - WATTLEUP/MUNSTER	Critical Infrastructure	Unlikely	Regional	Low	Moderate	Low (5B)	
5:02	North Lake / Yangebup Lake		0151	Western Power Jandakot Station and Power Lines	As Per Map 5:02	Critical Infrastructure	Unlikely	Regional	High	Maior	Medium (4B)	
5:02	North Lake / Yangebup Lake	Private	P152	IFAP Training Facility	128 Farrington Rd NORTH LAKE	Commercial/Industrial	Unlikely	Regional	Moderate	Maior	Medium (4B)	
5:02	North Lake / Yangebup Lake	Private	P153	North Lake Industrial Complex	Farrington Rd NORTH LAKE	Commercial/Industrial	Unlikely	Local	Moderate	Moderate	Low (5B)	
5:02	North Lake / Yangebup Lake	Private	P154	Good Life Fitness Gym	402 North Lake Rd NORTH LAKE	Tourist and Recreational	Unlikely	Local	Moderate	Moderate	Low (5B)	
5:02	North Lake / Yangebup Lake	Private	P155	Adventure World	351 Progress Dr BIBRA LAKE	Tourist and Recreational	Unlikely	Regional	Moderate	Major	Medium (4B)	
5:02	North Lake / Yangebup Lake	Private	P156	Bibra Lake Industrial interface	As Per Map 5:02	Commercial/Industrial	Unlikely	Regional	Moderate	Major	Medium (4B)	
5:02	North Lake / Yangebup Lake	Other Government Agency	0157	Industrial Rail Line	As Per Map 5:02	Critical Infrastructure	Unlikely	State	Moderate	Major	Medium (4B)	
6:02	Coastal Strip	<u> </u>	O158	Water Corp Site - Mt Brown	837 Cockburn Rd MUNSTER	Critical Infrastructure	Unlikely	State	Moderate	Major	Medium (4B)	
6:02	Coastal Strip	Private	P159	Henderson Industrial interface (Northern)	South of Cockburn Rd HENDERSON	Commercial/Industrial	Unlikely	State	Moderate	Major	Medium (4B)	
6:02	Coastal Strip	Other Government Agency	O160	Woodman Point Caravan Park	Woodman Point - MUNSTER	Tourist and Recreational	Unlikely	Local	Low	Minor	Low (5C)	
6:02	Coastal Strip	Local Government	L161	Coogee Caravan Park	POWELL Rd - COOGEE	Tourist and Recreational	Unlikely	Local	Low	Minor	Low (5C)	
6:02	Coastal Strip	Other Government Agency	0162	Stock Rd - WATTLEUP/MUNSTER	As Per Map 6:02	Critical Infrastructure	Unlikely	Regional	Low	Moderate	Low (5B)	
6:02	Coastal Strip	0 /	0163	Western Power C Y O'Conner	Lot 1 Robb Rd NORTH COOGEE	Critical Infrastructure	Unlikely	Regional	Moderate	Major	Medium (4B)	

April   Dept.   Processor			4040404040404040			Likelihood Inputs		Co	nsequence				
1-92	Man ID	Planning Area	Accos ID	Assot Namo	Asset Location	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.				Potential	1.1.1.1.1.1	Dick Dating	Comments/Notes
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100   Daniel / American   Transport   Tr	4.00		01/22 11 124		A 11 D1/0 # D1 D1D4NIIID								
100   Employ About Charmer years		3 ,			ŭ	- ,	,						
100   Servar / Annel (Parente are 1)   Copper		71 \ \ \ \ \ \ /				- /	,						
Col.   Description   Compared   Col.   Col		, , , , , , , , , , , , , , , , , , ,				- /	,						
Design   Annual Physics are		71 \ \ \ \ \ \ /				- ,	,						
100   Date   Princip area   1		, , , , , , , , , , , , , , , , , , , ,				Likely			·		Minor	Medium (4C)	
1.50   Barryat / More   Permit parts   1	1:03	Banjup / Atwell (Planning area 1)	CKBBAL176	Banksia Eucalypt Woodland Park (North)	Gibbs Rd AUBIN GROVE	Likely	Locally Important	Widespread	Low	Restrict	Minor	Medium (4C)	
Segregal / Amel   Pierrorg area 1)		71 \ \ \ \ \ \ /		· ·		- /	, , , , , , , ,						
Semiple   Amend   Parting parts		71 \ \ \ \ \ \ /											
1.50   Binston / Ander (Person and 1)   1.50		, , , , , , , , , , , , , , , , , , ,				- /							
Particular Program (1997)   Particular Reserve   Particular Program (1997)   Particular Reserve   Particular Program (1997)   Particular Pro		71 \ \ \ \ \ \ /				- ,	_						
201		, , , , , , , , , , , , , , , , , , ,				- /	,						
April   Apri		, , , , , , , , , , , , , , , , , , ,			,	- /	,						
		71 \ 0 7			Ŭ	- /	,						
Jundestof (Service Noth) (Person State) 2 (CKSIK-168   Heatletene Reserve   Heatletene Person Noth (Person State) Proportion (Violegerand Low Restrict Month (Person State)   Levic Notes Proportion (Violegerand Low Restrict Month (Person State)   Levic Notes Proportion (Violegerand Low Restrict Month (Person State)   Levic Notes Person (Low Restrict Month (Person S		,, , , , , ,											
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Junishkari / Pauriga Nathri, Planning Mark (Pauring) and 31 (CASSA, 1159) Vyraf Regarde C. College (Pauring) Anni (Pauring) and 31 (CASSA, 1159) Plane Re Balahmari (Pauring) and 32 (CASSA, 1159) P	2:03	Jandakot / Banjup North (Planning area 2)		Lukin Swamp Reserve	Merrit Loop JANDAKOT	Likely	Locally Important	Widespread	Low	Restrict	Minor	Medium (4C)	
Junciator   Fanique Notin   Prison   Restricted   High   Restrict   Moderate   High   Andrew   Ampropriate   Prison   Restricted   High   Restrict   Moderate   High   Restrict   Andrew   American   Americ		71 7 7				- /	,						
Aground Flamp North (Penning area 2)   CKB,KDP31192   Account Responsery   Account Response		,, , , , , ,				- /	,						
Jancason F Bangus Pontin (Plerring area 3)   CKRSC139   Southern Coast to Hammond Park, (Planning area 3)   CKRSC139   Southern Coast to Hammond Park, (Planning area 3)   CKRSC139   State Reserve   Russel R (HAMMOND PARK   Liely   Locally Important   Widespread   Low   Restrict Minor   Medium (of Local)   Southern Coast to Hammond Park, (Planning area 3)   CKRSC139   State Reserve   Russel R (HAMMOND PARK   Liely   Locally Important   Widespread   Low   Restrict Minor   Medium (of Local)   Southern Coast to Hammond Park, (Planning area 3)   CKRSC139   State R   Widespread   Low   Restrict Minor   Medium (of Local)   Southern Coast to Hammond Park   Planning area 3)   CKRSC139   State R   Widespread   Low   Restrict Minor   Widespread   Lo							•						
3.03   Southern Coast Is Harmond Park, Pillming area 3) CRSSCL198   Barfield Reserve   Barface HAMMOND PARK   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium Coast Is Harmond Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL196   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL197   Redemptor Reserve   Perserve Motioner Rel Warts TEE Park   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium Cod   Cristrate Tee Park   Seminary Park, Pillming area 3) CRSSCL198   Redemptor Reserve   Perserve Motioner Rel Warts Tee Park   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium Cod   Cristrate Tee Park   Redemptor Rel HENDER RESON   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium Cod   Cristrate Tee Park   Redemptor Rel HENDER RESON   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium Cod   Cristrate Tee Park   Reserve   Reserve   Restrict   Minor   Reserve   Reser		71 \ 0 7											
Southern Coast to Hammond Park, (Plinning area 3) CRSSCL194   Seried Reserve   Servin Parkwy HAMMOND PARK   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Southern Coast to Hammond Park, (Plinning area 3) CRSSCL195   Chrismina   Parkwy HAMMOND PARK   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Likely   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread   Low   Restrict   Minor   Medium (Co. 10.0   Loosly Important   Widespread		71 \ 0 7				- ,	_						
303   Southern Coast to Harmmood Park (Planning area 3)   CKRSCL195   Christmas Tice Park   Warring Mind Park   Warring Warring   Warring Mind Park   Warring Warring   Warring Warr		1 0 7				- /							
Southern Coast to Hammond Park (Planning area 3) CKRSCL198   Fenckland Park   Planning area 3) CKRSCL197   Holdscore Reserve   Pearse / Mortiner Rev WATTLEUP   Likely   Locally important Widespread   Low   Restrict   Minor   Medium (4c)		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				- /	,						
3.03   Southern Coast to Hammond Park (Plenning area 3)   CKRSCL198   Motion Park   Month Park   Month No.   Month Loop   Month Loop   Month No.   Month Loop   Month No.   Month Loop   Month No.		1 0 7			, ,								
3.03 Southern Coast to Hammond Park (Planning area 3) CKBSCL198 Mohan Park  Annual Southern Coast to Hammond Park (Planning area 3) CKBSCL199 Repetrey Repet BLVD HAMMOND PARK  1.03 Southern Coast to Hammond Park (Planning area 3) CKBSCL200  Roper Reserve Repet BLVD HAMMOND PARK  1.03 Southern Coast to Hammond Park (Planning area 3) CKBSCL200  Roper Reserve Repet BLVD HAMMOND PARK  1.03 Southern Coast to Hammond Park (Planning area 3) CKBSCL200  Roper Reserve Repet BLVD HAMMOND PARK  1.04 Likely Locally Important Widespread Low Restrict Minor Medium (4)  3.03 Southern Coast to Hammond Park (Planning area 3) CKBSCL200  Roper Reserve Repet BLVD HAMMOND PARK  1.04 Likely Locally Important Widespread Low Restrict Minor Medium (4)  3.05 Southern Coast to Hammond Park (Planning area 3) CKBSCL200  1.05 Southern Coast to Hammond Park (Planning area 3) CKBSCL200  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Beelar Regional Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning area 4)  1.05 Southern Coast to Hammond Park (Planning Area 4)  1.05 Southern Coast to Hammond Park		1 0 7				- /	,						
Southern Coast to Hammond Park (Planning area 3) CKBSCL199   Redemption Reserve   Redemption Roth HENDERSON   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (62)		1 0 7					_						
Southern Coast to Hammond Park, (Planning area 3) CKBSCL200   Roger Reserve   Roper BLVD HAMMOND PARK   Likely   Locally Important   Widespread   Low   Restrict   Minor   Modeum (4)		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			·	Likely	,				Minor		
3.03   Southern Coast to Hammond Park (Planning area 3)   CKSSCDPaW202   Harry Waring Mersupial Reserve   Likely   Coally Important (Midespread   Low   Restrict   Minor   Medium (4c)   4.03   Beelier Regional Park (Planning area 4)   CKBBEL204   Beelier Oval Reserve   The Grange BEELUR   Likely   Locally Important (Midespread   Low   Restrict   Minor   Medium (4c)   4.03   Beelier Regional Park (Planning area 4)   CKBBEL204   Beelier Oval Reserve   The Grange BEELUR   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4c)   4.03   Beelier Regional Park (Planning area 4)   CKBBEL206   Fancote Reserve   Henderson Rd MUNSTER   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4c)   4.03   Beelier Regional Park (Planning area 4)   CKBBEL206   Fancote Reserve   Henderson Rd MUNSTER   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4c)   4.03   Beelier Regional Park (Planning area 4)   CKBBEL207   Scales Park   Henderson Rd / Holms   Medium (4c)   4.04   Beelier Regional Park (Planning area 4)   CKBBEL208   Scales Park   Henderson Rd / Holms   Medium (4c)   4.05   Beelier Regional Park (Planning area 4)   CKBBEL208   Scales Park   Henderson Rd / Holms   Medium (4c)   4.06   Beelier Regional Park (Planning area 4)   CKBBEL208   Scales Park   Henderson Rd / Holms   Medium (4c)   4.07   Beelier Regional Park (Planning area 4)   CKBBEL208   Scales Park   Henderson Rd / Holms   Medium (4c)   4.08   Beelier Regional Park (Planning area 4)   CKBBEC108   Medium (4c)   4.09   Beelier Regional Park (Planning area 4)   CKBBEC108   Medium (4c)   4.00   Beelier Regional Park (Planning area 4)   CKBBEC108   Medium (4c)   4.01   Beelier Regional Park (Planning area 4)   CKBBEC1018   Medium (4c)   4.02   Beelier Regional Park (Planning area 4)   CKBBEC1018   Medium (4c)   4.03   Beelier Regional Park (Planning area 4)   CKBBEC1018   Medium (4c)   4.04   Beelier Regional Park (Planning area 4)   CKBBEC1018   Medium (4c)   4.05   Beelier Regional Park (Plann	3:03		CKBSCL200	Roper Reserve	Roper BLVD HAMMOND PARK	Likely	Locally Important	Widespread	Low	Restrict	Minor	Medium (4C)	
Beoliar Regional Park (Planning area 4)   CKBBEL203   Banbar Park   Astroioma Dr SUCCESS   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4c)	3:03	Southern Coast to Hammond Park (Planning area 3)	CKBSCDPaW201	Henderson Cliffs	Cockburn Rd HENDERSON	Likely	Locally Important	Widespread	Low	Restrict	Minor	Medium (4C)	
Beeliar Regional Park (Planning area 4)   CKBBELD4   Beeliar Oval Reserve   The Grange BEELIAR   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)	3:03	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	CKBSCDPaW202	Harry Waring Marsupial Reserve		Likely	Endangered	Restricted	High	Restrict	Moderate	High (3A)	
Beeliar Regional Park (Planning area 4)   CKBBEL205   Cooping Park   Cooping Link SUCCESS   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)		• • • • • • • • • • • • • • • • • • • •											
Beeliar Regional Park (Planning area 4)   CKBBEL206   Fancote Reserve   Henderson Rd MUNSTER   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4c)													
Beeliar Regional Park (Planning area 4)   CKBBEL207   Success Reserve Bushland   Hammond Rd / Columbus Loop SUCCESS   Likely   Locally important   Widespread   Low   Restrict   Minor   Medium (4C)				, ,		- ,	,						
Beelar Regional Park (Planning area 4)   CKBBED208 Shafe Park   Henderson Rd / Holmes Rd MUNSTER   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)						- /							
4:03   Beeliar Regional Park (Planning area 4)   CKBBEDPW210   CKBBEDP						- /	,						
4:03   Beeliar Regional Park (Planning area 4)   CKBBECPAW210   Kogalup Lake   South of Beeliar P BEELIAR   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (40)		0 1 0 7					,						
4:03   Beeliar Regional Park (Planning area 4)   CKBBEC/212   Lot 9001 Harmond RS SUCCESS   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)		• • • • • • • • • • • • • • • • • • • •				- /	•		·				
4:03   Beeliar Regional Park (Planning area 4)   CKBBEC212   Lot 9001 Hammond Rd Bushland   Iol 9001 Hammond Rs SUCCESS   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)   4:03   Beeliar Regional Park (Planning area 4)   CKBBEC213   Water Corp Site   Henderson Rd MUINSTER   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)   4:03   Beeliar Regional Park (Planning area 4)   CKBBEC214   Twin Bartram Swamps   Wentworth Parade SUCCESS   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)   Minor   Midespread   Minor   Medium (4C)   Minor   Medium (4C)   Minor   Midespread   Minor   Medium (4C)   Minor   Medium (4C)   Minor   Midespread   Minor   Medium (4C)   Minor   Midespread   Minor   Midespread   Minor   Medium (4C)   Minor   Midespread   Minor   Mi				0 1					·				
4.03   Beeliar Regional Park (Planning area 4)   CKBBEO214   Twin Bartram Swamps   Wentworth Parade SUCCESS   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)	4:03				lot 9001 Hammond Rs SUCCESS	Likely	_	Widespread	Low	Restrict	Minor	Medium (4C)	
5:03 North Lake — Yangebup Lake (Planning area 5) CKBNLL215   Bibra Lake Reserve   Bibra Dr BIBRA LAKE   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)	4:03	Beeliar Regional Park (Planning area 4)	CKBBEO213	Water Corp Site - Munster	Henderson Rd MUNSTER	Likely	Locally Important	Widespread	Low	Restrict	Minor	Medium (4C)	
School   S		0 1 0 7				- ,							
5:03 North Lake - Yangebup Lake (Planning area 5)   CKBNLL217   Cockburn Central Bushland   North Lake Rd COCKBURN CENTRAL   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)						- ,							
S:03   North Lake - Yangebup Lake (Planning area 5)   CKBNLL218   Levi Park   Plover Dr YANGEBUP   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)													
Signar   S							_						
Si:03 North Lake - Yangebup Lake (Planning area 5)   CKBNLL220   Lot 27 Progress Dr   Lot 27 Progress Dr   BIBRA LAKE   Likely   Locally Important   Widespread   Low   Restrict   Minor   Medium (4C)													
5:03 North Lake - Yangebup Lake (Planning area 5) CKBNLL221 Nola Waters Reserve Annois Rd BIBRA LAKE Likely Locally Important Widespread Low Restrict Minor Medium (4C) (5:03 Coastal Strip (planning area 6) CKBCSL223 Coogee Beach Reserve Cockburn rd. Co													
5:03 North Lake — Yangebup Lake (Planning area 5) CKBNLL222 Yangebup Lake Reserve Osprey Dr YANGEBUP Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL223 Coogee Beach Reserve Cockburn rd. COOGEE Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL224 C Y O'Conner Reserve Robb Rd NORTH COOGEE Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL225 Katsura Reserve Katsura Gardens MUNSTER Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL226 Lake Coogee Reserve Fawcett Rd MUNSTER Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL227 Manning Park Azelia Rd HAMILTON HILL Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL228 Market Garden Swamp #3 Preston Dr MUNSTER Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL228 Market Garden Swamp #1 Garden Rd MUNSTER Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL229 Market Garden Swamp #1 Garden Rd MUNSTER Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSL231 Mc Neil Field Mayor Rd MUNSTER Likely Locally Important Widespread Low Restrict Minor Medium (4C) 6:03 Coastal Strip (planning area 6) CKBCSDPaW232 Woodman Point Regional Park O'Kane Court COOGEE Likely Endangered Restricted High Exclude Major Very High (2A)				3	•		_						
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M 1D	<b>-</b>							Market and 1886		423.02.000	
Map ID	Planning Area	Asset ID	Asset Name	Asset Location	Asset Sub Cat.	Likelihood			Consequenc.	Risk Rating	Comments/Notes
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1:04	Banjup / Atwell (Planning area 1)	CKBBAL246	Paperbark Tree (Traffic Island)	Tapper Rd	Other Cultural Assets	Unlikely	Medium	Low	Minor	Low (5C)	
1:04	Banjup / Atwell (Planning area 1)	CKBBAL247	Mather Reserve	Mather Reserve BANJUP	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
1:04	Banjup / Atwell (Planning area 1)	CKBBAL248	Kraemer Reserve	Bartram Rd BANJUP	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
1:04	Banjup / Atwell (Planning area 1)	CKBBAP249	Ready Mix Sandpit 2	Armadale Rd	Other Cultural Assets	Unlikely	Medium	Low	Minor	Low (5C)	
1:04	Banjup / Atwell (Planning area 1)	CKBBAP250	Ready Mix Sandpit 1	Armadale Rd	Other Cultural Assets	Unlikely	Medium	Low	Minor	Low (5C)	
2:04	Jandakot / Banjup North (Planning area 2)	CKBJKP251	Prinsep Rd	Prinsep Rd	Other Cultural Assets	Unlikely	High	Low	Moderate	Low (5B)	
2:04	Jandakot / Banjup North (Planning area 2)	CKBJKP252	Warton Rd BANJUP	Warton Rd	Other Cultural Assets	Unlikely	Very High	Low	Moderate	Low (5B)	
2:04	Jandakot / Banjup North (Planning area 2)	CKBJKO253	Hope Rd JANDAKOT	Hope Rd JANDAKOT	Other Cultural Assets	Unlikely	High	Low	Moderate	Low (5B)	
2:04	Jandakot / Banjup North (Planning area 2)	CKBJKO254	Lukin Swamp	Eastern end of Jandakot Airport	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
2:04	Jandakot / Banjup North (Planning area 2)	CKBJKP255	Acourt Rd	Acourt Rd Jandakot	Aboriginal	Unlikely	Very High	Low	Moderate	Low (5B)	
2:04	Jandakot / Banjup North (Planning area 2)	CKBJKL256	Banjup Memorial Park	Armadale Rd	Non-indigenous Heritage	Likely	Very High	Moderate	Major	Very High (2A)	
3:04	Southern Coast to Hammond Park (Planning area 3)	CKBSCP257	Wattleup Road Swamp	290 Wattleup Rd	Aboriginal	Almost Certain	Very High	Low	Moderate	Very High (2C)	
3:04	Southern Coast to Hammond Park (Planning area 3)	CKBSCDPaW258	Gemma Road asset	Gemma Road HENDERSON	Non-indigenous Heritage	Possible	Very High	Low	Moderate	Medium (4A)	
3:04	Southern Coast to Hammond Park (Planning area 3)	CKBSCL259	Naval Base Shacks	1136 Cockburn Rd HENDERSON	Non-indigenous Heritage	Unlikely	Very High	Moderate	Major	Medium (4B)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEO260	Kogolup Lake	764L Branch Circus BEELIAR	Aboriginal	Almost Certain	Very High	Low	Moderate	Very High (2C)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEDPaW261	Thompson Lake	15556R Pearse Road BEELIAR	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEP262	Hammond Road Swamp	Hammond Rd Success	Aboriginal	Likely	High	Low	Moderate	High (3A)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEP263	Bartram Road Swamp	Bartram Rd Success	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEL264	Thompson Lake 01	63 Beaumont Parkway SUCCESS	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEDPaW265	Thompson Lake	15556R Pearse Road BEELIAR	Aboriginal	Possible	Very High	Low	Moderate	Medium (4A)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEO266	Thompson Reservoir 1	18L Lorimer Road MUNSTER	Aboriginal	Unlikely	Very High	Low	Moderate	Low (5B)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEO267	Thompson Reservoir 2	18L Lorimer Road MUNSTER	Aboriginal	Unlikely	Very High	Low	Moderate	Low (5B)	
4:04	Beeliar Regional Park (Planning area 4)	CKBBEO268	Beeliar Regional Rark 4	755L Lorimer Road BEELIAR	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
5:04	North Lake – Yangebup Lake (Planning area 5)	CKBNLO269	North Lake (North)	North Lake Rd Bibra Lake	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
5:04	North Lake – Yangebup Lake (Planning area 5)	CKBNLO270	North Lake (Coolbellup)	North Lake Rd Bibra Lake	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
5:04	North Lake – Yangebup Lake (Planning area 5)	CKBNLO271	North Lake and Bibra Lake	North Lake Dr Bibra Lake	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
5:04	North Lake – Yangebup Lake (Planning area 5)	CKBNLO272	Swamp 81	South of Adventure World on North Lake Rd	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
5:04	North Lake – Yangebup Lake (Planning area 5)	CKBNLO273	North Lake SW	North Lake Rd Bibra Lake	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
5:04	North Lake – Yangebup Lake (Planning area 5)	CKBNLO274	Bibra Lake North	North Lake Rd Bibra Lake	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSO275	Cockburn Lighthouse	Cockburn Rd HENDERSON	Aboriginal	Unlikely	Very High	Low	Moderate	Low (5B)	
6:04	Coastal Strip (planning area 6)	CKBCSL276	Robb Jetty Camp	Rob Rd NORTH COOGEE	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSL277	Lake Coogee 1	Cockburn Rd HENDERSON	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSL278	Lake Coogee 2	East of Cockburn Rd HENDERSON	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSO279	Cockburn Rd - Henderson	Cockburn Rd HENDERSON	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSO280	Woodman Point	Cockburn Rd HENDERSON	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSL281	Lake Coogee	Cockburn Rd HENDERSON	Aboriginal	Likely	Very High	Low	Moderate	High (3A)	
6:04	Coastal Strip (planning area 6)	CKBCSO282	Cockburn Rd Buildings and Rail	Cockburn Rd HENDERSON	Other Cultural Assets	Likely	High	Moderate	Moderate	High (3A)	

# **Appendix 3 - Treatment Schedule**

Appendix 3 comprises of the following A3 tables.

- Human Assets Treatment Schedule
- Economic Assets Treatment Schedule
- Environmental Assets Treatment Schedule
- Cultural Assets Treatment Schedule

N.B. Digital copies of the Asset risk register appendix to this BRMP is available by writing to the;

Emergency Management Coordinator PO Box 1215 Bibra lake DC WA 6965



Asset ID	Planning Area	Asset Name	Treatment Priority	Treatment Type	Land Owner
CKBBAP1	Banjup / Atwell (Planning area 1)	urban interface 1	28	Tier 1 Treatments	Private
CKBO2	Banjup / Atwell (Planning area 1)	Atwell Primary School	2B	Tier 1 Treatments	Other Government Agency
CKBL3	Banjup / Atwell (Planning area 1)	Atwell Community Centre	4B	Tier 1 Treatments	Local Government
CKBP4	Banjup / Atwell (Planning area 1)	Urban interface 2	2B	Tier 1 Treatments	Private
CKBP5	Banjup / Atwell (Planning area 1)	Lyon Rd Shopping Centre	3C	Tier 1 Treatments	Private
CKBP6	Banjup / Atwell (Planning area 1)	urban interface 3	3C	Tier 2 Treatments	Private
CKBP7	Banjup / Atwell (Planning area 1)	urban interface4	2B	Tier 4 Treatments	Private
CKBL8	Banjup / Atwell (Planning area 1)	Aubin Grove Community Centre	3C	Tier 1 Treatments	Local Government
CKBO9	Banjup / Atwell (Planning area 1)	Aubin Grove Primary School	3C	Tier 1 Treatments	Other Government Agency
CKBP10	Banjup / Atwell (Planning area 1)	Rural Living	1A	Tier 4 Treatments	Private
CKBBAO11	Banjup / Atwell (Planning area 1)	DCP Home	1A	Tier 4 Treatments	Other Government Agency
CKBBAL12	Banjup / Atwell (Planning area 1)	Jandakot Fire Station	1B	Tier 4 Treatments	Local Government
CKBBAL13	Banjup / Atwell (Planning area 1)	Banjup Community Centre	1B	Tier 4 Treatments	Local Government
CKBBAP14	Banjup / Atwell (Planning area 1)	Rural Living 2	1A	Tier 4 Treatments	Private
CKBJKP15	Jandakot / Banjup North (Planning area 2)	Rural Living	1A	Tier 4 Treatments	Private
CKBJKP16	Jandakot / Banjup North (Planning area 2)	Rural Living	1A	Tier 4 Treatments	Private
CKBJKP17	Jandakot / Banjup North (Planning area 2)	Industrial complex interface	48	Tier 1 Treatments	Private
CKBJKO18	Jandakot / Banjup North (Planning area 2)	Western Power Site (Jandakot)	4B	Tier 1 Treatments	Other Government Agency
CKBJKP19	Jandakot / Banjup North (Planning area 2)	Schaffer Corporation	3B	Tier 1 Treatments	Private
CKBJKP20	Jandakot / Banjup North (Planning area 2)	Glendale Crest rural interface	1A	Tier 4 Treatments	Private
CKBJKP21	Jandakot / Banjup North (Planning area 2)	Berrigan Dr urban interface	2A	Tier 1 Treatments	Private
CKBJKP22	Jandakot / Banjup North (Planning area 2)	Merrit Loop Industrial area	3C	Tier 1 Treatments	Private
CKBJKO23	Jandakot / Banjup North (Planning area 2)	Jandakot Airport - North of Eagle Dr	3C	Tier 4 Treatments	Other Government Agency
CKBJKO24	Jandakot / Banjup North (Planning area 2)	Jandakot Airport - South of Eagle Dr	3C	Tier 3 Treatments	Other Government Agency
CKBJKO25	Jandakot / Banjup North (Planning area 2)	Western Power Site 2 (Jandakot)	3C	Tier 1 Treatments	Other Government Agency
CKBSCP26	Southern Coast to Hammond Park (Planning area 3)	Hammond Park Urban Interface	1B	Tier 3 Treatments	Private
CKBSCO27	Southern Coast to Hammond Park (Planning area 3)	Hammond Park Catholic Primary School	2B	Tier 1 Treatments	Other Government Agency
CKBSCP28	Southern Coast to Hammond Park (Planning area 3)	up rural living area (along Wattleup Rd - south of Russe	2B	Tier 4 Treatments	Private
CKBSCP29	Southern Coast to Hammond Park (Planning area 3)	Industrial complex interface (Wattleup RD)	5C	Treatment Not Possible	Private
CKBSCL30	Southern Coast to Hammond Park (Planning area 3)	Wattleup Community Centre	5C	Tier 3 Treatments	Local Government
CKBSCO31	Southern Coast to Hammond Park (Planning area 3)	Telstra exchange (Wattleup)	2A	Tier 3 Treatments	Other Government Agency
CKBSCP32	Southern Coast to Hammond Park (Planning area 3)	Ten Mile Well (Wattleup Teven)	2A	Tier 1 Treatments	Private
CKBSCP33	Southern Coast to Hammond Park (Planning area 3)	53 Hurst Rd - industrial complex interface	2A	Tier 1 Treatments	Private
CKBSCP34	Southern Coast to Hammond Park (Planning area 3)	Henderson Industrial Complex interface	1A	Tier 4 Treatments	Private
CKBBEP35	Beeliar Regional Park (Planning area 4)	Emmanuel Catholic College	5B	Tier 1 Treatments	Private
CKBBEP36	Beeliar Regional Park (Planning area 4)	Beeliar Dr light industrial shopping complex	3B	Tier 1 Treatments	Private
CKBBEP37	Beeliar Regional Park (Planning area 4)	Success (North) Urban Interface	3C	Tier 1 Treatments	Private
CKBBEP38	Beeliar Regional Park (Planning area 4)	Hammond Rd rural interface	1B	Tier 1 Treatments	Private
CKBBEP39	Beeliar Regional Park (Planning area 4)	Success (South) urban interface	18	Tier 1 Treatments	Private
CKBBEP40	Beeliar Regional Park (Planning area 4)	Success (East) urban interface	1B	Tier 1 Treatments	Private
CKBBEO41	Beeliar Regional Park (Planning area 4)	Water Corp Site - Success	18	Tier 2 Treatments	Other Government Agency
KBBEDFES42	Beeliar Regional Park (Planning area 4)	Success Fire & Rescue Station	3C	Treatment Not Required	Department of Fire and Emergency Services
CKBBEL43	Beeliar Regional Park (Planning area 4)	Success Regional Sports Complex	3C	Tier 1 Treatments	Local Government
CKBBEO44	Beeliar Regional Park (Planning area 4)	Success Primary School	2A	Tier 1 Treatments	Other Government Agency
CKBBEP45	Beeliar Regional Park (Planning area 4)	Boronia Park urban interface	18	Tier 1 Treatments	Private
CKBBEP46	Beeliar Regional Park (Planning area 4)	Baler Reserve urban interface (North)	3A	Tier 1 Treatments	Private
CKBBEP47	Beeliar Regional Park (Planning area 4)	iar (suburb) Regional Park Urban Interface (East of rail I	1A	Tier 1 Treatments	Private
CKBBEP48	Beeliar Regional Park (Planning area 4)	Beeliar Village Urban Interface	3C	Treatment Not Possible	Private
CKBBEP49	Beeliar Regional Park (Planning area 4)	Beeliar Market Gardens	3C	Tier 3 Treatments	Private
CKBBEP50	Beeliar Regional Park (Planning area 4)	Cockburn Cement (Mill)	3C	Tier 1 Treatments	Private
CKBBEO51	Beeliar Regional Park (Planning area 4)	Water Corp Site - MUNSTER	1B	Tier 4 Treatments	Other Government Agency
CKBBEP52	Beeliar Regional Park (Planning area 4)	MUNSTER rural residential area	1A	Tier 4 Treatments	Private
CKBNLP53	North Lake – Yangebup Lake (Planning area 5)	Mater Christi Catholic Primary School	1A 1B	Tier 1 Treatments	Private
CKBNLP54	North Lake – Yangebup Lake (Planning area 5)  North Lake – Yangebup Lake (Planning area 5)	Divine Mercy College	3C	Tier 1 Treatments	Private

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CKBNLP55	North Lake - Yangebup Lake (Planning area 5)	Yangebup Lake Urban Interface (west)	2A	Tier 1 Treatments	Private
CKBNLP56	North Lake - Yangebup Lake (Planning area 5)	Argyle Place Urban Interface	2A	Tier 1 Treatments	Private
CKBNLP57	North Lake - Yangebup Lake (Planning area 5)	Levi Park Urban Interface	2A	Tier 1 Treatments	Private
CKBNLP58	North Lake - Yangebup Lake (Planning area 5)	Bibra Lake Industrial Interface (east)	18	Tier 4 Treatments	Private
CKBNLP59	North Lake - Yangebup Lake (Planning area 5)	Adventure World - Ice skating arena	5B	Tier 1 Treatments	Private
CKBNLP60	North Lake - Yangebup Lake (Planning area 5)	Bibra Lake Retirement Village	48	Tier 1 Treatments	Private
CKBNLP61	North Lake – Yangebup Lake (Planning area 5)	Tamera Dr Industrial Interface	5B	Tier 2 Treatments	Private
CKBNLP62	North Lake – Yangebup Lake (Planning area 5)	Lakes Shopping Centre	4B	Tier 1 Treatments	Private
CKBNLP63	North Lake – Yangebup Lake (Planning area 5)	South Lake Urban Interface	4B	Tier 1 Treatments	Private
CKBNLL64	North Lake – Yangebup Lake (Planning area 5)	south lake leisure centre	5C	Tier 1 Treatments	Local Government
CKBNLO65	North Lake – Yangebup Lake (Planning area 5)	Lakelands Senior High School	3C	Tier 1 Treatments	Other Government Agency
CKBNLP66	North Lake – Yangebup Lake (Planning area 5)	South Lake Urban Interface	4B	Tier 1 Treatments	Private
CKBNLP67	North Lake – Yangebup Lake (Planning area 5)	CVES Building Industrial Interface	5B	Tier 3 Treatments	Private
CKBNLP68	North Lake – Yangebup Lake (Planning area 5)	Cockburn Central residential acreage lots	1B	Tier 3 Treatments	Private
CKBNLP69	North Lake - Yangebup Lake (Planning area 5)	South Lake Urban Interface (South)	3C	Tier 3 Treatments	Private
CKBNLP70	North Lake - Yangebup Lake (Planning area 5)	South Lake Urban Interface (West)	4B	Tier 3 Treatments	Private
CKBNLP71	North Lake – Yangebup Lake (Planning area 5)	Poletti Rd (South) Urban Interface	4B	Tier 1 Treatments	Private
CKBNLP72	North Lake – Yangebup Lake (Planning area 5)	uth Lake / Bibra lake Urban Interface (West of Power lin	1B	Tier 3 Treatments	Private
CKBNLO73	North Lake – Yangebup Lake (Planning area 5)	Bibra Lake Primary School	5B	Tier 1 Treatments	Other Government Agency
CKBNLP74	North Lake – Yangebup Lake (Planning area 5)	Bibra Lake Urban Interface	5B	Tier 1 Treatments	Private
CKBNLO75	North Lake - Yangebup Lake (Planning area 5)	Farrington Rd / Baker Court Industrial Complex	5C	Tier 1 Treatments	Other Government Agency
CKBNLP76	North Lake – Yangebup Lake (Planning area 5)	Murdoch Pines urban Interface	18	Tier 1 Treatments	Private
CKBNLP77	North Lake – Yangebup Lake (Planning area 5)	IFAP Facility	3A	Tier 4 Treatments	Private
CKBNLP78	North Lake – Yangebup Lake (Planning area 5)	Progress Dr / Malvolio Rd Urban Interface	1B	Tier 4 Treatments	Private
CKBNLP79	North Lake - Yangebup Lake (Planning area 5)	Deller Rd (South) Urban Interface	18	Tier 1 Treatments	Private
CKBNLP80	North Lake - Yangebup Lake (Planning area 5)	Coolbellup (South) Urban Interface (Forrest Rd)	18	Tier 3 Treatments	Private
CKBNLP81	North Lake - Yangebup Lake (Planning area 5)	Good life Health Club	3A	Tier 1 Treatments	Private
CKBNLP82	North Lake - Yangebup Lake (Planning area 5)	Perth Waldorf School	1B.	Tier 3 Treatments	Private
CKBNLP83	North Lake - Yangebup Lake (Planning area 5)	Adventure World	3C	Tier 1 Treatments	Private
CKBCSO84	Coastal Strip (planning area 6)	Water Corp Site - Mt. Brown	18	Tier 1 Treatments	Other Government Agency
CKBCSP85	Coastal Strip (planning area 6)	Austal Ship Yard	3A	Tier 1 Treatments	Private
CKBCSO86	Coastal Strip (planning area 6)	Woodman Point Caravan Park	18	Tier 1 Treatments	Other Government Agency
CKBCSO87	Coastal Strip (planning area 6)	Woodman Point - Recreation Camp	18	Tier 1 Treatments	Other Government Agency
CKBCSL88	Coastal Strip (planning area 6)	Integrated Beach Facility (Coogee Surf Club)	4B	Tier 1 Treatments	Local Government
CKBCSL89	Coastal Strip (planning area 6)	Coogee Caravan Park	3C	Tier 1 Treatments	Local Government
CKBCSO90	Coastal Strip (planning area 6)	John Graham Recreational Reserve	3C	Treatment Not Required	Other Government Agency
CKBCSP91	Coastal Strip (planning area 6)	Port Coogee Urban Interface	5C	Tier 1 Treatments	Private
CKBCSO92	Coastal Strip (planning area 6)	Old Power Station - Cooqee	5B	Tier 2 Treatments	Other Government Agency
CKBCSP93	Coastal Strip (planning area 6)	South East Industrial Complex	4B	Tier 1 Treatments	Private
CKBCSP94	Coastal Strip (planning area 6)	Troode St Urban Interface	1B	Tier 1 Treatments	Private
CKBCSP95					Private
	Coastal Strip (planning area 6)	Market Garden Swamp Urban Interface	2A 3C	Tier 1 Treatments	11.010
CKBCSO96	Coastal Strip (planning area 6)	Coogee Primary School		Tier 2 Treatments	Other Government Agency
CKBCSP97	Coastal Strip (planning area 6)	Market Grande South East Urban Interface	1B	Tier 1 Treatments	Private
CKBCSP98	Coastal Strip (planning area 6)	Coogee Urban interface (west)	5C	Tier 3 Treatments	Private
CKBCSO99	Coastal Strip (planning area 6)	Telstra exchange - Spearwood	5B	Tier 2 Treatments	Other Government Agency
CKBCSP100	Coastal Strip (planning area 6)	Mell Rd Development (North)	1B	Treatment Not Possible	Private
CKBCSP101	Coastal Strip (planning area 6)	Amberley Aged Care	3C	Tier 1 Treatments	Private
CKBCSP102	Coastal Strip (planning area 6)	Pennlake Dr Urban Interface	2A	Tier 1 Treatments	Private
CKBCSP103	Coastal Strip (planning area 6)	Munster Market Gardens	18	Tier 3 Treatments	Private
CKBCSP104	Coastal Strip (planning area 6)	146 Cockburn Rd Industrial Interface	1B	Tier 4 Treatments	Private
CKBCSP105	Coastal Strip (planning area 6)	Emplacement Crescent Industrial Interface	1B	Tier 4 Treatments	Private
CKBCSL106	Coastal Strip (planning area 6)	Manning Park Homestead	1B	Tier 4 Treatments	Local Government
CKBCSP107	Coastal Strip (planning area 6)	Delmatinac Cub	5C	Tier 1 Treatments	Private
CKBCSO108	Coastal Strip (planning area 6)	Hamilton Hill Senior High School	5B	Tier 4 Treatments	Other Government Agency
CKBCSP109	Coastal Strip (planning area 6)	Angus Ave - Blackwood Ave Urban Interface	18	Tier 1 Treatments	Private
CKBCSP110	Coastal Strip (planning area 6)	Wheeler Rd - Purvis St Urban Interface	3C	Tier 1 Treatments	Private

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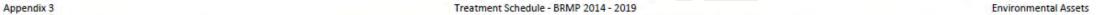
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Asset ID	Planning Area	Asset Name	Priority	Treatment Type	Land Owner
0121	Banjup / Atwell (Planning area 1)	Perth - Bunbury Gas Pipeline	2C	Tier 3 Treatments	Other Government Agency
0122	Banjup / Atwell (Planning area 1)	Jandakot Water Catchment	2C	Tier 1 Treatments	Other Government Agency
0123	Banjup / Atwell (Planning area 1)	Water Pump 1	4A	Tier 3 Treatments	Other Government Agency
0124	Banjup / Atwell (Planning area 1)	Water Pump 2	4A	Tier 3 Treatments	Other Government Agency
0125	Banjup / Atwell (Planning area 1)	Water Pump 3	4A	Tier 3 Treatments	Other Government Agency
0126	Banjup / Atwell (Planning area 1)	Water Pump 4	4A	Tier 3 Treatments	Other Government Agency
L127	Banjup / Atwell (Planning area 1)	Denis De Young Race Track	3D	Tier 1 Treatments	Local Government
P128	Banjup / Atwell (Planning area 1)	Lyon Blvd Shopping Village	5C	Tier 1 Treatments	Private
0129	Jandakot/Banjup North	Jandakot Airport (airside)	4B	Tier 1 Treatments	Other Government Agency
0130	Jandakot/Banjup North	Jandakot Airport (Hangers)	3C	Tier 1 Treatments	Other Government Agency
0131	Jandakot/Banjup North	Western Power (Jandakot)	4B	Tier 3 Treatments	Other Government Agency
P132	Jandakot/Banjup North	Atco Gas Depot	4B	Tier 3 Treatments	Private
P133	Jandakot/Banjup North	Cockburn Central Industrial Complex	4B	Tier 1 Treatments	Private
0134	Jandakot/Banjup North	Jandakot Water Pumps	5B	Tier 3 Treatments	Other Government Agency
0135	South Coast to Hammond Park	Western Power High tension lines	4B	Tier 3 Treatments	Other Government Agency
0136	South Coast to Hammond Park	Industrial Rail Line	4B	Tier 3 Treatments	Other Government Agency
P137	South Coast to Hammond Park	Henderson Go-Cart Track	5B	Tier 1 Treatments	Private
P138	South Coast to Hammond Park	Henderson Industrial Interface (EAST)	4B	Tier 1 Treatments	Private
0139	South Coast to Hammond Park	Telstra exchange - Wattleup	4B	Tier 1 Treatments	Other Government Agency
P140	South Coast to Hammond Park	Cockburn Cement quarry	5B	Tier 1 Treatments	Private
P141	South Coast to Hammond Park	Hurst Rd Industrial Complex	5C	Tier 1 Treatments	Private
P142	South Coast to Hammond Park	Wattleup Market Gardens	5A	Tier 1 Treatments	Private
0143	South Coast to Hammond Park	Model Car Club/Race tract	3D	Tier 1 Treatments	Other Government Agency
0144	Beeliar Regional Park	Industrial Rail Line	4B	Tier 3 Treatments	Other Government Agency
P145	Beeliar Regional Park	Cockburn Cement Mill	4B	Tier 3 Treatments	Private
0146	Beeliar Regional Park	Water Corp Site - MUNSTER	4B	Tier 3 Treatments	Other Government Agency
P147	Beeliar Regional Park	Cockburn Cement quarry 2	5B	Tier 1 Treatments	Private
0148	Beeliar Regional Park	Western Power High tension lines	4B	Tier 3 Treatments	Other Government Agency
0149	Beeliar Regional Park	Water Corp Site - SUCCESS	4B	Tier 3 Treatments	Other Government Agency
O150	Beeliar Regional Park	Stock Rd - WATTLEUP/MUNSTER	5B	Tier 3 Treatments	Other Government Agency
0151	North Lake / Yangebup Lake	Western Power Jandakot Station and Power Lines	4B	Tier 3 Treatments	Other Government Agency
P152	North Lake / Yangebup Lake	IFAP Training Facility	4B	Tier 1 Treatments	Private
P153	North Lake / Yangebup Lake	North Lake Industrial Complex	5B	Tier 1 Treatments	Private
P154	North Lake / Yangebup Lake	Good Life Fitness Gym	5B	Tier 1 Treatments	Private
P155	North Lake / Yangebup Lake	Adventure World	4B	Tier 1 Treatments	Private
P156	North Lake / Yangebup Lake	Bibra Lake Industrial interface	4B	Tier 1 Treatments	Private
0157	North Lake / Yangebup Lake	Industrial Rail Line	4B	Tier 3 Treatments	Other Government Agency

O158	Coastal Strip	Water Corp Site - Mt Brown	4B	Tier 1 Treatments	Other Government Agency
P159	Coastal Strip	Henderson Industrial interface (Northern)	4B	Tier 1 Treatments	Private
0160	Coastal Strip	Woodman Point Caravan Park	5C	Tier 1 Treatments	Other Government Agency
L161	Coastal Strip	Coogee Caravan Park	5C	Tier 1 Treatments	Local Government
0162	Coastal Strip	Stock Rd - WATTLEUP/MUNSTER	5B	Tier 3 Treatments	Other Government Agency
O163	Coastal Strip	Western Power C Y O'Conner	4B	Tier 3 Treatments	Other Government Agency



Asset ID	Planning Area	Asset Name	Priority	Treatment Type	Land Owner
CKBBAL170	Banjup / Atwell (Planning area 1)	Emma Tree by Reserve	4C	Tier 2 Treatments	Local Government
CKBBAL171	Banjup / Atwell (Planning area 1)	Bosworth Reserve	4C	Tier 1 Treatments	Local Government
CKBBAL172	Banjup / Atwell (Planning area 1)	Mather Reserve	4C	Tier 1 Treatments	Local Government
CKBBAL173	Banjup / Atwell (Planning area 1)	Kraemer Reserve	4C	Tier 1 Treatments	Local Government
CKBBADPaW174	Banjup / Atwell (Planning area 1)	Shirley Bella Swamp	3A	Tier 2 Treatments	Department of Park and Wildlife
CKBBAL175	Banjup / Atwell (Planning area 1)	Gil Chalwel Reserve	4C	Tier 1 Treatments	Local Government
CKBBAL176	Banjup / Atwell (Planning area 1)	Banksia Eucalypt Woodland Park (North)	4C	Tier 4 Treatments	Local Government
CKBBAL177	Banjup / Atwell (Planning area 1)	Buckingham Reserve	4C	Tier 2 Treatments	Local Government
CKBBAL178	Banjup / Atwell (Planning area 1)	Denis De Yung Reserve	3A	Tier 4 Treatments	Local Government
CKBBAL179	Banjup / Atwell (Planning area 1)	Triandra Reserve	4C	Tier 1 Treatments	Local Government
CKBBAL180	Banjup / Atwell (Planning area 1)	Eco Park	4C	Tier 2 Treatments	Local Government
CKBBAL181	Banjup / Atwell (Planning area 1)	Kurrajong Park	4C	Tier 1 Treatments	Local Government
CKBBAL182	Banjup / Atwell (Planning area 1)	Freshwater Reserve	4C	Tier 3 Treatments	Local Government
CKBJKL183	Jandakot / Banjup North (Planning area 2)	Bandicoot Reserve	4C	Tier 4 Treatments	Local Government
CKBJKL184	Jandakot / Banjup North (Planning area 2)	Brandwood Reserve	4C	Tier 3 Treatments	Local Government
CKBJKL185	Jandakot / Banjup North (Planning area 2)	Classon Park	4C	Tier 3 Treatments	Local Government
CKBJKL186	Jandakot / Banjup North (Planning area 2)	Heatherlea Reserve	4C	Tier 2 Treatments	Local Government
CKBJKL187	Jandakot / Banjup North (Planning area 2)	Lukin Swamp Reserve	4C	Tier 1 Treatments	Local Government
CKBJKL188	Jandakot / Banjup North (Planning area 2)	Rose Shanks Reserve	4C	Tier 1 Treatments	Local Government
CKBJKL189	Jandakot / Banjup North (Planning area 2)	Verdi Reserve	4C	Tier 3 Treatments	Local Government
CKBJKDPaW190	Jandakot / Banjup North (Planning area 2)	Fraser Rd Bushland	3A	Tier 4 Treatments	Department of Park and Wildlife
CKBJKO191	Jandakot / Banjup North (Planning area 2)	Jandakot Airport Bushland (airside)	3A	Tier 4 Treatments	Other Government Agency
CKBJKDPaW192	Jandakot / Banjup North (Planning area 2)	Accourt Reserve	4C	Tier 4 Treatments	Department of Park and Wildlife
CKBSCL193	Southern Coast to Hammond Park (Planning area 3)	Baler Reserve	4C	Tier 1 Treatments	Local Government
CKBSCL194	Southern Coast to Hammond Park (Planning area 3)	Barfield Reserve	4C	Tier 1 Treatments	Local Government
CKBSCL195	Southern Coast to Hammond Park (Planning area 3)	Christmas Tree Park	4C	Tier 1 Treatments	Local Government
CKBSCL196	Southern Coast to Hammond Park (Planning area 3)	Frankland Park	4C	Tier 4 Treatments	Local Government
CKBSCL197	Southern Coast to Hammond Park (Planning area 3)	Holdsworth Reserve	4C	Tier 3 Treatments	Local Government
CKBSCL198	Southern Coast to Hammond Park (Planning area 3)	Mohan Park	4C	Tier 2 Treatments	Local Government
CKBSCL199	Southern Coast to Hammond Park (Planning area 3)	Redemptora Reserve	4C	Tier 4 Treatments	Local Government
CKBSCL200	Southern Coast to Hammond Park (Planning area 3)	Roper Reserve	4C	Tier 2 Treatments	Local Government
CKBSCDPaW201	Southern Coast to Hammond Park (Planning area 3)	Henderson Cliffs	4C	Tier 4 Treatments	Department of Park and Wildlife
CKBSCDPaW202	Southern Coast to Hammond Park (Planning area 3)	Harry Waring Marsupial Reserve	3A	Tier 4 Treatments	Department of Park and Wildlife
CKBBEL203	Beeliar Regional Park (Planning area 4)	Banbar Park	4C	Tier 1 Treatments	Local Government
CKBBEL204	Beeliar Regional Park (Planning area 4)	Beeliar Oval Reserve	4C	Tier 3 Treatments	Local Government
CKBBEL205	Beeliar Regional Park (Planning area 4)	Coojong Park	4C	Tier 3 Treatments	Local Government
CKBBEL206	Beeliar Regional Park (Planning area 4)	Fancote Reserve	4C	Tier 3 Treatments	Local Government
CKBBEL207	Beeliar Regional Park (Planning area 4)	Success Reserve Bushland	4C	Tier 3 Treatments	Local Government
CKBBEL208	Beeliar Regional Park (Planning area 4)	Skaife Park	4C	Tier 3 Treatments	Local Government
CKBBEDPaW209	Beeliar Regional Park (Planning area 4)	Thompson Lake	3A	Tier 4 Treatments	Department of Park and Wildlife
CKBBEDPaW210	Beeliar Regional Park (Planning area 4)	Kogalup Lake	3A	Tier 4 Treatments	Department of Park and Wildlife
CKBBEO211	Beeliar Regional Park (Planning area 4)	Branch Circus Bushland	4C	Tier 3 Treatments	Other Government Agency
CKBBEO212	Beeliar Regional Park (Planning area 4)	Lot 9001 Hammond Rd Bushland	4C	Tier 3 Treatments	Other Government Agency
CKBBEO213	Beeliar Regional Park (Planning area 4)	Water Corp Site - Munster	4C	Tier 4 Treatments	Other Government Agency



CKBBEO214	Beeliar Regional Park (Planning area 4)	Twin Bartram Swamps	4C	Tier 3 Treatments	Other Government Agency
CKBNLL215	North Lake – Yangebup Lake (Planning area 5)	Bibra Lake Reserve	4C	Tier 4 Treatments	Local Government
CKBNLL216	North Lake - Yangebup Lake (Planning area 5)	Cocos Park Reserve	4C	Tier 3 Treatments	Local Government
CKBNLL217	North Lake - Yangebup Lake (Planning area 5)	Cockburn Central Bushland	4C	Tier 1 Treatments	Local Government
CKBNLL218	North Lake - Yangebup Lake (Planning area 5)	Levi Park	4C	Tier 3 Treatments	Local Government
CKBNLL219	North Lake - Yangebup Lake (Planning area 5)	Little Rush Lake Reserve	4C	Tier 3 Treatments	Local Government
CKBNLL220	North Lake - Yangebup Lake (Planning area 5)	Lot 27 Progress Dr	4C	Tier 3 Treatments	Local Government
CKBNLL221	North Lake - Yangebup Lake (Planning area 5)	Nola Waters Reserve	4C	Tier 1 Treatments	Local Government
CKBNLL222	North Lake - Yangebup Lake (Planning area 5)	Yangebup Lake Reserve	4C	Tier 3 Treatments	Local Government
CKBCSL223	Coastal Strip (planning area 6)	Coogee Beach Reserve	4C	Tier 1 Treatments	Local Government
CKBCSL224	Coastal Strip (planning area 6)	C Y O'Conner Reserve	4C	Tier 1 Treatments	Local Government
CKBCSL225	Coastal Strip (planning area 6)	Katsura Reserve	4C	Tier 3 Treatments	Local Government
CKBCSL226	Coastal Strip (planning area 6)	Lake Coogee Reserve	4C	Tier 2 Treatments	Local Government
CKBCSL227	Coastal Strip (planning area 6)	Manning Park	4C	Tier 4 Treatments	Local Government
CKBCSL228	Coastal Strip (planning area 6)	Market Garden Swamp #3	4C	Tier 3 Treatments	Local Government
CKBCSL229	Coastal Strip (planning area 6)	Market Garden Swamp #1	4C	Tier 3 Treatments	Local Government
CKBCSL230	Coastal Strip (planning area 6)	Market Garden Swamp # 2	4C	Tier 3 Treatments	Local Government
CKBCSL231	Coastal Strip (planning area 6)	Mc Neil Field	4C	Tier 2 Treatments	Local Government
CKBCSDPaW232	Coastal Strip (planning area 6)	Woodman Point Regional Park	2A	Tier 4 Treatments	Department of Park and Wildlife
CKBCSDPaW233	Coastal Strip (planning area 6)	Mt Brown	4C	Tier 4 Treatments	Department of Park and Wildlife
CKBCSO234	Coastal Strip (planning area 6)	Crnr of Spearwood Ave / Cockburn Rd	4C	Tier 3 Treatments	Other Government Agency
CKBCSO235	Coastal Strip (planning area 6)	20 King St	4C	Tier 3 Treatments	Other Government Agency

Asset ID	Planning Area	Asset Name	Priority	Treatment Type	Land Owner
CKBBAL246	Banjup / Atwell (Planning area 1)	Paperbark Tree (Traffic Island)	5C	Tier 1 Treatments	Local Government
CKBBAL247	Banjup / Atwell (Planning area 1)	Mather Reserve	3A	Tier 1 Treatments	Local Government
CKBBAL248	Banjup / Atwell (Planning area 1)	Kraemer Reserve	3A	Tier 1 Treatments	Local Government
CKBBAP249	Banjup / Atwell (Planning area 1)	Ready Mix Sandpit 2	5C	Tier 1 Treatments	Private
CKBBAP250	Banjup / Atwell (Planning area 1)	Ready Mix Sandpit 1	5C	Tier 1 Treatments	Private
CKBJKP251	Jandakot / Banjup North (Planning area 2)	Prinsep Rd	5B	Tier 1 Treatments	Private
CKBJKP252	Jandakot / Banjup North (Planning area 2)	Warton Rd BANJUP	5B	Tier 3 Treatments	Private
CKBJKO253	Jandakot / Banjup North (Planning area 2)	Hope Rd JANDAKOT	5B	Tier 1 Treatments	Other Government Agency
CKBJKO254	Jandakot / Banjup North (Planning area 2)	Lukin Swamp	3A	Tier 2 Treatments	Other Government Agency
CKBJKP255	Jandakot / Banjup North (Planning area 2)	Acourt Rd	5B	Tier 3 Treatments	Private
CKBJKL256	Jandakot / Banjup North (Planning area 2)	Banjup Memorial Park	2A	Tier 3 Treatments	Local Government
CKBSCP257	Southern Coast to Hammond Park (Planning area 3)	Wattleup Road Swamp	2C	Tier 3 Treatments	Private
CKBSCDPaW258	Southern Coast to Hammond Park (Planning area 3)	Gemma Road asset	4A	Tier 4 Treatments	Department of Park and Wildlife
CKBSCL259	Southern Coast to Hammond Park (Planning area 3)	Naval Base Shacks	4B	Tier 1 Treatments	Local Government
CKBBEO260	Beeliar Regional Park (Planning area 4)	Kogolup Lake	2C	Tier 4 Treatments	Other Government Agency
CKBBEDPaW261	Beeliar Regional Park (Planning area 4)	Thompson Lake	3A	Tier 4 Treatments	Department of Park and Wildlife
CKBBEP262	Beeliar Regional Park (Planning area 4)	Hammond Road Swamp	3A	Tier 4 Treatments	Private
CKBBEP263	Beeliar Regional Park (Planning area 4)	Bartram Road Swamp	3A	Tier 3 Treatments	Private
CKBBEL264	Beeliar Regional Park (Planning area 4)	Thompson Lake 01	3A	Tier 3 Treatments	Local Government
CKBBEDPaW265	Beeliar Regional Park (Planning area 4)	Thompson Lake	4A	Tier 4 Treatments	Department of Park and Wildlife
CKBBEO266	Beeliar Regional Park (Planning area 4)	Thompson Reservoir 1	5B	Tier 4 Treatments	Other Government Agency
CKBBEO267	Beeliar Regional Park (Planning area 4)	Thompson Reservoir 2	5B	Tier 4 Treatments	Other Government Agency
CKBBEO268	Beeliar Regional Park (Planning area 4)	Beeliar Regional Rark 4	3A	Tier 4 Treatments	Other Government Agency
CKBNLO269	North Lake – Yangebup Lake (Planning area 5)	North Lake (North)	3A	Tier 1 Treatments	Other Government Agency
CKBNLO270	North Lake – Yangebup Lake (Planning area 5)	North Lake (Coolbellup)	3A	Tier 1 Treatments	Other Government Agency
CKBNLO271	North Lake – Yangebup Lake (Planning area 5)	North Lake and Bibra Lake	3A	Tier 4 Treatments	Other Government Agency
CKBNLO272	North Lake – Yangebup Lake (Planning area 5)	Swamp 81	3A	Tier 3 Treatments	Other Government Agency
CKBNLO273	North Lake – Yangebup Lake (Planning area 5)	North Lake SW	3A	Tier 3 Treatments	Other Government Agency
CKBNLO274	North Lake – Yangebup Lake (Planning area 5)	Bibra Lake North	3A	Tier 3 Treatments	Other Government Agency
CKBCSO275	Coastal Strip (planning area 6)	Cockburn Lighthouse	5B	Tier 1 Treatments	Other Government Agency
CKBCSL276	Coastal Strip (planning area 6)	Robb Jetty Camp	3A	Tier 1 Treatments	Local Government
CKBCSL277	Coastal Strip (planning area 6)	Lake Coogee 1	3A	Tier 1 Treatments	Local Government
CKBCSL278	Coastal Strip (planning area 6)	Lake Coogee 2	3A	Tier 1 Treatments	Local Government
CKBCSO279	Coastal Strip (planning area 6)	Cockburn Rd - Henderson	3A	Tier 4 Treatments	Other Government Agency
CKBCSO280	Coastal Strip (planning area 6)	Woodman Point	3A	Tier 4 Treatments	Other Government Agency
CKBCSL281	Coastal Strip (planning area 6)	Lake Coogee	3A	Tier 2 Treatments	Local Government
CKBCSO282	Coastal Strip (planning area 6)	Cockburn Rd Buildings and Rail	3A	Tier 3 Treatments	Other Government Agency

# Appendix 4 -BRMP Stakeholder List

Agency/Organisation/Group	Area of Interest/ Consultation
Residents of Cockburn	Private freehold lands within the City of Cockburn
City of Cockburn Bush Fire	Provide on-going technical advice on the treatment
Advisory Reference Group	schedule
City of Cockburn (Community Services)	Development and implementation of the BRMP
City of Cockburn ( Parks and Environment)	Land management of the Reserves vested within the City of Cockburn as map 0:03
Department of Planning	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Landcorp	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Water Corporation	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Main Roads Western Australia	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Department of Education	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Western Power	Management of power lines and ancillary equipment on lands and easements of lands identified within the City of Cockburn
Landgate	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Commonwealth of Australia (Jandakot Airport Holdings)	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Department of Lands	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Department of Parks and Wildlife	Land vested as per Vested Land Holding Map (map I.D. 0:03)
Department of Fire and Emergency Services	Consultative technical support of mitigation strategies as outlined within the treatment schedule.
Office of Bushfire Risk Management	Project consultation advice and strategic document direction.

**Appendix 5 - Project Framework** 

**Aim** 

The aim of this project is to document a coordinated and efficient approach towards the identification and treatment of assets exposed to bush fire related risk within the City of

Cockburn.

**Objectives** 

The Objective of this project is to develop and implement a BRMP to effectively manage bushfire related risk within the city of Cockburn in order to protect people, assets and other

things valuable to the community. Specificity, the objectives of the BRMP are too:

• Guide and coordinate a tenure blind bushfire risk management/mitigation program

over a five (5) year period;

• Document the process used to identify, analyse and evaluate risk, determine

priorities and develop a plan to systematically treat risk;

• Facilitate the effective use of the financial and physical resources available for

bushfire risk management activities;

• Integrate bushfire risk management into the business processes of the City of

Cockburn, land managers and other agencies;

Ensure collaboration between stakeholders for bushfire risk management;

• Clearly and concisely communicate risk in a format that is meaningful to stakeholders

and the community; and

Monitor and review the implementation of the Plan, to ensure enhancements are

made on an on-going basis.

**Project Scope** 

The City of Cockburn BRMP will include the following attributes as part the implementation

phase of the risk management plan:

• Engaging various City of Cockburn internal departments and external agencies to

participate and commit to the project;

• Identify locations of risk, either quantified or perceived by carrying out physical fuel

loading inspections by City of Cockburn Staff;

GIS Mapping completed for City of Cockburn to identify Bushfire risk areas;

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- Determine risk assessment of those sites to quantify the risk and determine a prioritised approach according to the determined risk ratings; and
- Determine the ideal treatment strategies for the sites to reduce the risk rating.
- Life of the plan will last five (5) years with annual reviews to be carried out on treatment solutions provided as part of the BRMP

## **Project Outputs**

Output from the process of developing the BRMP will be as follows:

- BRMP asset mapping
- BRMP treatment mapping
- Geospatial data gained during the BRMP mapped within the City's GIS layer
- Comprehensive fuel loading assessments completed
- Implement initial consultation with major State land loading departments on proposed treatment strategies

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# **Project Schedule 2014;**

	Task Description	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
1	Establish a scope of works required for updating the existing Bush Fire Management Plan												
2	Prepare a draft brief for, and engage a consultant or suitable person(s) for the purposes of identifying Bushfire Risk across the City of Cockburn municipal boundaries.												
3	BFARG update												
4	Update to extraordinary BFARG meeting												
5	Internal stakeholder meeting												
6	External stake holder meeting												
7	Bush Fire Risk Assessment Officer Start												
8	Bush Fire Risk Assessment Officer Completed												
9	Public Workshop												
10	Review of draft plan (internal)												
12	Internal stakeholder meeting												
13	Seek Council approval for public comment												
14	Advertise for Public comment												
15	finalise changes												
16	September/October OCM for anticipated consideration by Council												
17	Ongoing review									Ongoi	ng		

## **Budget and Expenditure**

The BRMP will be wholly funded by the City of Cockburn within its operational budget approved by Council for the 2013/2014 financial year and remaining funds carried forward for the 2014/2015 financial year. The funding allocated will assist the City in employing staff on a casual basis to carry out a tenure blind fuel loading assessment, advertising community engagement activities and advertising the management plan and assist in any sundry minor expenses that occur during the development of the plan.

The City's staff involved in this project will have their wages absorbed by the relevant service unit. The City's CBFCO assistance during the development phase will be done in agreement with the Department of Fire and Emergency Service District Officer as per the current Fire Managers Memorandum of Understanding.

No additional budget has been allocated for any treatment works beyond what was approved by council for the 2013/2014 and 2014/2015 financial years.

### Responsibilities

The below responsibilities have been designated to the following roles within the City of Cockburn as responsible officers in the development process of the BRMP.

#### **Manager of Community Services**

- Provide advice on governance to ensure the BRMP is carried out to the City's Policies and guidelines
- Chair External Stakeholder meetings
- Chair meetings reviewing the BRMP draft
- Provide BRMP briefing to Elected Members
- Liaise and inform Directors on major milestones of the project.

#### Ranger & Community Safety Manager

- Provide technical compliance advice on fuel reduction activities on private land
- Review Superseded Bush Fire Management Plan
- Chair internal stakeholder meetings
- Provide advice and information of the City's Fire Control Order
- Chair individual stakeholder meetings
- Provide comment on proposed solutions for issues highlighted within the planning process
- Member of the draft review group

#### **Environmental Manager**

- Assess potential treatment solutions for environmental impact
- Provide environmental advice during the BRMP planning process
- Engage with the community on environmental concerns during community engagement activities
- Ensure treatment strategies' proposed will not pose unnecessary risk on environmental assets
- Assist with ensuring fuel load assessments have been carried out in high risk areas.
- Member of the draft review group

### **Emergency Management & Projects Coordinator**

- Coordinate the assembly of all information retaining to the BRMP
- Initiate contact with all external stakeholders
- Critique information given by internal information sources
- Establish contacts with affected neighbouring Local Governments
- Ensure the BRMP meets internal deadlines in time
- Supervisor casual staff employed for the purpose of completing the BRMP
- Build key relationship with OBRM
- Coordinate community engagement activities during the development of the BRMP
- Coordinate GIS resources to ensure maps are accurate
- Coordinate any public comment requirements are carried out if requested.
- Member of the draft review group

#### **Governance & Risk Coordinator**

- Provide advice on risk management process used
- Provide advice on wording and terminology used
- Ensure any liabilities are considered during the BRMP process
- Review draft BRMP

#### **Chief Bush Fire Control Officer/ DFES**

- Provide technical advice on fuel loading assessments carried out by the City
- Conduct regular compliance check on fuel loads are complete across the City
- Provide technical advice on treatment solutions during external stakeholder meetings
- Provide technical advice on treatment solutions during internal stakeholder meetings
- Liaise with the City on treatment solutions suggested/ ensure treatment solutions are reflected to the risk
- Review suggested treatment solutions proposed by external stakeholders
- Member of the draft review group

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# **Reporting Requirements**

Reporting during the planning process will be as per the City of Cockburn's organisational chart for internal staff. Any salient issues raised during the planning process of this document were added to the *Issues Register* by the City's Emergency Management & Project Coordinator. Issues raised by any external departments will be added into the issues registry and will not be altered by the City in anyway.



### **Appendix 6 - Public Consultation - Key Findings**

#### **Summary:**

As part of the Bush Fire Risk Management plan (BRMP) consultation phase, the City conducted two workshops to gauge and understand the following themes;

- Perceptions of Bush Fire
- Environmental Considerations
- Risk Mitigation / Risk Acceptability
- Enhancing Community Knowledge and Safety

The workshops were conducted in grouped round table discussion format and hosted by an independent facilitator. City staff attended the workshops to present key considerations of the BRMP and provide basic answers to queries raised during the discussion phase of the project.

Although a number of views were represented, the key findings were the issues/ideas raised most frequently between all participates. At no stage were specific ideas and views of residents used to alter the risk ratings to suite community perception.

The Workshops were carried out with consideration to the City of Cockburn Community Engagement Framework.

#### Theme one - Perceptions of bushfire

- Residents are more aware of the risk of bushfire following the Banjup/ Forrestdale Bushfire in February 2014
- Long term residents say they are aware, having been through multiple bushfires before, however they worry about the new residents who move into the area between fires and do not understand the extent of the threat.
- Some residents believe that they are fully prepared to stay and defend their properties, others say they are prepared only to a certain extent, whilst some would evacuate immediately leaving just their sprinklers for their home's protection.
- Residents had limited knowledge of the Fire Danger Index and its meaning. They would like more information about the stages and what each stage represents.

#### Theme two - Environmental considerations

- Residents are concerned about the decline in biodiversity in the Banjup area, that it is a sensitive natural ecosystem. Stating other methods of fuel reduction should be explored, beyond normal burning and fire breaks.
- Residents believe it is difficult to control fuel loads on their properties due to council imposed burning restrictions.

- Residents would like expert advice on what they are allowed to do with the vegetation on their properties and how to take care of it properly.
- Residents would like a brochure containing pictures and brief understandable descriptions of weeds are distributed to rural land owners so they are aware of what to look out for and remove to reduce their fire risk.
- Residents would like to see a veldt grass removing subsidy set up by council or increase current subsidies available to reduce veldt grass on their properties.

#### Theme three - Risk Mitigation / Risk Acceptability

- Residents believe fire mitigation is important in rural areas, risk calculated using the risk framework should be treated from the highest risk down.
- Risk identified can be accepted if other more cost effective solutions such as community engagement can be made more readily between the City of Cockburn, Local Volunteer Bush Fire Brigades and the community.
- Assets that face an extreme risk highlighted within the BRMP should be have a process to alert nearby residents.
- Residents would like the council and DPaW to burn their land/reserves as much as the other so their land isn't a threat to residential properties.

### Theme four - Enhancing Community Knowledge and Safety

- Community information barbeques with DFES, City of Cockburn staff and local fire fighters to provide advice.
- Bushfire related Street parties organised by residents but support by the City of Cockburn/ local volunteer bush fire brigades - for residents to get to know their neighbours including contact details, work details (eg FIFO), and assets that may be affected by fire (horses, cars etc).
- More preparedness/ bushfire prevention displays at community events/meetings.
- Create a 'one stop' website for residents to access all of the information they require to make decisions on minimizing risks.
- Increase the community engagement between schools to ensure children are aware the
  risk around them and help improve their families knowledge of bushfire prevention.
   Specific engagement activities should be conducted with high school students to prevent
  arson in conjunction with WA Police.

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# **Appendix 7 - Maps**

Within the Bushfire Risk Management Plan (BRMP) the following maps have been included to assist in identifying assets for readers of this plan. Due to data being sourced from various methods, no accuracy can be guaranteed. Please consult with the City of Cockburn for further clarification.

#### **Map Index**

#### **Overarching maps**

- 0:01 Bushfire planning areas boundary
- 0:02 Environmentally Managed reserves within the City of Cockburn
- 0:03 Vested Land Holding Map
- 0:04 Jandakot Water Mound

### Bushfire planning area 1 - Banjup / Atwell

- 1:01 Human Assets
- 1:02 Economic Assets
- 1:03 Environmental Assets
- 1:04 Cultural Assets

#### Bushfire Planning Area 2 - Jandakot / Banjup North

- 2:01 Human Assets
- 2:02 Economic Assets
- 2:03 Environmental Assets
- 2:04 Cultural Assets

#### **Bushfire Planning Area 3 - Southern Coast to Hammond Park**

- 3:01 Human Assets
- 3:02 Economic Assets
- 3:03 Environmental Assets
- 3:04 Cultural Assets

#### **Bushfire Planning Area 4 - Beeliar Regional Park**

- 4:01 Human Assets
- 4:02 Economic Assets
- 4:03 Environmental Assets
- 4:04 Cultural Assets

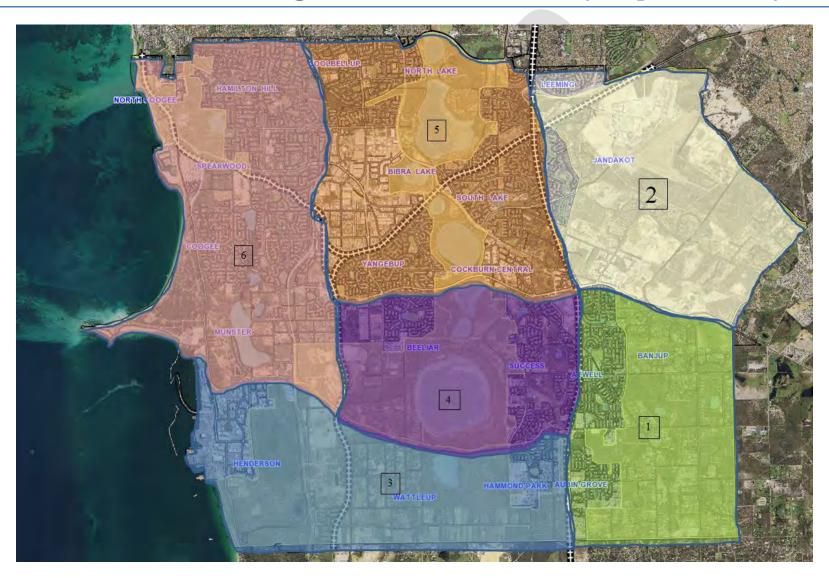
### **Bushfire Planning Area 5- North Lake - Yangebup Lake (Planning area 5)**

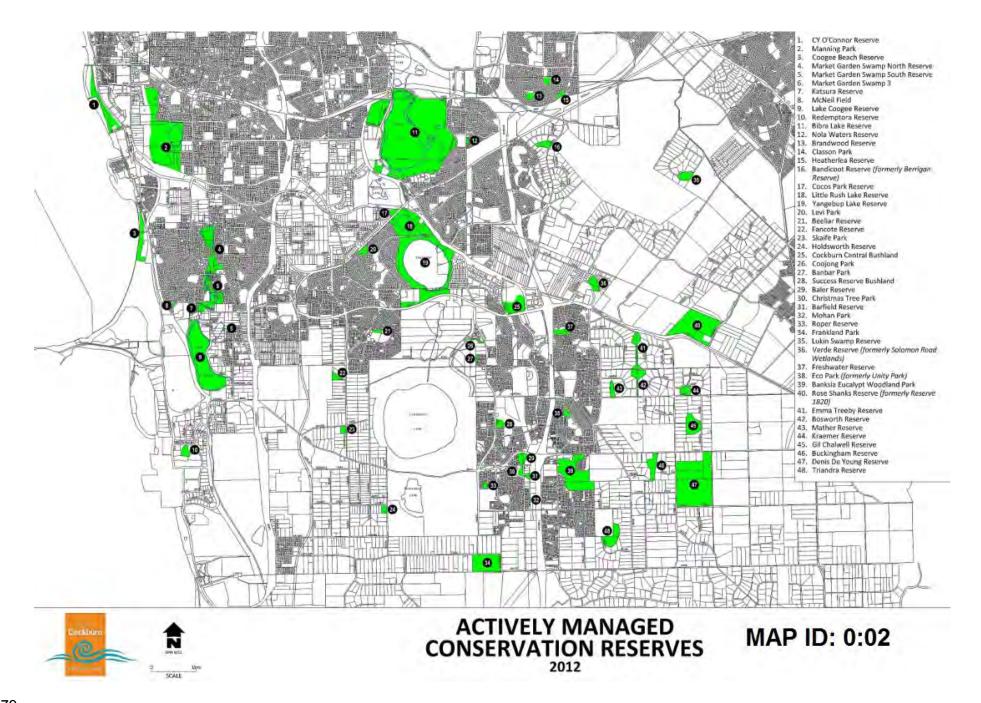
- 5:001 Human Assets
- 5:02 Economic Assets
- 5:03 Environmental Assets
- 5:04 Cultural Assets

#### **Bushfire Planning Area 6 - Coastal Strip**

- 6:01 Human Assets
- 6:02 Economic Assets
- 6:03 Environmental Assets
- 6:04 Cultural Assets

# Bushfire Planning Area Boundaries (Map ID 0:01)



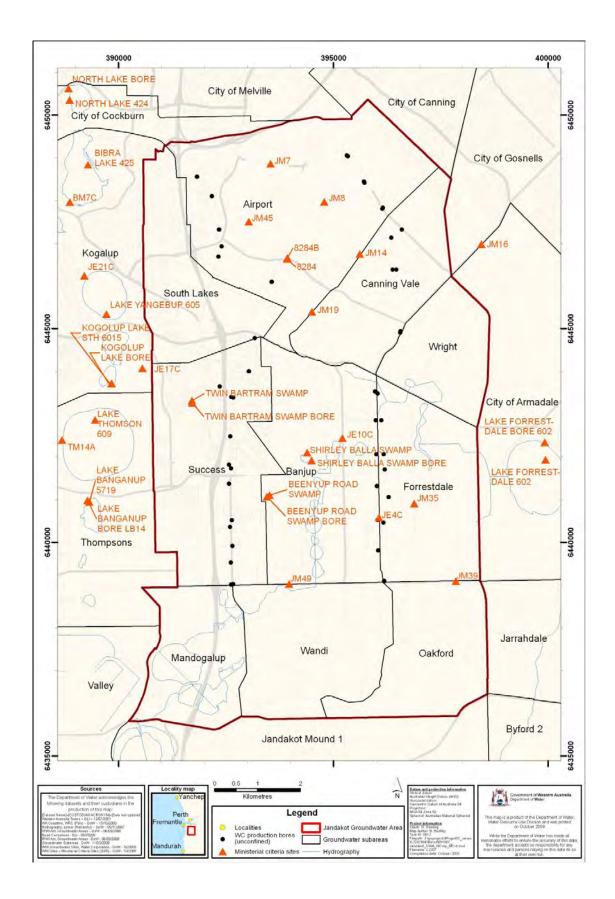


# Vested Land Holding Map (MAP ID 0:03)





# MAP ID: 0:04 Jandakot Water Mound



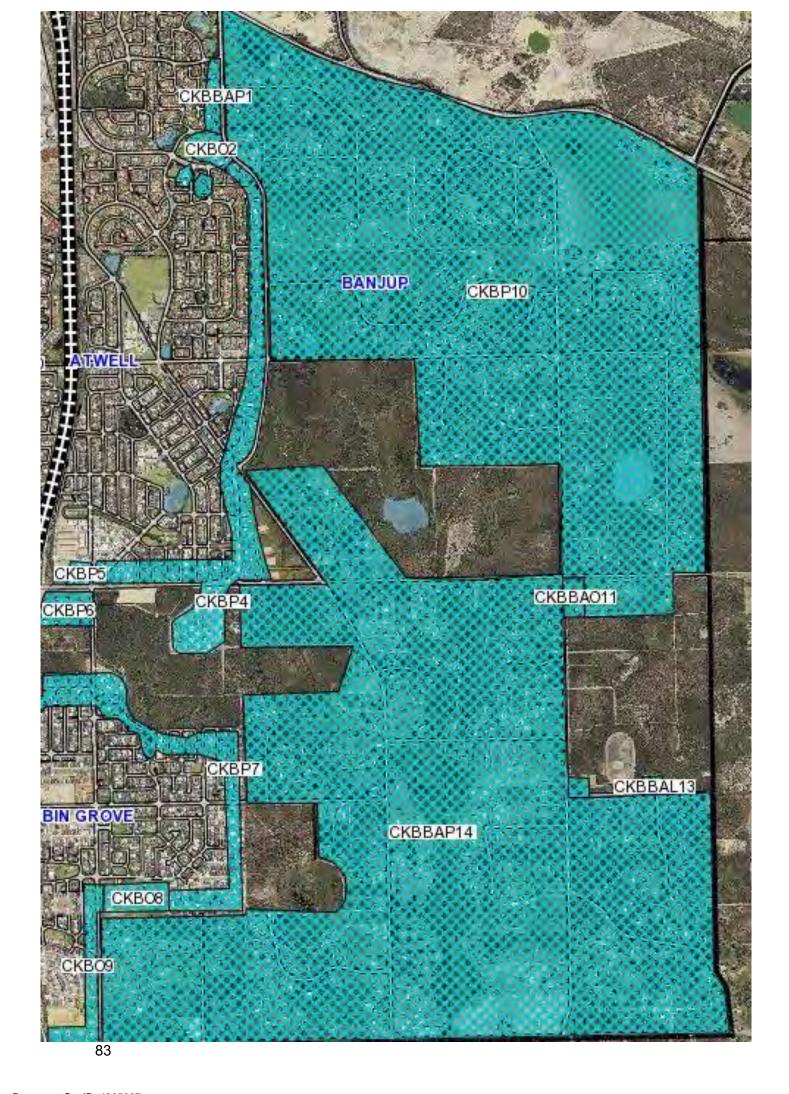
# Banjup/ Atwell - Human Assets



# **Bushfire Risk Management Plan 2014 - 2019**

# MAP ID: 1:01

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBBAP1	urban interface 1	Lydon Blvd./ Mosedale Retreat	Very High (2B)
CKBO2	Atwell Primary School	160 Lydon Boulevard ATWELL	Very High (2B)
CKBL3	Atwell Community Centre	129 Lydon Boulevard ATWELL	Medium (4B)
CKBP4	Urban interface 2	Lydon blvd. / Lyon Rd	Very High (2B)
CKBP5	Lyon Rd Shopping Centre	80 Lyon Rd	High (3C)
CKBP6	urban interface 3	Twilight Mews	High (3C)
CKBP7	urban interface4	Aubin Grove Bush Fire interface	Very High (2B)
CKBL8	Aubin Grove Community Centre	71 Camden Boulevard	High (3C)
CKBO9	Aubin Grove Primary School	85 Camden Boulevard AUBIN GROVE	High (3C)
CKBP10	Rural Living	Armadale Rd / Gibbs Rd	Extreme (1A)
CKBBAO11	DCP Home	275 Liddelow Road BANJUP	Extreme (1A)
CKBBAL12	Jandakot Fire Station	41 Oxley Rd BANJUP	Extreme (1B)
CKBBAL13	Banjup Community Centre	41 Oxley Rd BANJUP	Extreme (1B)
CKBBAP14	Rural Living 2	Southern Part of Banjup	Extreme (1A)



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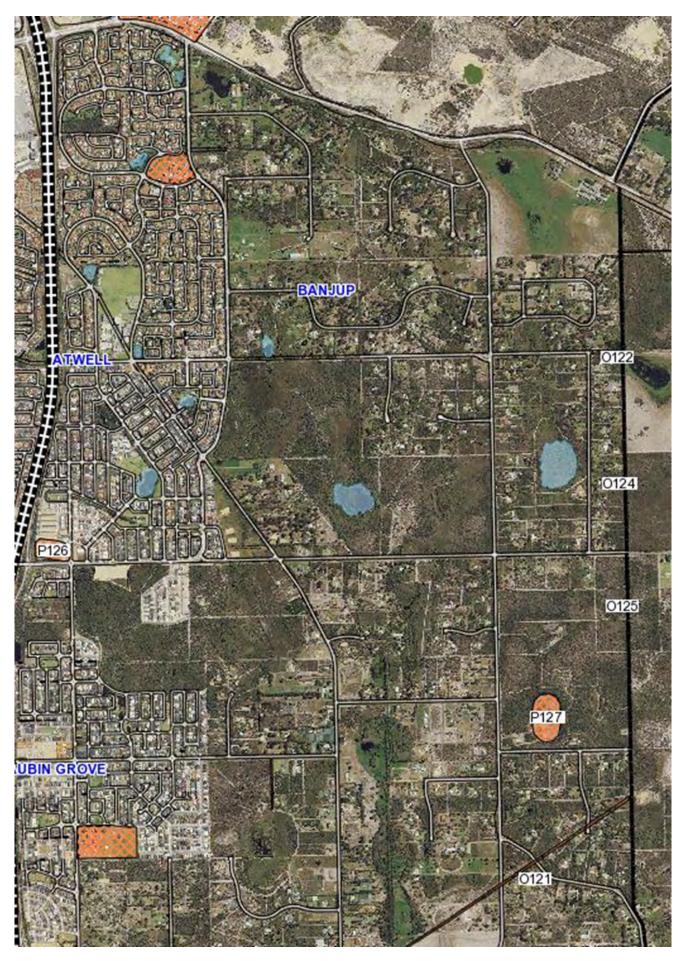
# Banjup/ Atwell – Economic Assets



# **Bushfire Risk Management Plan 2014 - 2019**

# **MAP ID: 1:02**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
O121	Perth - Bunbury Gas Pipeline	Banjup (south eastern side)	Very High (2C)
O122	Jandakot Water Catchment	Banjup	Very High (2C)
O123	Water Pump 1	Hebble Loop BANJUP	Mediu m (4A)
O124	Water Pump 2	Lot 465 Bartrum Rd BANJUP	Mediu m (4A)
O125	Water Pump 3	Lot 464 Beronia Road BANJUP	Mediu m (4A)
O126	Water Pump 4	Denis De Young Reserve (LGA) Boundary	Mediu m (4A)
L127	Denis De Young Race Track	Denis De Young Reserve	High (3D)
P128	Lyon Blvd Shopping Village	80 Lyon Blvd ATWELL	Low (5C)



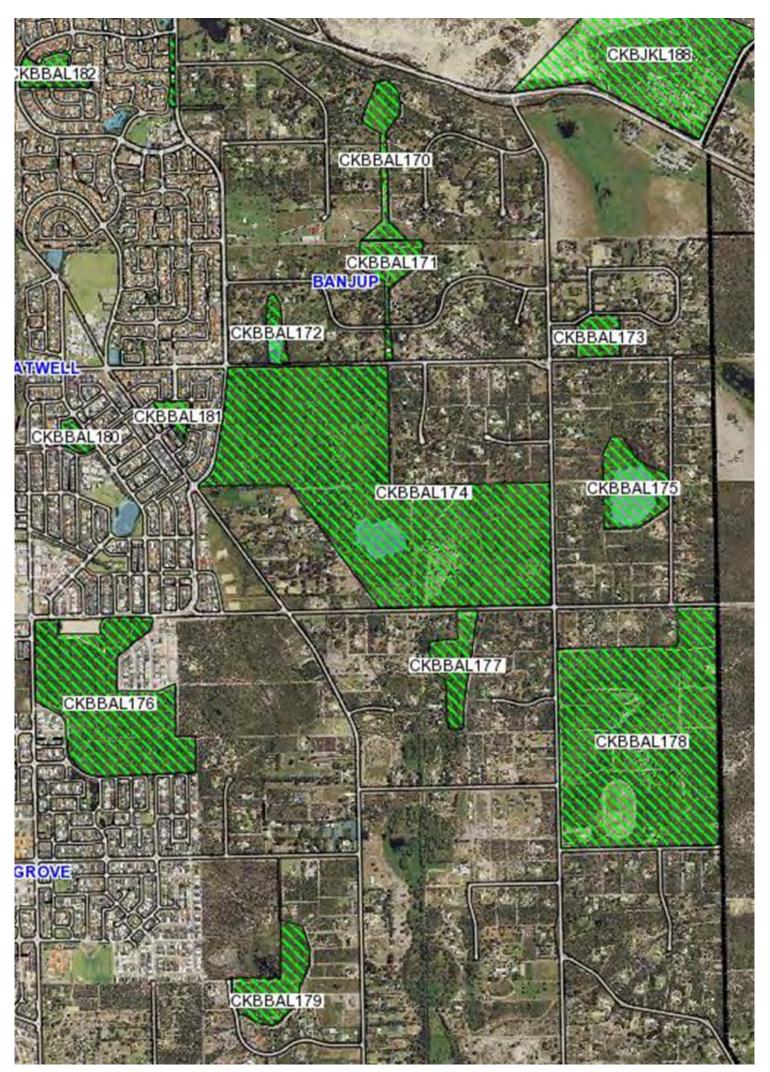
# Banjup/ Atwell – Environmental Assets



# **Bushfire Risk Management Plan 2014 - 2019**

## **MAP ID: 1:03**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBBAL170	Emma Treeby Reserve	Armadale Rd / Gutter Ridge Rd BANJUP	Medium (4C)
CKBBAL171	Bosworth Reserve	Harper Rd BANJUP	Medium (4C)
CKBBAL172	Mather Reserve	Bartram Rd BANJUP	Medium (4C)
CKBBAL173	Kraemer Reserve	Bartrum Rd / Hebble Loop BANJUP	Medium (4C)
CKBBADPaW174	Shirley Bella Swamp	Gibbs Rd / Liddelw Rd /Tapper Rd BANJUP	High (3A)
CKBBAL175	Gil Chalwel Reserve	Boronia Rd BANJUP	Medium (4C)
CKBBAL176	Banksia Eucalypt Woodland Park (North)	Gibbs Rd AUBIN GROVE	Medium (4C)
CKBBAL177	Buckingham Reserve	Gibbs Rd BANJUP	Medium (4C)
CKBBAL178	Denis De Yung Reserve	Liddelow Rd BANJUP	High (3A)
CKBBAL179	Triandra Reserve	Triandra Court BANJUP	Medium (4C)
CKBBAL180	Eco Park	Aurora Dr ATWELL	Medium (4C)
CKBBAL181	Kurrajong Park	Kurrajong Approach ATWELL	Medium (4C)
CKBBAL182	Freshwater Reserve	Hawkesbury Retreat ATWELL	Medium (4C)



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# Banjup/ Atwell - Cultural Assets

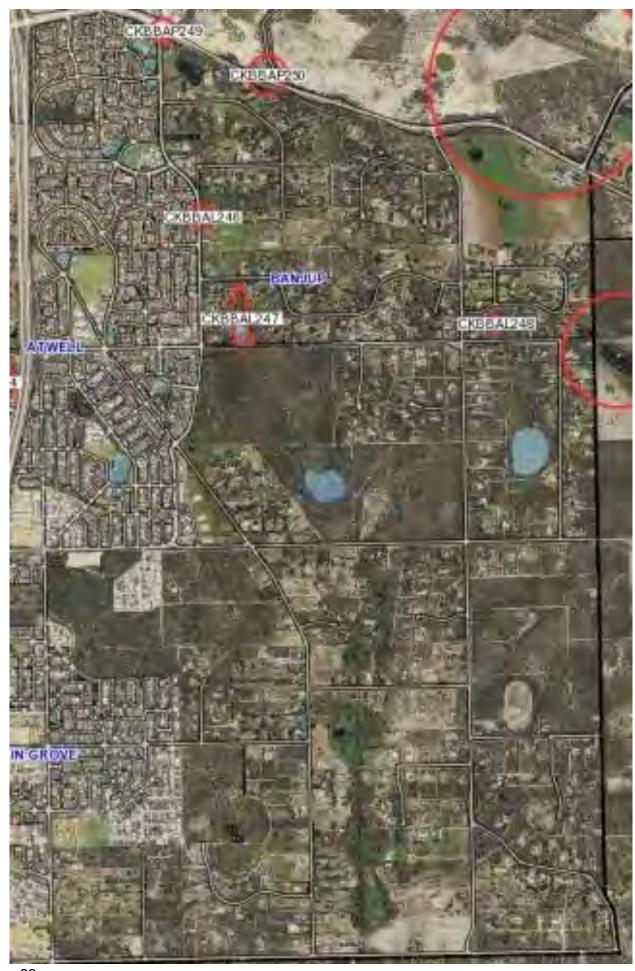


# **Bushfire Risk Management Plan 2014 - 2019**

# **MAP ID: 1:04**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBBAL2 46	Papperbark Tree (Traffic Island)	Tapper Rd	Low (5C)
CKBBAL2 47	Mather Reserve	Mather Reserve BANJUP	High (3A)
CKBBAL2 48	Kraemer Reserve	Bartram Rd BANJUP	High (3A)
CKBBAP2 49	Ready Mix Sandpit 2	Armadale Rd	Low (5C)
CKBBAP2 50	Ready Mix Sandpit 1	Armadale Rd	Low (5C)





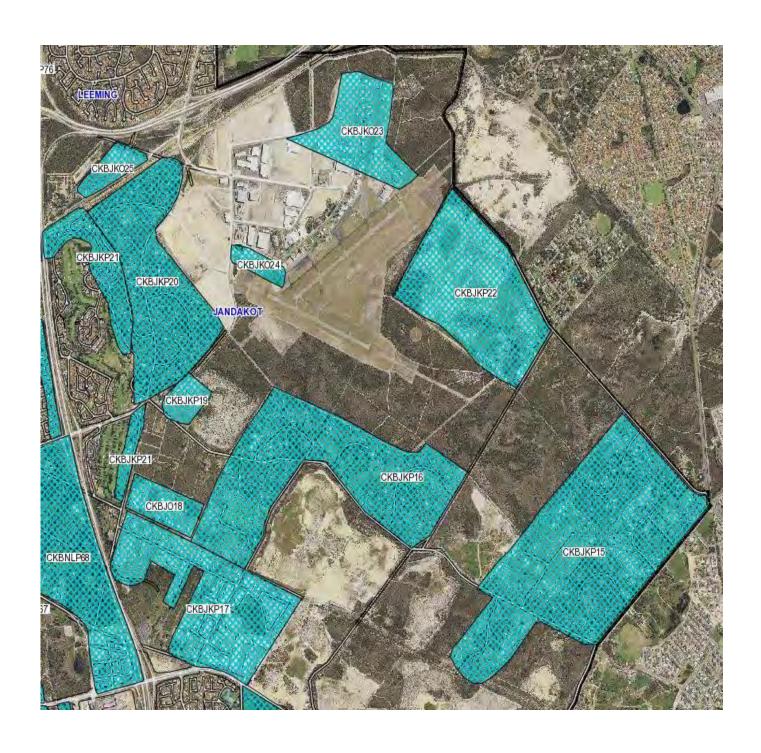
# Jandakot / Banjup North – Human Assets



# **Bushfire Risk Management Plan 2014 - 2019**

## **MAP ID:2:01**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBJKP 15	Rural Living	Jandakot Rd/ Owsten Court	Extreme (1A)
CKBJKP 16	Rural Living	Jandakot Rd (sth of airport)	Extreme (1A)
CKBJKP 17	Industrial complex interface	Armadale Rd next to Kwn Freeway	Medium (4B)
CKBJKO 18	Western Power Site (Jandakot)	85 Prinsep Road JANDAKOT	Medium (4B)
CKBJKP 19	Schaffer Corporation	27 Jandakot Road JANDAKOT	High (3B)
CKBJKP 20	Glendale Crst rural interface	Glendale Crescent	Extreme (1A)
CKBJKP 21	Berrigan Dr urban interface	Berrigan Dr	Very High (2A)
CKBJKP 22	Merrit Loop Industrial area	Merrit Loop	High (3C)
CKBJKO 23	Jandakot Airport - North of Eagle Dr	North Eagle Dr	High (3C)
CKBJKO 24	Jandakot Airport - South of Eagle Dr	South - Eagle Dr	High (3C)
CKBJKO 25	Western Power Site 2 (Jandakot)	450 Hope Rd Jandakot	High (3C)



# Jandakot / Banjup North – Economic Assets



# **Bushfire Risk Management Plan 2014 - 2019**

## **MAP ID:2:02**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
O129	Jandakot Airport (airside)	Jandakot Airport	Medium (4B)
O130	Jandakot Airport (Hangers)	Jandakot Airport	High (3C)
O131	Western Power (Jandakot)	85 Prinsep Road JANDAKOT	Medium (4B)
P132	Atco Gas Depot	81 Prinsep Road JANDAKOT	Medium (4B)
P133	Cockburn Central Industrial Complex	Armadale Rd JANDAKOT	Medium (4B)
O134	Jandakot Water Pumps	As Per Map 2:02	Low (5B)





# Jandakot / Banjup North – Environmental Assets



# **Bushfire Risk Management Plan 2014 - 2019**

## **MAP ID: 2:03**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBJKL183	Bandicoot Reserve	Berrigan Dr. JANDAKOT	Medium (4C)
CKBJKL184	Brandwood Reserve	Brandwood Grdns LEEMING	Medium (4C)
CKBJKL185	Classon Park	Casserly Dr LEEMING	Medium (4C)
CKBJKL186	Heatherlea Reserve	Heatherlea Parkway LEEMING	Medium (4C)
CKBJKL187	Lukin Swamp Reserve	Merrit Loop JANDAKOT	Medium (4C)
CKBJKL188	Rose Shanks Reserve	Armadale / Warton Rd JANDAKOT	Medium (4C)
CKBJKL189	Verdi Reserve	Cutler Rd JANDAKOT	Medium (4C)
CKBJKDPaW190	Fraser Rd Bushland	Fraser Rd JANDAKOT	High (3A)
CKBJKO191	Jandakot Airport Bushland (airside)	Jandakot Airport JANDAKOT	High (3A)
CKBJKDPaW192	Accourt Reserve	Accourt Rd JANDAKOT	Medium (4C)



# Jandakot / Banjup North - Cultural Assets

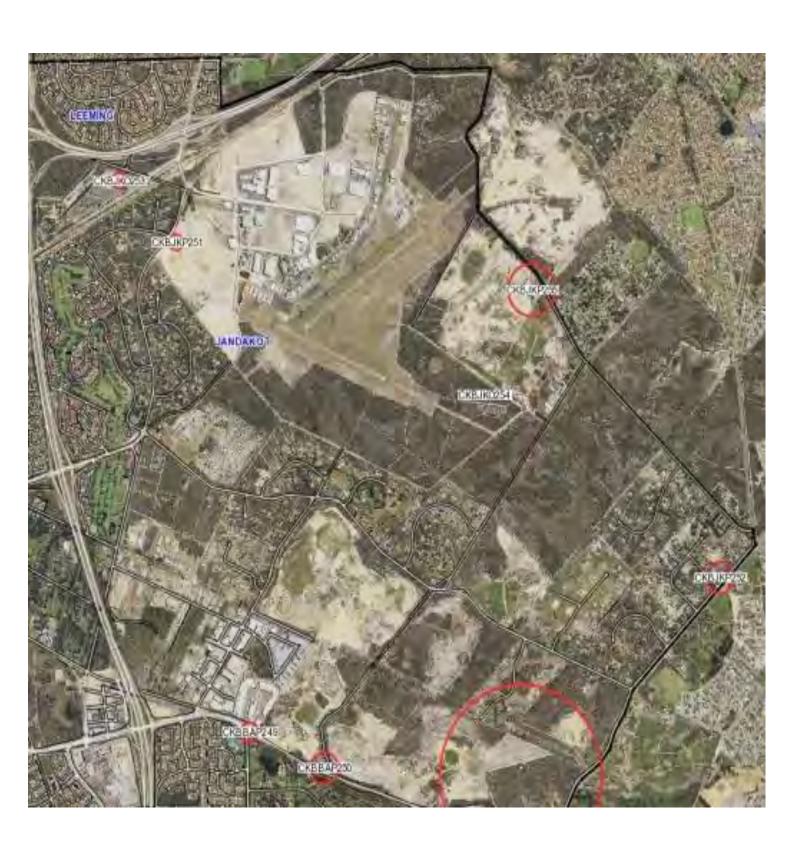


# **Bushfire Risk Management Plan 2014 - 2019**

# **MAP ID:2:04**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBJKP25	Prinsep Rd	Prinsep Rd	Low (5B)
CKBJKP25 2	Warton Rd BANJUP	Warton Rd	Low (5B)
CKBJKO25	Hope Rd JANDAKOT	Hope Rd JANDAKOT	Low (5B)
CKBJKO25 4	Lukin Swamp	Eastern end of Jandakot Airport	High (3A)
CKBJKP25 5	Acourt Rd	Acourt Rd Jandakot	Low (5B)
CKBJKL256	Banjup Memorial Park	Armadale Rd	Very High (2A)





# Southern Coast to Hammond Park – Human Assets



# **Bushfire Risk Management Plan 2014 - 2019**

## **MAP ID: 3:01**

Asset	Asset Name		Asset
Code		Asset	Risk
		Location	Rating
	Hammond Park Catholic Primary School	25	
		Woodrow	Very
		Avenue	High
CKBSC		HAMMON	(2B)
O27		D PARK	
OKBOO	Wattleup rural living area (along Wattleup Rd - south of	Wattleup	Very
CKBSC	Russell Rd )	Rd	High
P28	Indicatrial accordance interfere (Matthews DD)	\\/ a + +   a + +   a + +   a + +   a + +   a + +   a + +   a +	(2B)
CKBSC	Industrial complex interface (Wattleup RD)	Wattleup	Low
P29	Wattleup Community Centre	Rd 25 Marban	(5C)
	Wattleup Community Centre	Way	Low
CKBSCL		WATTLEU	(5C)
30		P	(30)
	Telstra exchange (Wattleup)	1022	
	( · · · · · · · · · · · · · · · · · · ·	Rockingha	Very
		m Road	High
CKBSC		WATTLEU	(2A)
O31		Р	, ,
	Ten Mile Well (Wattleup Teven)	1048	
		Rockingha	Very
		m Rd	High
CKBSC		WATTLEU	(2A)
P32		Р	
	53 Hurst Rd - industrial complex interface	53 Hurst	Very
OKDOO		Road	High
CKBSC P33		WATTLEU P	(2A)
F33	Henderson Industrial Complex interface	Cockburn	
	Tienderson industrial Complex interface	Rd	
		interfacing	Extrem
CKBSC		with	e (1A)
P34		bushland	
	Emmanuel Catholic College	122	
		Hammond	Low
CKBBE		Road	(5B)
P35		SUCCESS	
	Beeliar Dr light industrial shopping complex	1/640	
		Beeliar	High
CKBBE		Drive	(3B)
P36		SUCCESS	
	Success (North) Urban Interface	Hammond	
01/225		Rd -	High
CKBBE		Wentworth	(3C)
P37		Prde	





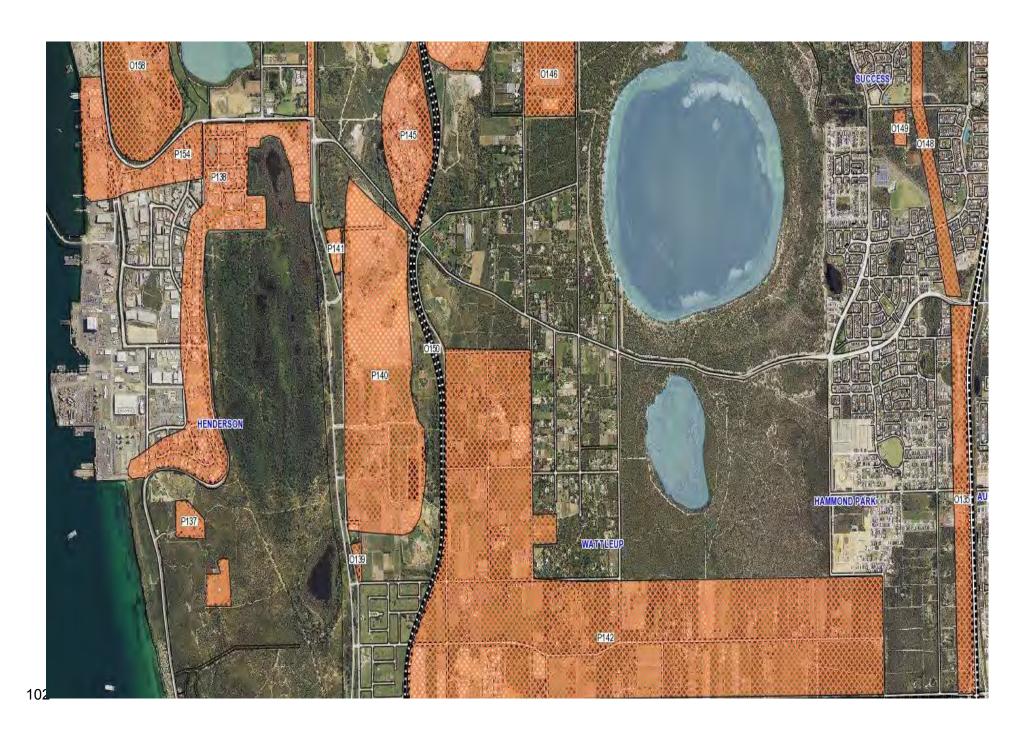
## Southern Coast to Hammond Park – Economic Assets



## **Bushfire Risk Management Plan 2014 - 2019**

### **MAP ID: 3:02**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
O135	Western Power High tension lines	West of Kwinana FWY	Medium (4B)
O136	Industrial Rail Line	West of Moylan Rd WATTLEUP	Medium (4B)
P137	Henderson Go-Cart Track	Gemma Rd HENDERSON	Low (5B)
P138	Henderson Industrial Interface (EAST)	West of Cockburn Rd HENDERSON	Medium (4B)
O139	Telstra exchange - Wattleup	1022 Rockingham Rd WATTLEUP	Medium (4B)
P140	Cockburn Cement quarry	Lot 241 Rockingham Rd WATTLEUP	Low (5B)
P141	Hurst Rd Industrial Complex	53 Hurst Rd WATTLEUP	Low (5C)
P142	Wattleup Market Gardens	Wattleup - WATTLEUP	Low (5A)
O143	Model Car Club/Race tract	Gemma Rd HENDERSON	High (3D)



# Southern Coast to Hammond Park – Environmental Assets



## **Bushfire Risk Management Plan 2014 - 2019**

### **MAP ID: 3:03**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBSCL193	Baler Reserve	Russell Rd HAMMOND PARK	Medium (4C)
CKBSCL194	Barfield Reserve	Barfiel Rd HAMMOND PARK	Medium (4C)
CKBSCL195	Christmas Tree Park	Serrenity Parkway HAMMOND PARK	Medium (4C)
CKBSCL196	Frankland Park	Wattleup Rd WATTLEUP	Medium (4C)
CKBSCL197	Holdsworth Reserve	Pearse / Mortimer Rd WATTLEUP	Medium (4C)
CKBSCL198	Mohan Park	Mohan Loop HAMMOND PARK	Medium (4C)
CKBSCL199	Redemptora Reserve	Redemptora Rd HENDERSON	Medium (4C)
CKBSCL200	Roper Reserve	Roper BLVD HAMMOND PARK	Medium (4C)
CKBSCDPaW201	Henderson Cliffs	Cockburn Rd HENDERSON	Medium (4C)
CKBSCDPaW202	Harry Waring Marsupial Reserve		High (3A)





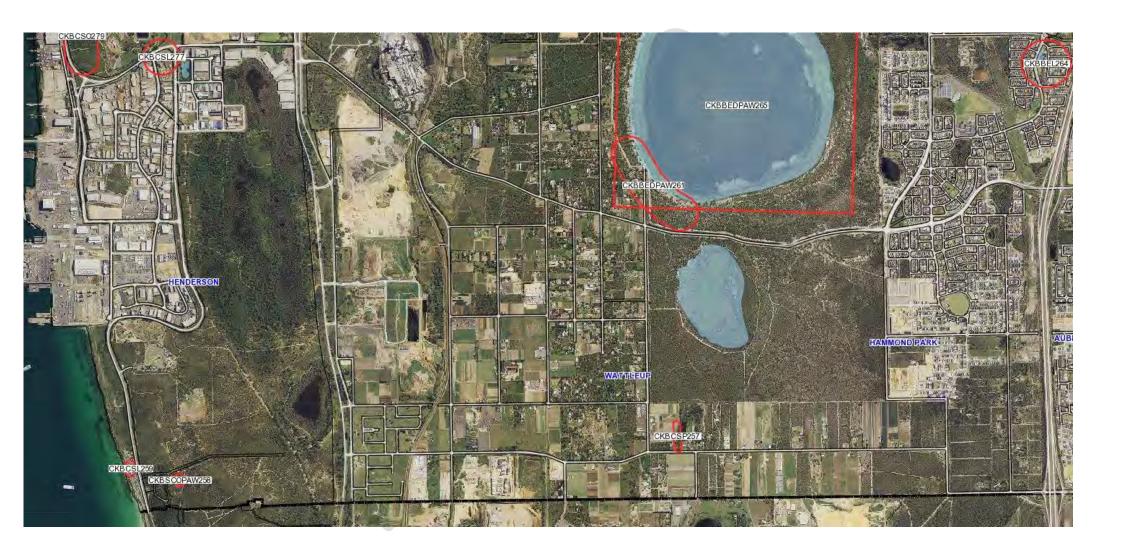
## Southern Coast to Hammond Park – Cultural Assets

### **Bushfire Risk Management Plan 2014 - 2019**

### **MAP ID: 3:04**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBSCP257	Wattleup Road Swamp	290 Wattleup Rd	Very High (2C)
CKBSCDPaW2 58	Gemma Road asset	Gemma Road HENDERSON	Medium (4A)
CKBSCL259	Naval Base Shacks	1136 Cockburn Rd HENDERSON	Medium (4B)



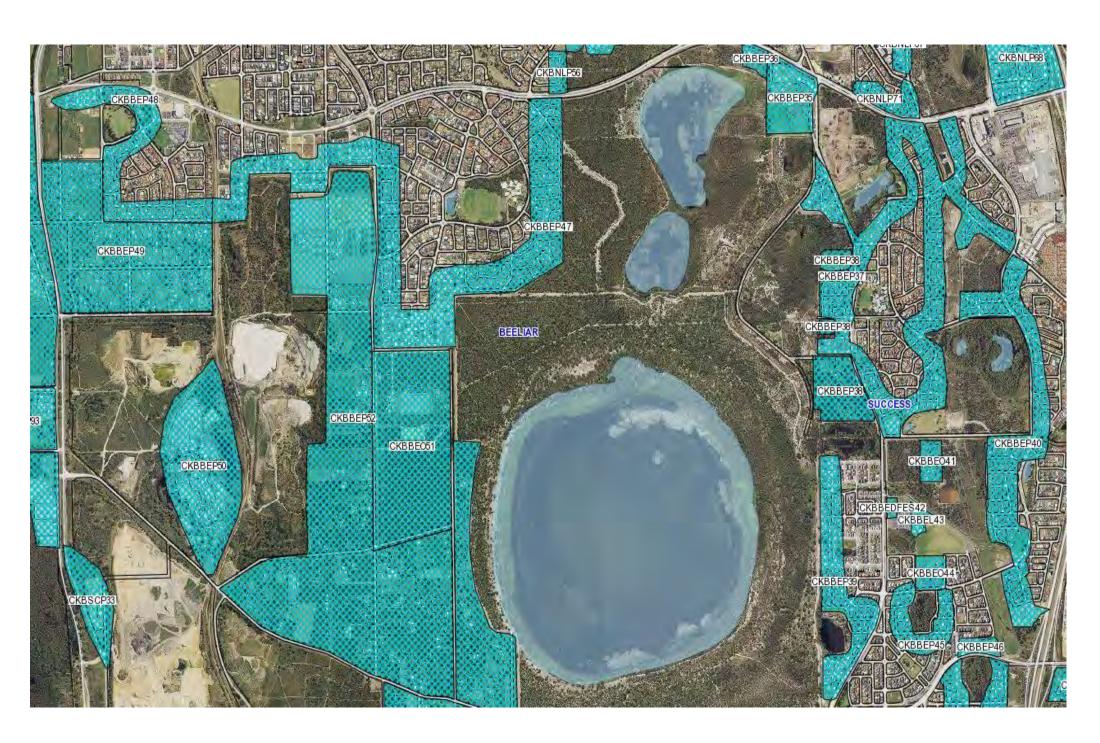


# Beeliar Regional Park – Human Assets



## **Bushfire Risk Management Plan 2014 - 2019**

Asset Code	Asset Name	Asset Location	Asset Risk
			Rating
CKBBEP3 5	Emmanuel Catholic College	122 Hammond Road SUCCESS	Low (5B)
CKBBEP3	Beeliar Dr light industrial shopping complex	1/640 Beeliar Drive SUCCESS	High (3B)
CKBBEP3	Success (North) Urban Interface	Hammond Rd - Wentworth Prde	High (3C)
CKBBEP3 8	Hammond Rd rural interface	210-222, 256, 272 - 304 Hammond Rd	Extreme (1B)
CKBBEP3 9	Success (South) urban interface	North - Daviesa Turn / South - Mariposa Gdns	Extreme (1B)
CKBBEP4 0	Success (East) urban interface	Follow Wentworth Prde	Extreme (1B)
CKBBEO 41	Water Corp Site - Success	35271R Bartram Road SUCCESS	Extreme (1B)
CKBBED FES42	Success Fire & Rescue Station	365 Hammond Road SUCCESS	High (3C)
CKBBEL4 3	Success Regional Sports Complex	Hammond Road SUCCESS	High (3C)
CKBBEO 44	Success Primary School	90 Wentworth Parade SUCCESS	Very High (2A)
CKBBEP4	Boronia Park urban interface	Wentworth Prde / Oak Ridge Meander SUCCESS	Extreme (1B)
CKBBEP4 6	Baler Reserve urban interface (North)	North of Russell Road	High (3A)
CKBBEP4	Beeliar (suburb) Regional Park Urban Interface (East of rail line)	West of Beeliar Regional Park to Rail Line East	Extreme (1A)
CKBBEP4	Beeliar Village Urban Interface	Beeliar Village Urban Interface (west of rail line)	High (3C)
CKBBEP4	Beeliar Market Gardens	west of Spearwood Ave / south of Beeliar Dr	High (3C)
CKBBEP5 0	Cockburn Cement (Mill)	Cement Works Quarry MUNSTER	High (3C)
CKBBEO 51	Water Corp Site - MUNSTER	Lot 17 Lorimer Rd	Extreme (1B)
CKBBEP5 2	MUNSTER rural residential area	North of Russell Rd / south of Beeliar Dr	Extreme (1A)



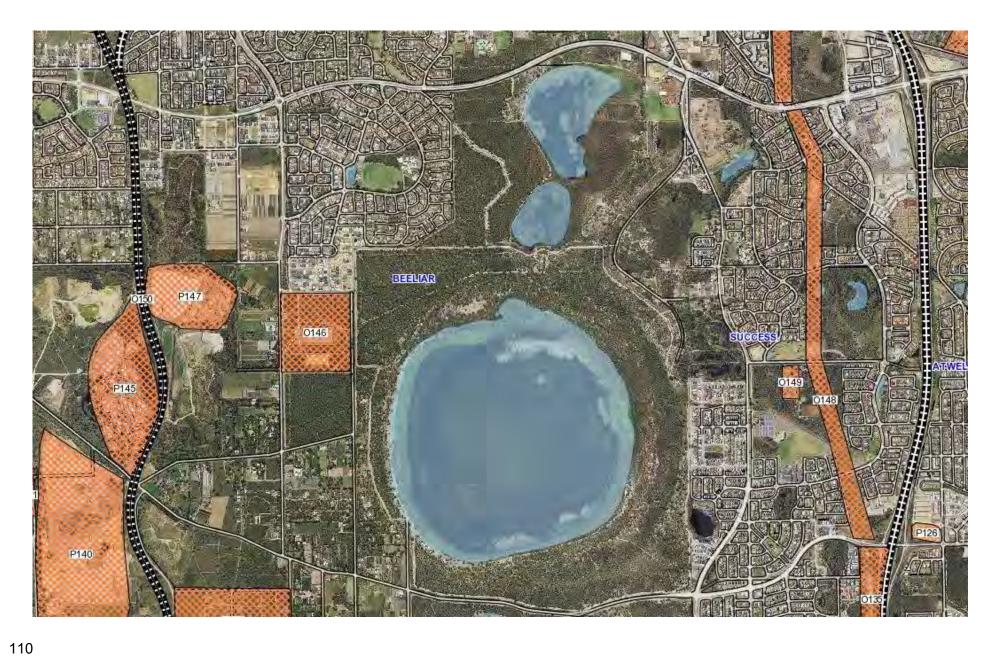
Document Set ID: 4205607 Version: 1, Version Date: 04/12/2014

# Beeliar Regional Park – Economic Assets



## **Bushfire Risk Management Plan 2014 - 2019**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
O144	Industrial Rail Line	East of Cockburn Cement Mill	Medium (4B)
P145	Cockburn Cement Mill	Lot 88 Holmes Rd MUNSTER	Medium (4B)
O146	Water Corp Site - MUNSTER	HENDERSON RD MUNSTER	Medium (4B)
P147	Cockburn Cement quarry 2	lot 888 Holmes Rd MUNSTER	Low (5B)
O148	Western Power High tension lines	West of Kwinana FWY - Success	Medium (4B)
O149	Water Corp Site - SUCCESS	Bartrum Rd - SUCCESS	Medium (4B)
O150	Stock Rd - WATTLEUP/MUNSTER	Stock Rd - WATTLEUP/MUNSTER	Low (5B)



## Beeliar Regional Park – Environmental Assets



## **Bushfire Risk Management Plan 2014 - 2019**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBBEL203	Banbar Park	Astroloma Dr SUCCESS	Medium (4C)
CKBBEL204	Beeliar Oval Reserve	The Grange BEELIAR	Medium (4C)
CKBBEL205	Coojong Park	Coojong Link SUCCESS	Medium (4C)
CKBBEL206	Fancote Reserve	Henderson Rd MUNSTER	Medium (4C)
CKBBEL207	Success Reserve Bushland	Hammond Rd / Columbus Loop SUCCESS	Medium (4C)
CKBBEL208	Skaife Park	Henderson Rd / Holmes Rd MUNSTER	Medium (4C)
CKBBEDPaW209	Thompson Lake	North of Russell Rd BEELIAR	High (3A)
CKBBEDPaW210	Kogalup Lake	South of Beeliar Dr BEELIAR	High (3A)
CKBBEO211	Branch Circus Bushland	Hammond Rd SUCCESS	Medium (4C)
CKBBEO212	Lot 9001 Hammond Rd Bushland	lot 9001 Hammond Rd SUCCESS	Medium (4C)
CKBBEO213	Water Corp Site - Munster	Henderson Rd MUNSTER	Medium (4C)
CKBBEO214	Twin Bartram Swamps	Wentworth Parade SUCCESS	Medium (4C)



# Beeliar Regional Park – Cultural Assets



## **Bushfire Risk Management Plan 2014 - 2019**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBBEO260	Kogolup Lake	764L Branch Circus BEELIAR	Very High (2C)
CKBBEDPaW2 61	Thompson Lake	15556R Pearse Road BEELIAR	High (3A)
CKBBEP262	Hammond Road Swamp	Hammond Rd Success	High (3A)
CKBBEP263	Bartram Road Swamp	Bartram Rd Success	High (3A)
CKBBEL264	Thompson Lake 01	63 Beaumont Parkway SUCCESS	High (3A)
CKBBEDPaW2 65	Thompson Lake	15556R Pearse Road BEELIAR	Medium (4A)
CKBBEO266	Thompson Reservior 1	18L Lorimer Road MUNSTER	Low (5B)
CKBBEO267	Thompson Reservior 2	18L Lorimer Road MUNSTER	Low (5B)
CKBBEO268	Beeliar Regional Rark 4	755L Lorimer Road BEELIAR	High (3A)



# North Lake / Yangebup Lake – Human Assets

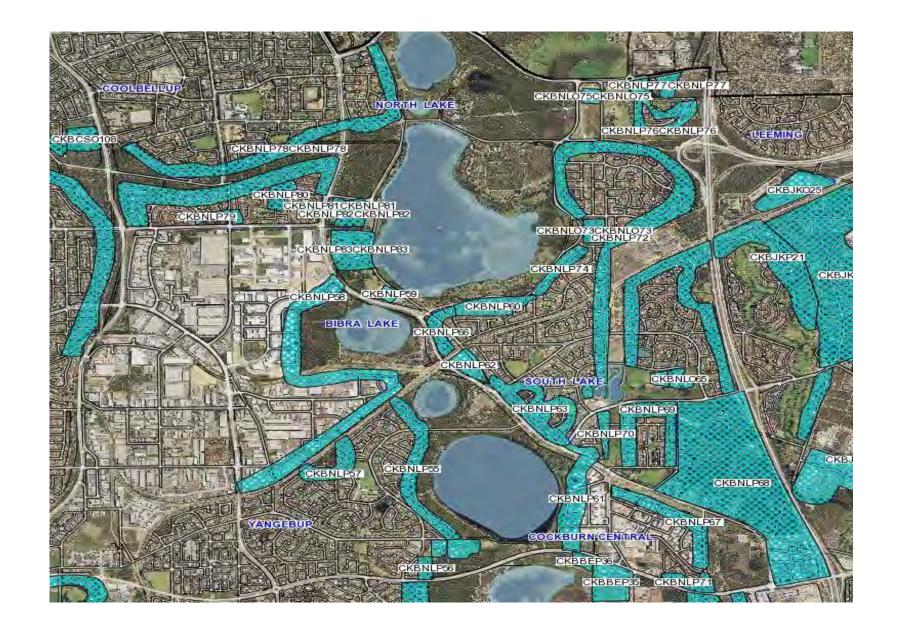


## **Bushfire Risk Management Plan 2014 - 2019**

CKBNL P56 CKBNL P57 CKBNL P57 CKBNL P57 CKBNL P57 CKBNL P57 CKBNL P57 CKBNL P58 CKBNL P59 CKBNL Lake Undoubtrial Interface P59 CKBNL P59	Accet			Accet
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CKBNL P54		•	340 Yangebup Rd YANGEBUP	
CKBNL P56				
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P58		Ribra Lake Industrial Interface (east)	West of North Lake Road / North of	
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P61		Tamera Dr Industrial Interface		
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P63		South Lake Urban Interface	Urban Interface with Blackburn Park	
CKBNL L64  CKBNL O65  CKBNL O65  CKBNL P66  CKBNL P66  CKBNL P67  CKBNL P67  CKBNL P68  CKBNL P68  CKBNL P68  CKBNL P68  CKBNL COckburn Central residential acreage lots  CKBNL P69  CKBNL South Lake Urban Interface (South) P69  CKBNL South Lake Urban Interface (South) P69  CKBNL South Lake Urban Interface (South) P69  CKBNL South Lake Urban Interface (West) CKBNL P70  CKBNL South Lake Urban Interface (West) P70  CKBNL South Lake Urban Interface (West) P70  CKBNL P71  CKBNL South Lake Urban Interface (West) P72  Interface (West of Power lines)  CKBNL South Lake Primary School O73  CKBNL Bibra Lake Urban Interface  CKBNL Bibra Lake Urban Interface  CKBNL South Lake Primary School O73  CKBNL Bibra Lake Urban Interface  Bibra Dr BIBRA LAKE  Low (5C)  106 South Lake Dr SOUTH LAKE  High (3C)  Medium (4B)  CENTRAL  Berrigan Dr (South) Thomas St (North) SOUTH LAKE  (4B)  West of Poletti Rd Cockburn central  West of Poletti Rd Cockburn central  South Lake / Bibra Lake (West of Power Lines and Roe Hwy on-ramp e (1B)  CKBNL Bibra Lake Urban Interface  Ribra Dr BIBRA LAKE  Low (5B)		Codin Edito Orban Interiace		
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CKBNL P71 Poletti Rd (South) Urban Interface West of Poletti Rd Cockburn central (4B)  CKBNL South Lake / Bibra lake Urban Interface (West of Power lines) South Lake / Bibra Lake (West of Power Lines and Roe Hwy on-ramp e (1B)  CKBNL Bibra Lake Primary School 29 Annois Rd BIBRA LAKE (5B)  CKBNL Bibra Lake Urban Interface Ribra Dr BIBRA LAKE Low			, , ,	
P71 West of Poletti Rd Cockburn certifal (4B)  CKBNL South Lake / Bibra lake Urban Interface (West of Power lines)  CKBNL Bibra Lake Primary School  CKBNL O73  CKBNL Bibra Lake Urban Interface  Bibra Dr BIBRA LAKE  (4B)  (4B)  (4B)  Extrem Power Lines and Roe Hwy on-ramp (1B)  29 Annois Rd BIBRA LAKE  (5B)  CKBNL Bibra Lake Urban Interface		Poletti Rd (South) Urban Interface		
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CKBNL Bibra Lake Primary School O73  CKBNL Bibra Lake Urban Interface  Bibra Dr BIBRA LAKE  Low (5B)  Low			l • • • • • • • • • • • • • • • • • • •	
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	P74		RIDIA DI RIRKY LAKE	(5B)

CKBNL O75	Farrington Rd / Baker Court Industrial Complex	Lot 551 Baker Court BIBRA LAKE	Low (5C)
CKBNL P76	Murdoch Pines urban Interface	East of Baker Crt / Along Peterborough Circle BIBRA LAKE	Extrem e (1B)
CKBNL P77	IFAP Facility	128 Farrington Rd BIBRA LAKE	High (3A)
CKBNL P78	Progress Dr / Malvolio Rd Urban Interface	Progress Dr / Mavolio Rd BIBRA I AKF	Extrem e (1B)
CKBNL P79	Deller Rd (South) Urban Interface	Daller Rd (North) / Phoenix Rd (South) BIBRA LAKE	Extrem e (1B)
CKBNL P80	Coolbellup (South) Urban Interface (Forrest Rd)	Forrest Rd (Coolbellup) BIBRA LAKE/COOLBELLUP	Extrem e (1B)
CKBNL P81	Good life Health Club	402 North Lake Rd BIBRA LAKE	High (3A)
CKBNL P82	Perth Waldorf School	14 Gwilliam Dr BIBRA LAKE	Extrem e (1B)
CKBNL P83	Adventure World	351 Progress Dr BIBRA LAKE	High (3C)



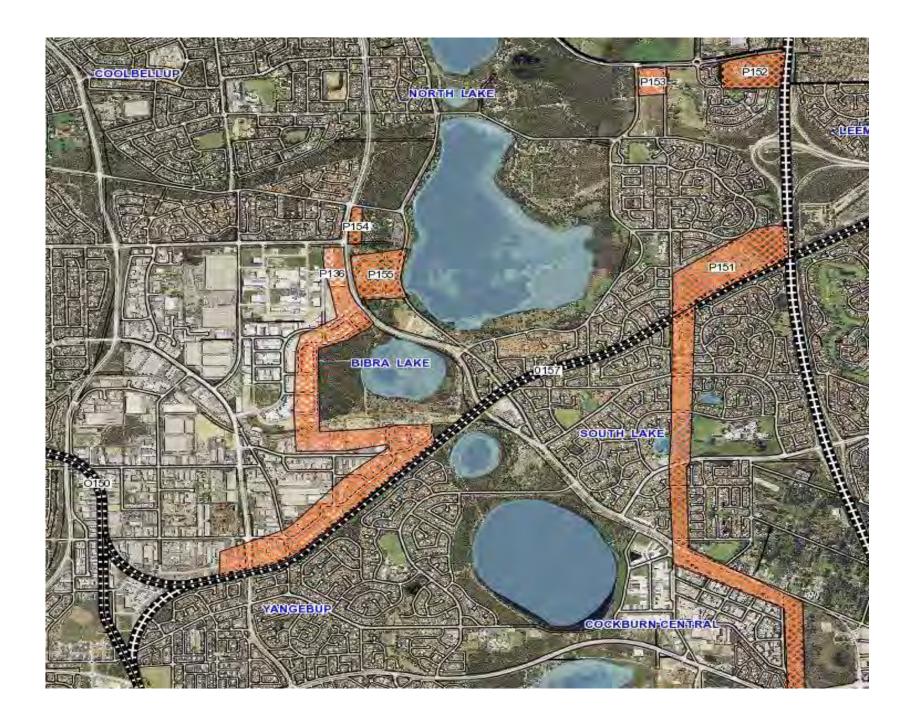


# North Lake / Yangebup Lake – Economic Assets



## **Bushfire Risk Management Plan 2014 - 2019**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
O151	Western Power Jandakot Station and Power Lines	As Per Map 5:02	Medium (4B)
P152	IFAP Training Facility	128 Farrington Rd NORTH LAKE	Medium (4B)
P153	North Lake Industrial Complex	Farrington Rd NORTH LAKE	Low (5B)
P154	Good Life Fitness Gym	402 North Lake Rd NORTH LAKE	Low (5B)
P155	Adventure World	351 Progress Dr BIBRA LAKE	Medium (4B)
P156	Bibra Lake Industrial interface	As Per Map 5:02	Medium (4B)
O157	Industrial Rail Line	As Per Map 5:02	Medium (4B)



# North Lake / Yangebup Lake – Environmental Assets



## **Bushfire Risk Management Plan 2014 - 2019**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBNLL215	Bibra Lake Reserve	Bibra Dr BIBRA LAKE	Medium (4C)
CKBNLL216	Cocos Park Reserve	Cocos Dr BIBRA LAKE	Medium (4C)
CKBNLL217	Cockburn Central Bushland	North Lake Rd COCKBURN CENTRAL	Medium (4C)
CKBNLL218	Levi Park	Plover Dr YANGEBUP	Medium (4C)
CKBNLL219	Little Rush Lake Reserve	Osprey Dr YANGEBUP	Medium (4C)
CKBNLL220	Lot 27 Progress Dr	Lot 27 Progress Dr BIBRA LAKE	Medium (4C)
CKBNLL221	Nola Waters Reserve	Annois Rd BIBRA LAKE	Medium (4C)
CKBNLL222	Yangebup Lake Reserve	Osprey Dr YANGEBUP	Medium (4C)



# North Lake / Yangebup Lake – Cultural Assets



Bushfire Risk Management Plan 2014 - 2019

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBNLO2 69	North Lake (North)	North Lake Rd Bibra Lake	High (3A)
CKBNLO2 70	North Lake (Coolbellup)	North Lake Rd Bibra Lake	High (3A)
CKBNLO2 71	North Lake and Bibra Lake	North Lake Dr Bibra Lake	High (3A)
CKBNLO2 72	Swamp 81	South of Adventure World on North Lake Rd	High (3A)
CKBNLO2 73	North Lake SW	North Lake Rd Bibra Lake	High (3A)
CKBNLO2 74	Bibra Lake North	North Lake Rd Bibra Lake	High (3A)





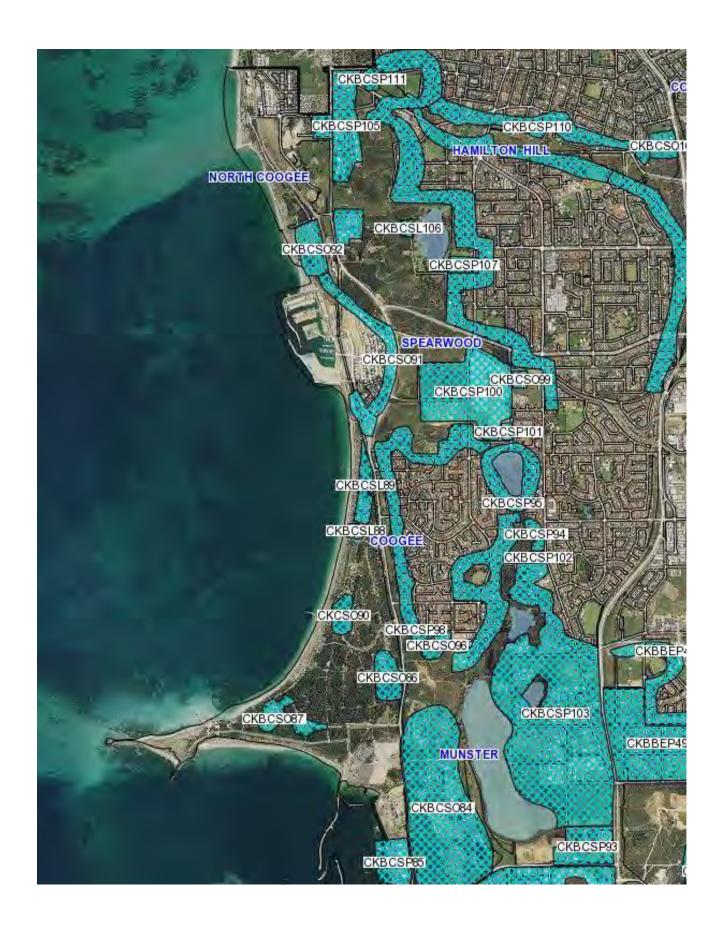
# Coastal Strip – Human Assets

# Bushfire Risk Management Plan 2014 - 2019 MAP ID: 6:01

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBCSO8	Water Corp Site - Mt. Brown	837 Cockburn Rd MUNSTER	Extreme (1B)
CKBCSP8 5	Austal Ship Yard	Lot 100 Clearance Beach Rd MUNSTER	High (3A)
CKBCSO8	Woodman Point Caravan Park	Woodman Point - Cockburn Road - MUNSTER	Extreme (1B)
CKBCSO8	Woodman Point - Recreation Camp	Woodman Point - Cockburn Road - MUNSTER	Extreme (1B)
CKBCSL8 8	Integrated Beach Facility (Coogee Surf Club)	4 Powell Rd - COOGEE	Medium (4B)
CKBCSL8	Coogee Caravan Park	Powell Rd -COOGEE	High (3C)
CKBCSO9	John Graham Recreational Reserve	Woodman Point - Cockburn Road - MUNSTER	High (3C)
CKBCSP9	Port Coogee Urban Interface	Perlinite View / Cockburn Rd	Low (5C)
CKBCSO9	Old Power Station - Coogee	Lot 3 Robb Rd COOGEE	Low (5B)
CKBCSP9	South East Industrial Complex	Ulidia Cove	Medium (4B)
CKBCSP9 4	Troode St Urban Interface	485 Rockingham Rd MUNSTER	Extreme (1B)
CKBCSP9 5	Market Garden Swamp Urban Interface	West of Pennlake Dr / East of Garden Rd MUNSTER	Very High (2A)
CKBCSO9	Coogee Primary School	22 Mayor Rd COOGEE	High (3C)
CKBCSP9 7	Market Garnde South East Urban Interface	East of Hamilton Rd COOGEE	Extreme (1B)
CKBCSP9 8	Coogee Urban interface (west)	East of Cockburn Rd COOGEE	Low (5C)
CKBCSO9	Telstra exchange - Spearwood	89 Mell Rd SPEARWOOD	Low (5B)
CKBCSP1 00	Mell Rd Development (North)	Mell Rd SPEARWOOD	Extreme (1B)
CKBCSP1 01	Amberley Aged Care	30 Mell Rd SPEARWOOD	High (3C)
CKBCSP1 02	Pennlake Dr Urban Interface	Pennlake Dr MUNSTER	Very High (2A)
CKBCSP1 03	Munster Market Gardens	South Munster (West of Stock Rd)	Extreme (1B)
CKBCSP1 04	146 Cockburn Rd Industrial Interface	146 Cockburn Rd NORHT COOGEE	Extreme (1B)
CKBCSP1 05	Emplacement Crescent Industrial Interface	Along Emplacement Crt NORTH COOGEE	Extreme (1B)
CKBCSL1 06	Manning Park Homestead	Azelia Rd HAMILTION HILL	Extreme (1B)
CKBCSP1 07	Delmatinac Cub	41 Azelia Rd HAMILTN HILL	Low (5C)
CKBCSO1	Hamilton Hill Senior High School	8 Purvis Rd HAMILTON HILL	Low (5B)

08			
CKBCSP1	Angus Ave - Blackwood Ave	Angus Ave to Blackwood Ave HAMILTON	Extreme
09	Urban Interface	HILL	(1B)
CKBCSP1	Wheeler Rd - Purvis St Urban	Wheeler Rd - Purvis St HAMILTON HILL	High (3C)
10	Interface	Wheeler Na - Fulvis StriAiviiLTON File	riigir (3C)
CKBCSP1	Hamilton Hill and Spearwood	Ommanney St - Ferris Way HAMILTON	Medium
11	(West) Urban Interface	HILL / SPEARWOOD	(4B)





# Coastal Strip – Economic Assets

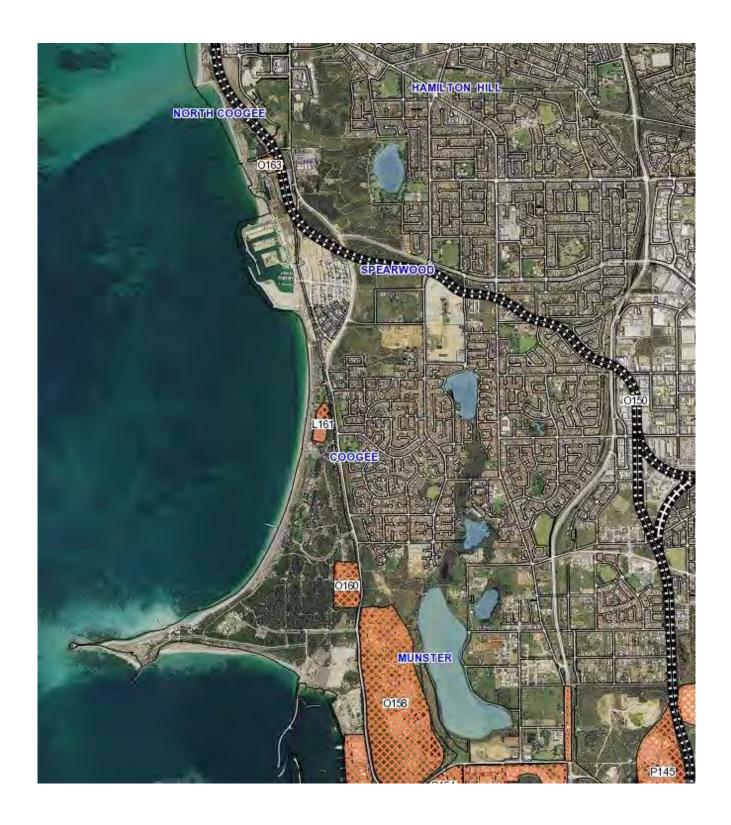


## **Bushfire Risk Management Plan 2014 - 2019**

#### MAP ID: 6:02

Asset Code	Asset Name	Asset Location	Asset Risk Rating
O158	Water Corp Site - Mt Brown	837 Cockburn Rd MUNSTER	Medium (4B)
P159	Henderson Industrial interface (Northern)	South of Cockburn Rd HENDERSON	Medium (4B)
O160	Woodman Point Caravan Park	Woodman Point - MUNSTER	Low (5C)
L161	Coogee Caravan Park	POWELL Rd - COOGEE	Low (5C)
O162	Stock Rd - WATTLEUP/MUNSTER	As Per Map 6:02	Low (5B)
O163	Western Power C Y O'Conner	Lot 1 Robb Rd NORTH COOGEE	Medium (4B)





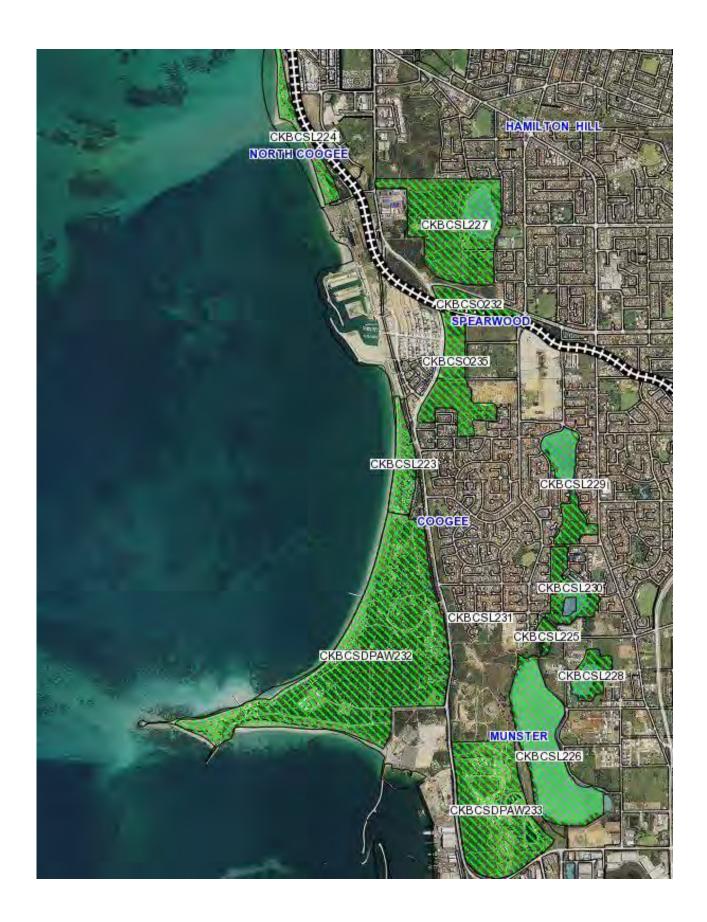
# Coastal Strip – Environmental Assets



## **Bushfire Risk Management Plan 2014 - 2019**

### **MAP ID: 6:03**

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBCSL223	Coogee Beach Reserve	Cockburn rd. COOGEE	Medium (4C)
CKBCSL224	C Y O'Conner Reserve	Robb Rd NORTH COOGEE	Medium (4C)
CKBCSL225	Katsura Reserve	Katsura Gardens MUNSTER	Medium (4C)
CKBCSL226	Lake Coogee Reserve	Fawcett Rd MUNSTER	Medium (4C)
CKBCSL227	Manning Park	Azelia Rd HAMILTON HILL	Medium (4C)
CKBCSL228	Market Garden Swamp #3	Preston Dr MUNSTER	Medium (4C)
CKBCSL229	Market Garden Swamp #1	Garden Rd MUNSTER	Medium (4C)
CKBCSL230	Market Garden Swamp # 2		Medium (4C)
CKBCSL231	Mc Niel Field	Mayor Rd MUNSTER	Medium (4C)
CKBCSDPaW232	Woodman Point Regional Park	O'Kane Court COOGEE	Very High (2A)
CKBCSDPaW233	Mt Brown	Gemma Rd HENDERSON	Medium (4C)
CKBCSO234	Corner of Spearwood Ave / Cockburn Rd	Corner of Spearwood Ave / Cockburn Rd	Medium (4C)
CKBCSO235 20 King St		20 King St Coogee	Medium (4C)



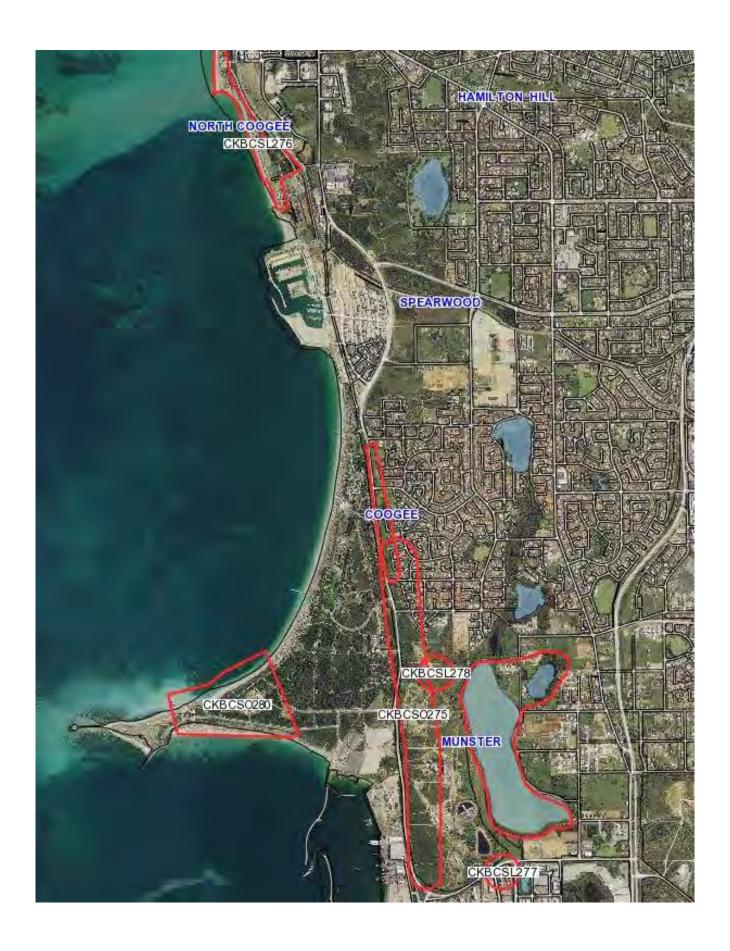
# Coastal Strip – Cultural Assets



## **Bushfire Risk Management Plan 2014 - 2019**

#### MAP ID: 6:04

Asset Code	Asset Name	Asset Location	Asset Risk Rating
CKBCSO2 75	Cockburn Lighthouse	Cockburn Rd HENDERSON	Low (5B)
CKBCSL2 76	Robb Jetty Camp	Rob Rd NORTH COOGEE	High (3A)
CKBCSL2 77	Lake Coogee 1	Cockburn Rd HENDERSON	High (3A)
CKBCSL2 78	Lake Coogee 2	East of Cockburn Rd HENDERSON	High (3A)
CKBCSO2 79	Cockburn Rd - Henderson	Cockburn Rd HENDERSON	High (3A)
CKBCSO2 80	Woodman Point	Cockburn Rd HENDERSON	High (3A)
CKBCSL2 81	Lake Coogee	Cockburn Rd HENDERSON	High (3A)
CKBCSO2 82	Cockburn Rd Buildings and Rail	Cockburn Rd HENDERSON	High (3A)

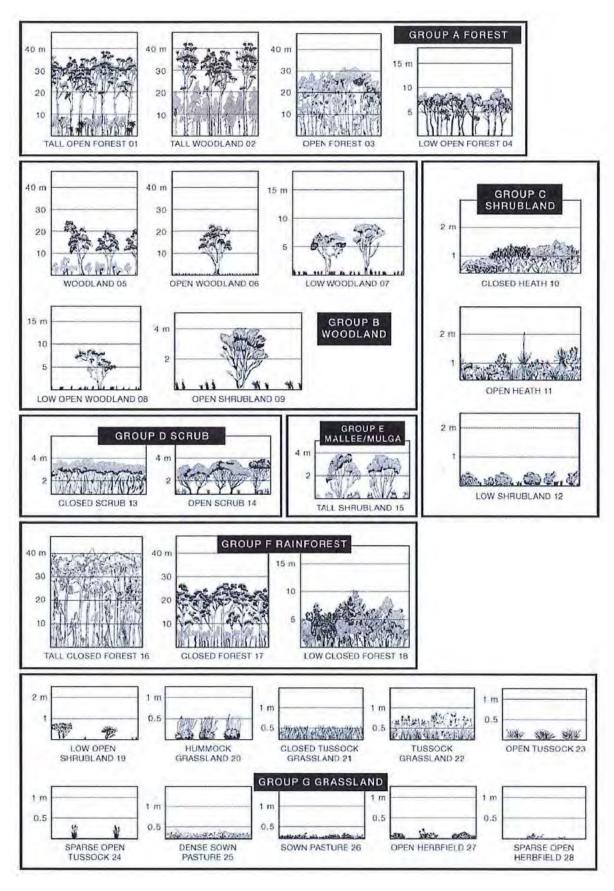


# Appendix 8 Australian Standard AS3959-2009 Construction of buildings in bushfire prone areas (Extract)

Vegetation Type	Figure No.	Description
Tall open forest Tall woodland	01 02	Trees over 30 metres high; 30-70% foliage cover; (may include understorey ranging from rainforest and tree ferns to low trees and tall shrubs). Found in areas of highly reliable rainfall. Typically dominated by eucalypts.
Open forest Low open forest	03 04	Trees 10-30 metres high; 30-70% foliage cover; (may include understorey of sclerophyllous low trees and tall scrubs or grass). Typically dominated by eucalypts.
Pine plantations	Not shown	Trees 10-30 metres in height at maturity generally comprising Pinus species or other softwood species, planted as a single species for the production of timber.
Woodland Open woodland	05	Trees 10-30 metres high; 10-30% foliage cover dominated by eucalypts; understorey low trees to tall scrubs typically dominated by Acacia, Callitris or Casuarina.
Low woodland Low open woodland Open shrubland	06 07 08 09	Low trees and shrubs 2-10 metres high; foliage cover less than 10%. Dominated by eucalypts and Acacias. Often have a grassy understorey or low shrubs. Acacias and Casuarina woodlands grade to Atriplex shrublands in the arid and semi-arid zones.
Closed heath Open heath	10 11	Found in wet areas but which are affected by poor soil fertility or shallow soils. Shrubs 1-2 metres high often comprising of Banksia, Hakea and Grevillea. Wet heaths occur in sands adjoining dunes of the littoral (shore) zone. Montane heaths occur on shallow or water-logged soils.
Low shrubland	12	Shrubs <2 metres high; greater than 30% foliage cover. Understoreys can contain grasses, Acacia and Casuarina often dominant in the arid and semi-arid zones.
Closed Scrub	13	Found in areas wet enough to support eucalypts trees, which are affected by poor soil fertility of shallow soils. >30% foliage cover. Dry heaths occur in rocky areas. Shrubs 1-2 metres high Often coastal wetlands.
Open Scrub	14	Trees greater than 2 metres high, 10-30% foliage cover.  Dominated by eucalypts or co-dominant melaleuca and myoporum with a mixed understorey.
Tall Shrubland	15	Vegetation dominated by shrubs (especially eucalypts and acacias) with a multi-stemmed habit; usually greater than 2 metres in height; <30% foliage cover. Understorey of widespread to dense low shrubs (Acacia) or sparse grasses.
Tall closed forest Closed forest Low closed forest	16 17 18	Trees 10-40 metres in height; >90% foliage cover; understorey may contain a large number of species with a variety of heights.
Low open Shrubland Hummock grassland Closed tussock grassland Tussock grassland Open tussock Sparse open tussock Dense sown pasture Sown pasture	19 20 21 22 23 24 25 26	All forms including situations with shrubs and trees if the overstorey foliage cover is less than 10%.
	Tall woodland  Open forest Low open forest  Pine plantations  Woodland Open woodland Low woodland Closed heath Open shrubland  Closed Scrub  Closed Scrub  Tall Shrubland  Tall closed forest Closed forest Low dosed forest Low open Shrubland Hummock grassland Closed tussock grassland Open tussock Sparse open tussock Dense sown pasture	Tall open forest Tall woodland  Open forest Low open forest  Open woodland  Copen woodland Copen woodland Open shrubland Open heath  Closed heath Open heath  Tall Shrubland  Tall Shrubland  Tall Shrubland  Tall closed forest C

#### Notes

Overstoreys of Open Woodland, Low Open Woodland, Tall Open Shrubland and Low Open Shrubland should be classified to the vegetation type on the basis of their understories, others to be classified on the basis of their overstoreys. Vegetation height is the average height of the top of the overstorey.



**Figure 3 Classification of Vegetation** 

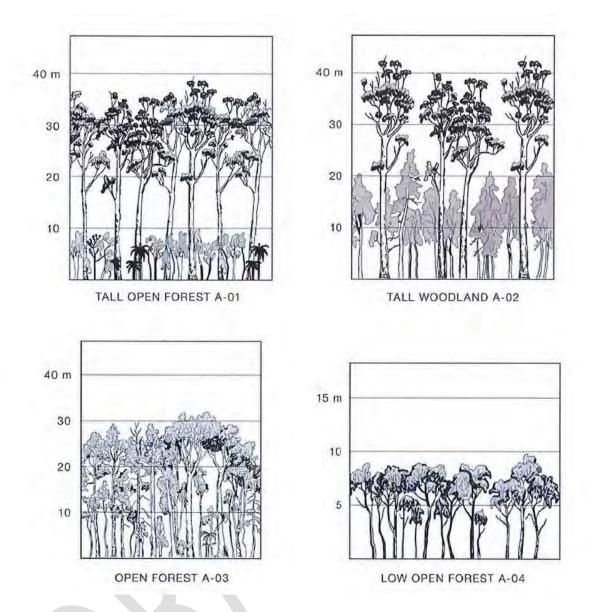


Figure 4 Classification of Vegetation – Forest

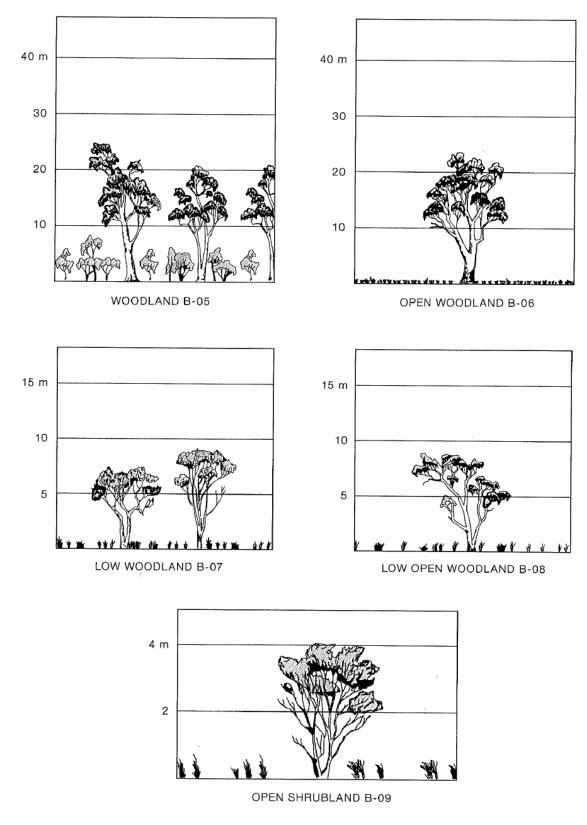
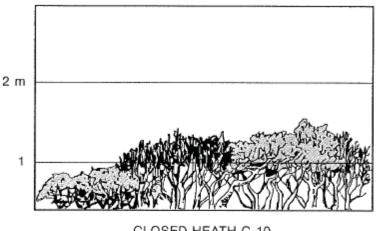
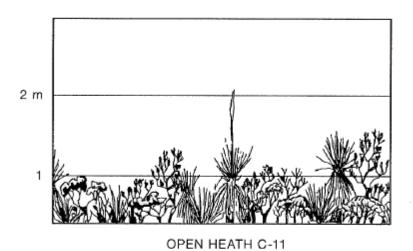


Figure 5 Classification of Vegetation – Woodland



CLOSED HEATH C-10



2 m 1

LOW SHRUBLAND C-12

Figure 6 Classification of Vegetation – Shrubland

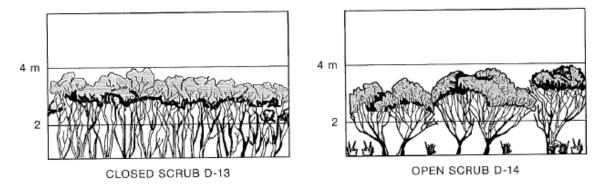


Figure 7 Classification of Vegetation – Scrub

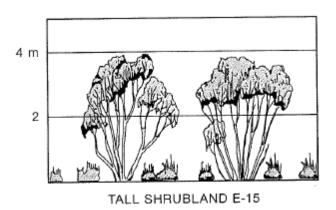
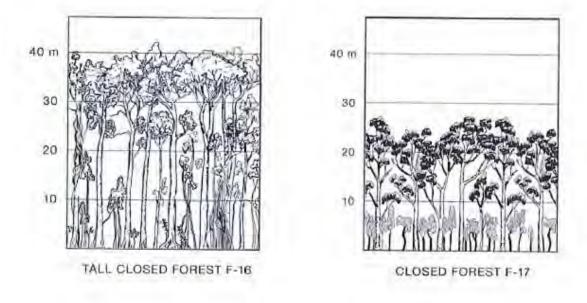


Figure 8 Classification of Vegetation - Mallee/ Mulga



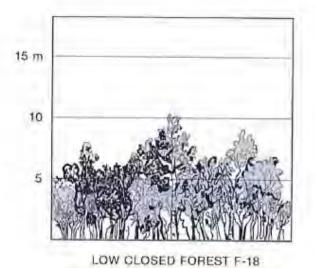


Figure 9 Classification of Vegetation – Rainforest

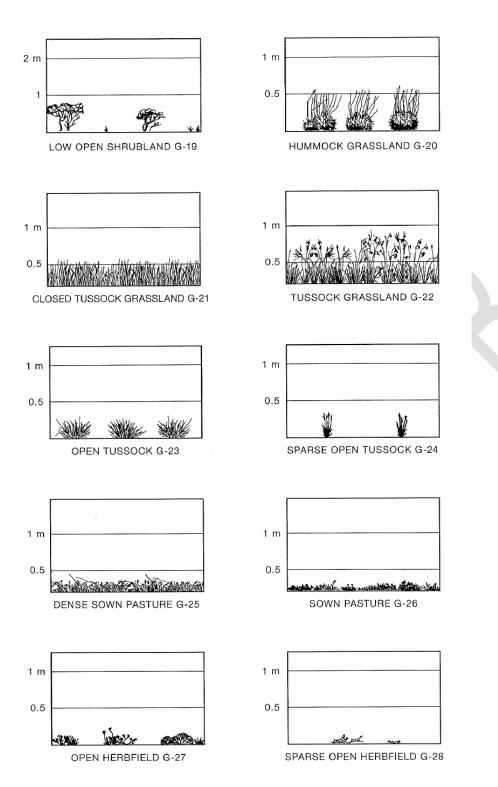


Figure 10 Classification of Vegetation - Grassland (unmanaged)

# City of Cockburn Conservation Reserves Fuel Loading Assessment 2014

#### Methodology

The fuel load calculations in this document have been made using the conversion tables in the DPaW (formerly DEC) "Red Book" of Forest Fire Behaviour Tables for Western Australia.

Due to the fact that the Red Book deals only with the forest areas in the southern regions of Western Australia, assumptions have been made when calculating the tonnage for the areas observed.

In the Red Book there is no table which deals directly with the Mallee Heath scrub so instead the table 7.2.1 – Litter Depth and Weight 'Jarrah Dominant' has been utilised to calculate tonnage from the litter depth.

Litter			Fores	t Type		
Depth MM	Kerri	Mixed	Jarrah	P. pinaster	Pradiata	Wandoo
	Dominant	M.J.K.	Dominant	needle	needle	
			Litter weight	(tonnes/Ha)		
5	3.2	2.6	2.7	2.5	2.8	4.4
10	6.4	5.1	5.3	4.9	5.2	8.8
15	9.6	7.7	8.0	7.4	7.2	13.2
20	13.0	10.3	11.0	10.0	9.0	17.6
25	16.0	13.0	13.0	12.4	10.7	22.0
30	19.0	15.0	16.0	15.0	12.0	26.4
35	23.0	17.0	19.0	17.0	14.0	30.0
40	26.0	19.0	21.0	20.0	16.0	
45	29.0	22.0	24.0	22.0	18.0	
50	32.0	25.0	27.0	25.0	20.0	
55	35.0	27.0	29.0	27.0	22.0	
60	39.0			29.0	24.0	
65	42.0			31.0	26.0	
70	45.0			33.0	28.0	
80	51.0			37.0	31.0	
90	58.0			41.0	34.0	
100	64.0			45.0	37.0	

The tonnage assessed is an educated estimate due to the interpretation of the forest tables and whilst these tables are not ideal, they are the only conversion tables currently available. The same methodology was used by the City in its 2011 Fuel Load Assessment. The conversions may not be accurate for some of the smaller Reserves that were assessed.

Another factor to note is that the table 7.2.1 'Jarrah Dominant' only calculates litter to tonnage up to 55mm of litter, therefore any litter readings higher than this 55mm were calculated at the maximum supplied conversion of 55mm = 29 T/Ha.

Litter is not the only consideration when calculating fuel loads and as such, Scrub Structural Type – 'Type 6' has been utilised for all calculations.

In Table 7.4.1 – Scrub Fuel Weight (Tonnes/Hectare) it has been assumed that the total live scrub (consumed in intense wildfire) to be worst case scenario and therefore the factor of 7 has been added to the total tonnage calculations.

1. For example, hazal, netic, kerri wattle	Scrub Structural Type	Average Scrub Height (MM)		ive Scrub med in int	ense	Total F (Consu wildfire	med in mo	oderate		oliage (Cor cribed bur	
example, hazal, netic, kerri wattle   5.5   30   27   23   7   6   5   0.5   0.3   0.2   0.2			Dense	Medium	Sparse	Dense	Medium	Sparse	Dense	Medium	Sparse
hazal, netic, kerri vattle         5.5         30         27         23         7         6         5         0.5         0.3         0.2           wattle         5.0-         25         20         17         5         5         4         0.5         0.3         0.2           2. For example, hazel or netic, with Acacia sp, understory         6.0         43         38         33         9         8         7         3         2         1.5           2. For example, hazel or netic, with Acacia sp, understory         5.0-         33         29         25         7         6         5         2.5         1.5         1.0           3. For example, notic, with Acacia sp, understory         3.0         16         11         7         5         4         3         2         1.5         1.0           4. For example, notic, A. urophylla, a. Logolar control of the control	1. For	7.0 +	40	35	31	9	8	7	0.5	0.3	0.3
netic, kerri wattle         5.0-         25         20         17         5         5         4         0.5         0.3         0.2           2. For example, hazel or netic, with Acacia sp, understory         5.5         38         34         29         8         7         3         2         1.5           3. For netic, with Acacia sp, understory         3.0         16         11         7         5         4         3         2         1.5         1.0           3. For punchella         3.0         16         11         7         5         4         3         2         1.5         1           hovea, A. pulchella         2.5         13         9         6         4         3         2.5         2         1.5         1           A. pulchella         2.0         9         7         5         3         2.5         2         1.5         1           4. For Example, netric, A. urophylla, young hael         5.0         26         20         15         5         4         3         2.5         1         1         1         0.8           5. For Example, netic, A.         5.5         4         2         1         1         1		6.0	35	31	26	8	7	6	0.5	0.3	0.3
wattle           7.0 +         49         43         39         10         9         8         3         2.5         1.5           2. For example, hazel or netic, with Acacia sp, understory         5.5         38         34         29         8         7         6         3         2         1.5           3. For example, netric, A. urophylla, pounds hale         3.0         16         11         7         5         4         3         2         1.5         1         1         1.5         1         1.5         1         1.5         1.5         1.5         1         1.5         1         1         1.5         1         1.5         1         1.5         1		5.5	30	27	23	7	6	5	0.5	0.3	0.2
2. For example, hazel or netic, with Acacia sp, understory  3. For 3.0 16 11 7 5 4 3 2 1.5 1 example, hovea, A. pulchella A. strigosa, A. pentadenia  4. For 5.0 26 20 15 5 4 3 1.5 1.2 1 example, netric, A. urophylla, young hael  5. For 5.5 + 35 28 20 6 5 4 2 1.5 1 example, netic, A. 5. For example, netic, A. 5. For example, netic, A. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.		5.0-	25	20	17	5	5	4	0.5	0.3	0.2
Example, hazel or netic, with Acacia sp, understory   3. For example, hovea, A. pulchella A. strigosa, A. pentadenia   4. For Example, netric, A. urophylla, young hael   5.0		7.0 +	49	43	39	10	9	8	3	2.5	1.5
hazel or netic, with Acacia sp, understory       3.5 + 19       13       9       6       5       2.5       1.5       1.0         3. For example, hovea, A. pulchella A. pulchella A. pulchella A. pulchella A. pulchella (A. pentadenia)       2.5       13       9       6       4       3       2.5       2       1.8       1.2         4. For Example, netric, A. urophylla, young hael       5.0       26       20       15       5       4       3       2.5       1.2       1         5. For example, netic, A. urophylla, voung hael       4.0       20       14       8       4       3       2.5       1.2       1       1         5. For example, netic, A. urophylla, voung hael       4.5       23       17       11       4       3       2.5       2       1.5       1         5. For example, netic, A. 2. 2. 2. 2. 2. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.			43	38	33	9	8	7			1.5
netic, with Acacia sp, understory  3. For 3.5 + 19 13 9 6 5 3.5 2 1.5 1 example, hovea, A. 2.5 13 9 6 4 3 2.5 2 1.5 1.5 1.5 hovea, A. 2.0 9 7 5 3 2.5 2 1.5 2.5 2 1.5 A. 1.5 - 6 4 3 2.5 2 1.5 2.5 2 1.5 2.5 1.5 1.5 strigosa, A. pentadenia  4. For Example, netric, A. 4.5 23 17 11 4 3 2.5 1.2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5.5	38	34	29	8	7	6	3	2	1.2
Acacia sp, understory         3. For example, hovea, A. pulchella       3.0       16       11       7       5       4       3       2       1.5       1         A. pulchella       2.0       9       7       5       3       2.5       2       1.8       1.2         A. pulchella       2.0       9       7       5       3       2.5       2       2.5       2       1.5         A. pentadenia       1.5 -       6       4       3       2.5       2       1.5       2       1.5         4. For Example, netric, A. urophylla, young hael       5.0       26       20       15       5       4       3       2.5       1.2       1       1         5. For 5.5 + 35       28       20       6       5       4       2       1.5       1		5.0-	33	29	25	7	6	5	2.5	1.5	1.0
Second Color											
example,   3.0   16   11   7   5   4   3   2   1.5   1											
hovea, A. pulchella         2.5         13         9         6         4         3         2.5         2         1.8         1.2           A. strigosa, A. pentadenia         4. For Example, netric, A. quantity         5.5 + 32         25         20         6         5         4         1.5         1.2         1           Example, netric, A. quantity         5.0         26         20         15         5         4         3         1.5         1.2         1           Incomphylla, young hael         4.0         20         14         8         4         3         2.5         2         1.5         1           5. For example, netic, A. quantity         5.0         28         22         16         5         4         3         2.5         1.2         1         1           5. For example, netic, A. quantity         4.5         22         18         14         4         3         2.5         2         1.5         1           4.5         22         18         14         4         3         2.5         2         1         1         0.8           5. For example, netic, A. quantity         4.5         22         18         14         4 <t< td=""><td>3. For</td><td>3.5 +</td><td>19</td><td>13</td><td></td><td>6</td><td>5</td><td>3.5</td><td>2</td><td>1.5</td><td>1</td></t<>	3. For	3.5 +	19	13		6	5	3.5	2	1.5	1
pulchella         2.0         9         7         5         3         2.5         2         2.5         2         1.5           A.         1.5 -         6         4         3         2.5         2         1.5         2.5         2         1.5           strigosa, A.           pentadenia         4. For         5.5 +         32         25         20         6         5         4         1.5         1.2         1           Example, netric, A.         5.0         26         20         15         5         4         3         1.5         1.2         1           netric, A.         4.5         23         17         11         4         3         2.5         1.2         1         1           young hael         3.5 -         16         10         7         3         2.5         2         1         1         0.8           5. For         5.5 +         35         28         20         6         5         4         2         1.5         1           example, netic, A.         4.5         22         18         14         4         3         2.5         2         1.5 <th< td=""><td></td><td>3.0</td><td>16</td><td>11</td><td>7</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1.5</td><td>1</td></th<>		3.0	16	11	7	5	4	3	2	1.5	1
A. strigosa, A. pentadenia  4. For 5.5 + 32 25 20 6 5 4 1.5 1.2 1 Example, 5.0 26 20 15 5 4 3 1.5 1.2 1 netric, A. 4.5 23 17 11 4 3 2.5 1.2 1 young hael 3.5 - 16 10 7 3 2.5 2 1 1 0.8  5. For 5.5 + 35 28 20 6 5 4 2 1.5 1 example, 5.0 28 22 16 5 4 3 2 1.5 1 netic, A. 4.5 22 18 14 4 3 2.5 2 1.5 1		2.5	13	9	6	4	3	2.5	2	1.8	1.2
strigosa, A.         A. pentadenia         4. For 5.5 + 32 25 20 6 5 4 1.5 1.2 1         Example, netric, A. urophylla, young hael       4.5 23 17 11 4 3 2.5 1.2 1 1         5. For 5.5 + 35 28 20 6 5 4 2 1.5 1         5. For 6.5 + 35 28 20 6 5 4 2 1.5 1         6 5 4 2 1.5 1         7 7 3 2.5 2 1 1 1 0.8         7 8 8 8 9 1 1.5 1         8 9 1 1.5 1         9 1 1.5 1         9 1 1.5 2.5 2         1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2.0	9	7	5	3	2.5	2	2.5	2	1.5
A. pentadenia         4. For       5.5 +       32       25       20       6       5       4       1.5       1.2       1         Example, netric, A. urophylla, young hael       4.5       23       17       11       4       3       2.5       1.2       1		1.5 -	6	4	3	2.5	2	1.5	2.5	2	1.5
4. For Example, netric, A. young hael       5.5 + 32       25       20       6       5       4       1.5       1.2       1         5.0       26       20       15       5       4       3       1.5       1.2       1         netric, A. urophylla, young hael       4.0       20       14       8       4       3       2       1.2       1       1         5. For example, netic, A.       5.0       28       22       16       5       4       3       2       1.5       1         10       7       3       2.5       2       1       1       0.8         5. For example, netic, A.       5.0       28       22       16       5       4       3       2       1.5       1         1       4.5       22       18       14       4       3       2.5       2       1.5       1	A.										
Example, netric, A. urophylla, young hael         5.0         26         20         15         5         4         3         1.5         1.2         1           5.0         26         20         15         5         4         3         1.5         1.2         1           4.5         23         17         11         4         3         2.5         1.2         1         1           4.0         20         14         8         4         3         2         1.2         1         1           5.5 - 16         10         7         3         2.5         2         1         1         0.8           5. For example, 5.0         28         22         16         5         4         2         1.5         1           netic, A. 4.5         22         18         14         4         3         2.5         2         1.5         1											
netric, A.       4.5       23       17       11       4       3       2.5       1.2       1       1         urophylla, young hael       4.0       20       14       8       4       3       2       1.2       1       1         5. For example, netic, A.       5.5 + 35       28       20       6       5       4       2       1.5       1         netic, A.       4.5       22       18       14       4       3       2.5       2       1.5       1											
urophylla, young hael     4.0     20     14     8     4     3     2     1.2     1     1       5. For example, netic, A.     5.0     28     22     16     5     4     2     1.5     1       1     1     1     1     1     1     1     1     1       2     1     1     1     1     1     1     1     1       3     5     1											
young hael       3.5 -     16     10     7     3     2.5     2     1     1     0.8       5. For example, netic, A.     5.0     28     22     16     5     4     2     1.5     1       example, netic, A.     4.5     22     18     14     4     3     2.5     2     1.5     1											
5. For example, netic, A.     5.0     28     22     16     5     4     2     1.5     1       example, netic, A.     4.5     22     18     14     4     3     2.5     2     1.5     1									1.2		
example, netic, A.     5.0     28     22     16     5     4     3     2     1.5     1       netic, A.     4.5     22     18     14     4     3     2.5     2     1.5     1											8.0
netic, A. 4.5 22 18 14 4 3 2.5 2 1.5 1											
											1
rue a la villa			22	18	14	4			2		1
1 1 4 0 E 1.0 1.2 1	urophylla,	4.0	19	15	11	4	3	2	1.5	1.2	
young 3.5 - 14 12 9 3 2.5 2 1.5 1.2 1 hazal	hazal	3.5 -	14		9	3		2	1.5		1
<b>6. For</b> 1.5 + 7 5 4 3.5 3 2.5 2.5 2 1.5											
<b>example</b> , 1.2 5 4 3 3 2.5 2 2 1.5 1	example,	1.2	5	4	3	3	2.5	2	2	1.5	1
young 0.9 3 3 2 2.5 2 1.5 2 1.5 1		0.9			2	2.5	2	1.5	2	1.5	1
scrub, tall 0.6 - 3 2 1.5 2 1.5 1 1.5 1 0.8		0.6 -	3	2	1.5	2	1.5	1	1.5	1	0.8
grasses,											
jarrah											
For the purpose of this analysis the scrub flammability factor has been discounted. If it were		aaa af ili. '	ا ما جمع م	- 4l ·	h fla	_  _ :  :  :	-4 l !-	ا دالد مرم د	<b>1</b>	I£ :4	

For the purpose of this analysis the scrub flammability factor has been discounted. If it were to be applied the 'high' factor would be utilised, and at 50% dead, it would provide a multiplying factor of 5.

As such, the tonnage figure supplied for each area has been calculated thus;

Table 7.2.1 – Average Litter Depth to Tonnage – Jarrah Dominant + Scrub Fuel Weight (7) = Total Tonnes per Hectare.

E.g. 30mm (16 T/ha) + 7 = 23 Tonnes/Hha

	Fuel Loading Average by Reserve	T/Ha
1	C Y O'Connor Reserve	28.1
2	Manning Park	29.3
3	Coogee Beach Reserve	12.1
4	Market Gardens Swamps	21.3
5	McNeil Field	N/A
6	Lake Coogee	25.5
7	Redemptora Reserve	17.7
8	Sherbrook Reserve	N/A
9	Bibra Lake Reserve	27.9
10	Nola Waters Reserve	N/A
11	Brandwood Reserve	23.5
12	Classon Park	23.5
13	Bandicoot Reserve	26.0
14	Heatherlea Reserve	26.4
15	Cocos Park Reserve	21.6
16	Little Rush Lake	25.8
17	Yangebup Lake	28.0
18	Beeliar Reserve	23.9
19	Fancote Reserve	24.2
20	Levi Park	20.9
21	Skaife Park	22.2
22	Holdsworth Reserve	27.5
23	Cockburn Central Bushland	33.6
24	Coojong Park	29.3
25	Banbar Park	20.9
26	Success Bushland Reserve	25.8
27	Baler Reserve	24.6
28	Christmas Tree Park	23.5
29	Barfield Reserve	22.2
30	Mohan Park	18.8
31	Roper Reserve	23.5
32	Frankland Park	26.2
33	Lukin Swamp Reserve	12.4
34	Verde Reserve	24.3
35	Freshwater Reserve	15.0
36	Eco Park	17.8
37	Banksia Eucalypt Woodland Park	20.7
38	Rose Shanks Reserve	15.9
39	Emma Treeby Reserve	29.5
40	Bosworth Reserve	18.2
41	Mather Reserve	28
42	Kraemer Reserve	21.0
43	Gil Chalwell Reserve	N/A
44	Buckingham Reserve	N/A
45	Dennis De Young Reserve	29.3
46	Triandra Reserve	25.6
47	Macrozamia Park	14.0
48	Mt Brown Reserve	33.5
49	Brownman Swamps	32.3
N/A	Not Assassad	

N/A Not Assessed

#### CY O'Connor Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	28						
2	15	15						
3	45	31						
4	50	34						
5	90	36						
6	50	34						
7	30	23						
8	30	23						
9	50	34						
10	30	23						
Summar Location					Factor	Total T/ha		
Location					7	28.1		,
Location								
							Average	28.1

# Manning Park

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21	1	30	16	1	30	16
2	110	29	2	30	16	2	50	27
3	100	29	3	50	27	3	20	11
4	50	27	4	40	21	4	40	21
5	90	29	5	70	29	5	30	16
6	30	16	6	20	11	6	70	29
7	50	27	7	50	27	7	70	29
8	100	29	8	30	16	8	60	29
9	30	16	9	30	16	9	60	29
10	10	5.3	10	50	27	10	50	27
Summar					Factor	Total T/ha		
Location					7	29.8		
Location					7	27.6		
					7	30.4	Average	29.3

#### Coogee Beach Reserve

L	ocation #	1		ocation#	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	10	5.3						
2	10	5.3						
3	5	2.7						
4	5	2.7						
5	10	5.3						
6	10	5.3						
7	0	0						
8	15	8.0						
9	15	8.0						
10	15	8.0						
Summar					Factor	Total T/ha		
Location					7	12.06		
Location								
							Average	12.06

#### Market Garden Swamps (North, South & 3)

Loca	tion # 1 (N	lorth)	Locat	ion # 2 (S	outh)	Lo	cation #3	(3)
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	10	5.3	1	20	11	1	80	29
2	80	29	2	10	5.3	2	130	29
3	10	5.3	3	10	5.3	3	30	16
4	20	11	4	30	16	4	50	27
5	30	16	5	20	11	5	40	21
6	20	11	6	30	16	6	40	21
7	10	5.3	7	40	21	7	40	21
8	60	29	8	10	5.3	8	50	27
9	50	27	9	20	11	9	130	29
10	10	5.3	10	60	29	10	110	29
Summar	•				Factor	Total T/ha		
Location					7	21.3		
Location					7	19.9		
					7	31.9	Average	24.4

Note: 60% of area is underwater for eight to ten months of the year.

#### Lake Coogee

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	10	5.3	1	20	11	1	40	21
2	20	11	2	60	29	2	30	16
3	20	11	3	110	29	3	30	16
4	40	21	4	50	27	4	30	16
5	60	29	5	60	29	5	20	11
6	60	29	6	10	5.3	6	20	11
7	190	29	7	20	11	7	40	21
8	50	27	8	10	5.3	8	20	11
9	120	29	9	20	11	9	20	11
10	50	27	10	70	29	10	30	16
Summar	•				Factor	Total T/ha		
Location					7	28.8		
Location					7	25.7		
	J				7	22.0	Average	25.5

#### Redemptora Reserve

L	ocation #	1	L	ocation #	2		ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16						
2	30	16						
3	40	21						
4	10	5.3						
5	10	5.3						
6	10	5.3						
7	30	16						
8	20	11						
9	10	5.3						
10	10	5.3						
Summar					Factor	Total T/ha		
Location	2				7	17.7		
Location	3						Average	17.7

#### Bibra Lake Reserve

L	ocation#	1	L	ocation#	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11	1	40	21	1	20	11
2	30	16	2	30	16	2	80	29
3	40	21	3	40	21	3	20	11
4	60	29	4	30	16	4	40	21
5	40	21	5	100	29	5	60	29
6	20	11	6	90	29	6	40	21
7	70	29	7	90	29	7	130	29
8	20	11	8	70	29	8	5	2.7
9	40	21	9	70	29	9	20	11
10	70	29	10	50	27	10	30	16
Summar	•				Factor	Total T/ha		
Location					7	26.9		
Location					7	31.6		
	-				7	25.1	Average	27.9

#### Brandwood Reserve

L	ocation #	1		ocation #	2		ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16						
2	30	16						
3	30	16						
4	40	21						
5	30	16						
6	20	11						
7	40	21						
8	40	21						
9	20	11						
10	30	16						
Summar					Factor	Total T/ha		
Location					7	23.5		
Location								
							Average	23.5

#### Classon Park

L	ocation#	1		ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	10	5.3						
2	30	16						
3	40	21						
4	20	11						
5	30	16						
6	40	21						
7	30	16						
8	50	27						
9	30	16						
10	30	16						
Summar					Factor	Total T/ha		
Location					7	23.5		
Location								
							Average	23.5

#### Bandicoot Reserve

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16						
2	100	29						
3	30	16						
4	70	29						
5	40	21						
6	40	21						
7	50	27						
8	60	29						
9	90	29						
10	80	29						
Summar					Factor	Total T/ha		
Location					7	26.0		
Location								
							Average	26.0

#### Heatherlea Reserve

L	ocation #	1	L	ocation #	2	L	ocation#	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	50	34						
2	30	23						
3	20	18						
4	40	28						
5	40	28						
6	30	23						
7	80	29						
8	40	21						
9	30	16						
10	30	16						
Summar					Factor	Total T/ha		
Location					7	26.4		
Location								
							Average	26.4

#### Cocos Park Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	120	29						
2	40	21						
3	20	11						
4	10	5.3						
5	10	5.3						
6	10	5.3						
7	30	16						
8	40	21						
9	10	5.3						
10	50	27						
Summar Location					Factor	Total T/ha		
Location					7	21.6		
Location	3							
							Average	21.6

#### Little Rush Lake

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16	1	10	5.3	1	60	29
2	10	5.3	2	20	11	2	40	21
3	20	11	3	20	11	3	50	27
4	10	5.3	4	30	16	4	30	16
5	30	16	5	60	29	5	80	29
6	40	21	6	40	21	6	50	27
7	30	16	7	40	21	7	50	27
8	60	29	8	60	29	8	40	21
9	30	16	9	40	21	9	40	21
10	20	11	10	30	16	10	40	21
Summar					Factor	Total T/ha		
Location					7	21.6		
Location					7	25.0		
					7	30.9	Average	25.8

# Yangebup Lake

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16	1	60	29	1	40	21
2	30	16	2	40	21	2	20	11
3	60	29	3	20	11	3	10	5.3
4	60	29	4	80	29	4	40	21
5	80	29	5	60	29	5	50	27
6	80	29	6	40	21	6	60	29
7	30	16	7	60	29	7	30	16
8	90	29	8	50	27	8	20	11
9	80	29	9	10	5.3	9	40	21
10	20	11	10	20	11	10	40	21
Summar					Factor	Total T/ha		
Location					7	30.3		
Location					7	28.2		
					7	25.3	Average	28.0

#### Beeliar Reserve

L	ocation #	1	L	ocation #	2	L	ocation#	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16						
2	30	16						
3	20	11						
4	50	27						
5	20	11						
6	40	21						
7	30	16						
8	70	29						
9	20	11						
10	20	11						
Summar Location					Factor	Total T/ha		
Location					7	23.9		,
Location								
							Average	23.9

#### Fancote Reserve

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21						
2	10	5.3						
3	90	29						
4	40	21						
5	40	21						
6	10	5.3						
7	30	16						
8	30	16						
9	30	16						
10	40	21						
Summar					Factor	Total T/ha		
Location					7	24.2		
Location								
							Average	24.2

#### Levi Park

L	ocation #	1	L	ocation #	2	L	Location # 3  Reading # mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	40	21							
2	20	11							
3	40	21							
4	20	11							
5	20	11							
6	40	21							
7	20	11							
8	20	11							
9	10	5.3							
10	30	16							
Summar		•			Factor	Total T/ha			
Location					7	20.9			
Location									
							Average	20.9	

#### Skaife Park

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	10	5.3						
2	20	11						
3	30	16						
4	10	5.3						
5	40	21						
6	20	11						
7	30	16						
8	30	16						
9	40	21						
10	60	29						
Summar		1			Factor	Total T/ha		
Location					7	22.2		
Location								
							Average	22.2

#### Holdsworth Reserve

L	ocation #	1	L	ocation #	2	L	Location # 3 ading # mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	40	21							
2	50	27							
3	40	21							
4	40	21							
5	20	11							
6	120	29							
7	50	27							
8	20	11							
9	40	21							
10	30	16							
Summar		•			Factor	Total T/ha			
Location					7	27.5			
Location									
							Average	27.5	

#### Cockburn Central Bushland

L	ocation#	1	L	ocation#	2	L	ocation #3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	25	13						
2	70	29						
3	40	21						
4	60	29						
5	60	29						
6	80	29						
7	90	29						
8	60	29						
9	80	29						
10	60	29						
Summar					Factor	Total T/ha		
Location					7	33.6		
Location	3							
							Average	33.6

Note: Samples taken from only unburnt patch in the area.

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# Coojong Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	30	16						
3	40	21						
4	60	29						
5	40	21						
6	50	27						
7	70	29						
8	40	21						
9	40	21						
10	50	27						
Summar	y	•			Factor	TT/ha		\
Location	1				7	29.3		
Location								
Location	3							00.0
							Average	29.3

#### Banbar Park

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	30	16						
3	40	21						
4	20	11						
5	20	11						
6	10	5.3						
7	40	21						
8	30	16						
9	30	16						
10	20	11						
Summar	у	<u> </u>			Factor	TT/ha		
Location					7	20.9		
Location								
Location	3						Average	20.9
							Average	20.0

#### Success Bushland Reserve

L	ocation#	1	L	ocation #	2	L	Location # 3 Reading # mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	40	21							
2	50	27							
3	30	16							
4	30	16							
5	20	11							
6	40	21							
7	20	11							
8	50	27							
9	40	21							
10	40	21							
Summar	у	<u> </u>			Factor	TT/ha			
Location					7	25.8			
Location									
Location	3								
							Average	25.8	

#### Baler Reserve

L	ocation #	1	Lo	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	30	16						
3	40	21						
4	30	16						
5	40	21						
6	30	16						
7	30	16						
8	30	16						
9	50	27						
10	30	16						
Summar	у	<u> </u>			Factor	TT/ha		
Location					7	24.6		
Location								
Location	3							
							Average	24.6

#### Christmas Tree Park

L	ocation #	1	L	ocation #	2	L	ocation # 3	mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha		
#1										
1	60	29								
2	80	29								
3	20	11								
4	50	27								
5	30	16								
6	0	0								
7	30	16								
8	140	5.3								
9	20	11								
10	40	21								
Summar	у	•			Factor	TT/ha				
Location	1				7	23.5				
Location										
Location	3									
							Average	23.5		

#### Barfield Reserve

L	ocation #	1	Lo	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16						
2	40	21						
3	10	5.3						
4	10	5.3						
5	30	16						
6	40	21						
7	60	29						
8	20	11						
9	20	11						
10	30	16						
Summar	y				Factor	TT/ha		
Location					7	22.2		
Location								
Location	3							
							Average	22.2

#### Mohan Park

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21						
2	10	5.3						
3	10	5.3						
4	20	11						
5	30	16						
6	20	11						
7	30	16						
8	10	5.3						
9	20	11						
10	30	16						
Summar	y	•			Factor	TT/Ha		
Location	1				7	18.8		
Location	2							
Location	3							
							Average	18.8

# Roper Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	10	5.3						
3	40	21						
4	30	16						
5	80	29						
6	30	16						
7	20	11						
8	60	29						
9	10	5.3						
10	40	21						
Summar		•			Factor	TT/ha		
Location					7	23.5		
Location								
Location	3						Avorage	23.5
							Average	23.3

#### Frankland Park

L	ocation#	1	L	ocation#	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21						
2	20	11						
3	10	5.3						
4	70	29						
5	20	11						
6	10	5.3						
7	50	27						
8	30	16						
9	60	29						
10	50	27						
Summar	у	•			Factor	TT/ha		
Location					7	26.2		
Location								
Location	3							
							Average	26.2

# Lukin Swamp Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	0	0						
2	0	0						
3	0	0						
4	10	5.3						
5	10	5.3						
6	10	5.3						
7	30	16						
8	20	11						
9	10	5.3						
10	10	5.3						
Summar	y				Factor	TT/ha		
Location					7	12.4		
Location								
Location	3							
							Average	12.4

#### Verde Reserve

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21						
2	50	27						
3	20	11						
4	10	5.3						
5	20	11						
6	30	16						
7	30	16						
8	30	16						
9	40	21						
10	60	29						
Summar	у				Factor	TT/ha		
Location	1				7	24.3		
Location								
Location	3							
							Average	24.3

# Freshwater Reserve

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	10	5.3						
3	10	5.3						
4	10	5.3						
5	30	16						
6	10	5.3						
7	10	5.3						
8	10	5.3						
9	30	16						
10	10	5.3						
Summar	у	<u> </u>			Factor	TT/ha		
Location	1				7	15.0		
Location								
Location	3							
							Average	15.0

#### Eco Park

L	ocation#	1	L	ocation #	2		Location # 3 Reading # mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	30	16							
2	1030	16							
3	20	11							
4	20	11							
5	10	5.3							
6	20	11							
7	20	11							
8	0	0							
9	30	16							
10	20	11							
Summar	у				Factor	TT/ha			
Location					7	17.8			
Location									
Location	3								
							Average	17.8	

# Banksia Eucalypt Woodland Park

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16	1	20	11	1	0	0
2	30	16	2	20	11	2	0	0
3	10	5.3	3	30	16	3	10	5.3
4	40	21	4	30	16	4	20	11
5	70	29	5	20	11	5	20	11
6	50	27	6	40	21	6	10	5.3
7	80	29	7	50	27	7	20	11
8	60	29	8	20	11	8	30	16
9	10	5.3	9	20	11	9	20	11
10	20	11	10	30	16	10	0	0
Summar	у				Factor	TT/ha		
Location	1				7	25.9		
Location					7	22.1		
Location	Location 3				7	14.1		00.7
							Average	20.7

#### Rose Shanks Reserve

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21	1	20	11	1	20	11
2	20	11	2	30	16	2	10	5.3
3	10	5.3	3	10	5.3	3	20	11
4	10	5.3	4	20	11	4	20	11
5	30	16	5	20	11	5	10	5.3
6	10	5.3	6	20	11	6	20	11
7	0	0	7	40	21	7	10	5.3
8	10	5.3	8	20	11	8	20	11
9	10	5.3	9	0	0	9	20	11
10	10	5.3	10	10	5.3	10	10	5.3
Summar	у				Factor	TT/ha		
Location	1				7	14.9		
Location					7	17.3		
Location	3				7	15.7		45.0
							Average	15.9

# Emma Treeby Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	60	29						
2	10	5.3						
3	50	27						
4	10	5.3						
5	40	21						
6	60	29						
7	120	29						
8	70	29						
9	100	29						
10	40	21						
Summar					Factor	TT/ha		
Location					7	29.5		
Location								
Location	Location 3						A	00.5
							Average	29.5

#### Bosworth Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3 mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	20	11							
2	40	21							
3	20	11							
4	10	5.3							
5	10	5.3							
6	20	11							
7	10	5.3							
8	40	21							
9	10	5.3							
10	30	16							
Summar	у	•			Factor	TT/ha			
Location					7	18.2			
Location									
Location	3								
							Average	18.2	

#### Mather Reserve

L	ocation#	1	L	ocation #	2	L	Location # 3 Reading # mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	50	27							
2	50	27							
3	50	27							
4	30	16							
5	100	29							
6	50	27							
7	10	5.3							
8	50	27							
9	60	29							
10	70	29							
Summar	у	<u> </u>			Factor	TT/ha			
Location	1				7	28.0			
Location									
Location	3						A	00.0	
							Average	28.0	

#### Kraemer Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16						
2	40	21						
3	30	16						
4	20	11						
5	30	16						
6	30	16						
7	20	11						
8	30	16						
9	30	16						
10	40	21						
Summar	y	•			Factor	TT/ha		
Location					7	21.0		
Location								
Location	3							04.0
							Average	21.0

#### Gil Chalwell Reserve

L	ocation #	1	L	ocation #	2	L	ocation # :	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
Summar	у							
Location								
Location								
Location	3						Avorago	
							Average	

Note: No fuel loads could be taken due to the reserve being completely burnt from recent fires.

#### **Buckingham Reserve**

L	ocation #	1		ocation #	2	L	ocation#	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
Summar	У	<u> </u>						\
Location	Location 1							
	Location 2							
Location	Location 3							
							Average	

Note: No fuel loads could be taken due to the reserve being completely burnt from recent fires.

# Dennis De Young Reserve

L	ocation #	1	Lo	ocation #	2		ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	30	16						
3	30	16						
4	90	29						
5	70	29						
6	50	27						
7	90	29						
8	70	29						
9	30	16						
10	40	21						
Summar	y				Factor	TT/ha		
Location					7	29.3		
Location								
Location	3							
							Average	29.3

#### Triandra Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha		
#1										
1	20	11								
2	20	11								
3	20	11								
4	40	21								
5	10	5.3								
6	20	11								
7	70	29								
8	70	29								
9	60	29								
10	60	29								
Summar	y	•			Factor	TT/ha				
Location	1				7	25.6				
Location										
Location	3									
							Average	25.6		

#### Macrozamia Park

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	20	11						
2	10	5.3						
3	10	5.3						
4	0	0						
5	10	5.3						
6	0	0						
7	20	11						
8	10	5.3						
9	30	16						
10	20	11						
Summar					Factor	TT/ha		
Location					7	14.0		
	Location 2							
Location	ა						Average	14.0

#### Mt Brown Reserve

L	ocation#	1	L	ocation #	2	L	ocation # 3	mm T/ha		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha		
#1										
1	30	16								
2	40	21								
3	60	29								
4	120	29								
5	50	27								
6	50	27								
7	70	29								
8	70	29								
9	90	29								
10	60	29								
Summar	y	•			Factor	TT/ha				
Location	1				7	33.5				
Location										
Location	3									
							Average	33.5		

# Brownman Swamps

Location # 1			L	ocation #	2	Location # 3			
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	30	16							
2	60	29							
3	40	21							
4	60	29							
5	100	29							
6	50	27							
7	50	27							
8	50	27							
9	50	27							
10	40	21							
	Summary				Factor				
	Location 1				7	32.3			
	Location 2 Location 3								
Location	ა 						Average	32.3	

# City of Cockburn Fuel Loading (Non – Council Land) Assessment 2014

#### Methodology

The fuel load calculations in this document have been made using the conversion tables in the DPaW (formerly DEC) "Red Book" of Forest Fire Behaviour Tables for Western Australia.

Due to the fact that the Red Book deals only with the forest areas in the southern regions of Western Australia, assumptions have been made when calculating the tonnage for the areas observed.

In the Red Book there is no table which deals directly with the Mallee Heath scrub so instead the table 7.2.1 – Litter Depth and Weight 'Jarrah Dominant' has been utilised to calculate tonnage from the litter depth.

Litter			Fores	t Type		
Depth MM	Kerri	Mixed	Jarrah	P. pinaster	Pradiata	Wandoo
	Dominant	M.J.K.	Dominant	needle	needle	
			Litter weight	t (tonnes/Ha)		
5	3.2	2.6	2.7	2.5	2.8	4.4
10	6.4	5.1	5.3	4.9	5.2	8.8
15	9.6	7.7	8.0	7.4	7.2	13.2
20	13.0	10.3	11.0	10.0	9.0	17.6
25	16.0	13.0	13.0	12.4	10.7	22.0
30	19.0	15.0	16.0	15.0	12.0	26.4
35	23.0	17.0	19.0	17.0	14.0	30.0
40	26.0	19.0	21.0	20.0	16.0	
45	29.0	22.0	24.0	22.0	18.0	
50	32.0	25.0	27.0	25.0	20.0	
55	35.0	27.0	29.0	27.0	22.0	
60	39.0			29.0	24.0	
65	42.0			31.0	26.0	
70	45.0			33.0	28.0	
80	51.0			37.0	31.0	
90	58.0			41.0	34.0	
100	64.0			45.0	37.0	

The tonnage assessed is an educated estimate due to the interpretation of the forest tables and whilst these tables are not ideal, they are the only conversion tables currently available. The same methodology was used by the City in its 2011 Fuel Load Assessment. The conversions may not be accurate for some of the smaller Reserves that were assessed.

Another factor to note is that the table 7.2.1 'Jarrah Dominant' only calculates litter to tonnage up to 55mm of litter, therefore any litter readings higher than this 55mm were calculated at the maximum supplied conversion of 55mm = 29 T/Ha.

Litter is not the only consideration when calculating fuel loads and as such, Scrub Structural Type – 'Type 6' has been utilised for all calculations.

In Table 7.4.1 – Scrub Fuel Weight (Tonnes/Hectare) it has been assumed that the total live scrub (consumed in intense wildfire) to be worst case scenario and therefore the factor of 7 has been added to the total tonnage calculations.

	(MM)	Total Live Scrub (Consumed in intense wildfire)		Total Foliage (Consumed in moderate wildfires)			Low Foliage (Consumed in prescribed burning)			
		Dense	Medium	Sparse	Dense	Medium	Sparse	Dense	Medium	Sparse
1. For	7.0 +	40	35	31	9	8	7	0.5	0.3	0.3
example,	6.0	35	31	26	8	7	6	0.5	0.3	0.3
hazal,	5.5	30	27	23	7	6	5	0.5	0.3	0.2
netic, kerri wattle	5.0-	25	20	17	5	5	4	0.5	0.3	0.2
	7.0 +	49	43	39	10	9	8	3	2.5	1.5
2. For	6.0	43	38	33	9	8	7	3	2	1.5
example,	5.5	38	34	29	8	7	6	3	2	1.2
hazel or netic, with <i>Acacia</i> sp, understory	5.0-	33	29	25	7	6	5	2.5	1.5	1.0
3. For	3.5 +	19	13	9	6	5	3.5	2	1.5	1
example,	3.0	16	11	7	5	4	3	2	1.5	1
hovea, A.	2.5	13	9	6	4	3	2.5	2	1.8	1.2
pulchella	2.0	9	7	5	3	2.5	2	2.5	2	1.5
A.	1.5 -	6	4	3	2.5	2	1.5	2.5	2	1.5
strigosa, A.										
pentadenia										
4. For	5.5 +	32	25	20	6	5	4	1.5	1.2	1
Example,	5.0	26	20	15	5	4	3	1.5	1.2	1
netric, A.	4.5	23	17	11	4	3	2.5	1.2	1	1
urophylla,	4.0	20	14	8	4	3	2	1.2	1	1
young hael	3.5 -	16	10	7	3	2.5	2	1	1	8.0
5. For	5.5 +	35	28	20	6	5	4	2	1.5	1
example,	5.0	28	22	16	5	4	3	2	1.5	1
netic, A.	4.5	22	18	14	4	3	2.5	2	1.5	1
urophylla,	4.0	19	15	11	4	3	2	1.5	1.2	1
young hazal	3.5 -	14	12	9	3	2.5	2	1.5	1.2	1
6. For	1.5 +	7	5	4	3.5	3	2.5	2.5	2	1.5
example,	1.2	5	4	3	3	2.5	2	2	1.5	1
young	0.9	3	3	2	2.5	2	1.5	2	1.5	1
scrub, tall grasses, jarrah scrub	0.6 -	3	2	1.5	2	1.5	1	1.5	1	0.8

For the purpose of this analysis the scrub flammability factor has been discounted. If it were to be applied the 'high' factor would be utilised, and at 50% dead, it would provide a multiplying factor of 5.

As such, the tonnage figure supplied for each area has been calculated thus;

Table 7.2.1 – Average Litter Depth to Tonnage – Jarrah Dominant + Scrub Fuel Weight (7) = Total Tonnes per Hectare.

E.g. 30mm (16 T/ha) + 7 = 23 Tonnes/Hha

	Land Area	T/Ha
	Thompson Lake	32.3
1		
	Kogalup Lake	34.3
2		
	Jandakot Airport – Landside	29.9
3		
	Jandakot Airport – Airside	31.9
4		
_	North Lake	35.5
5	South Lake	30.2
6	South Lake	30.2
	Harry Waring Marsupial Reserve – Main Reserve	25.9
7		
,	Harry Waring Marsupial Reserve – (Southwest unfenced corner)	31.1
•		
8	Boldewood Reserve	28.5
9	Dolug Wood 17636176	20.5
3	Torgoyle Reserve	28.6
10		
11	Farrington Bushland	27.3

#### Thompsons Lake

Location # 1			L	ocation #	2	Location # 3			
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	40	21	1	20	11	1	30	16	
2	50	27	2	50	27	2	70	29	
3	70	29	3	20	11	3	50	27	
4	20	11	4	70	29	4	60	29	
5	40	21	5	60	29	5	70	29	
6	20	11	6	90	29	6	70	29	
7	90	29	7	90	29	7	50	27	
8	50	27	8	60	29	8	80	29	
9	60	29	9	90	29	9	60	29	
10	80	29	10	60	29	10	70	29	
Summary Location 1				Factor	Total T/ha				
Location 2				7	30.4				
	Location 3				7	32.2			
					7	34.3	Average	32.3	

#### Kogalup Lake

Location # 1			L	ocation #	2	Location # 3			
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	20	11	1	60	29	1	80	29	
2	40	21	2	60	29	2	120	29	
3	30	16	3	60	29	3	80	29	
4	60	29	4	70	29	4	60	29	
5	90	29	5	80	29	5	60	29	
6	60	29	6	100	29	6	90	29	
7	70	29	7	90	29	7	90	29	
8	80	29	8	90	29	8	120	29	
9	50	27	9	50	27	9	70	29	
10	40	21	10	70	29	10	70	29	
Summar	Summary				Factor	Total T/ha			
Location 2					7	31.1			
Location 3					7	35.8			
					7	36.0	Average	34.3	

#### Jandakot Airport – Landside

L	ocation#	1	L	ocation #	2	Location # 3		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	80	29	1	30	16	1	40	21
2	50	27	2	90	29	2	80	29
3	40	21	3	40	21	3	30	16
4	40	21	4	50	27	4	30	16
5	30	16	5	30	16	5	60	29
6	50	27	6	50	27	6	30	16
7	40	21	7	20	11	7	40	21
8	50	27	8	40	21	8	60	29
9	60	29	9	70	29	9	60	29
10	60	29	10	30	16	10	40	21
Summar	•				Factor	Total T/ha		
Location					7	31.7		
Location					7	28.3		
	-				7	29.7	Average	29.9

## Jandakot Airport – Airside

L	Location # 1			Location # 2			Location # 3		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha	
#1									
1	30	16	1	60	29	1	40	21	
2	30	16	2	40	21	2	50	27	
3	50	27	3	90	29	3	60	29	
4	40	21	4	80	29	4	50	27	
5	40	21	5	80	29	5	50	27	
6	60	29	6	20	11	6	30	16	
7	50	27	7	40	21	7	30	16	
8	90	29	8	50	27	8	40	21	
9	60	29	9	80	29	9	60	29	
10	50	27	10	60	29	10	70	29	
Summar					Factor	Total T/ha			
Location					7	32.2			
Location					7	32.4			
					7	31.2	Average	31.9	

#### North Lake

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	60	29	1	29	36	1	50	27
2	120	29	2	29	36	2	80	29
3	100	29	3	29	36	3	40	21
4	90	29	4	29	36	4	60	29
5	60	29	5	29	36	5	100	29
6	50	27	6	29	36	6	80	29
7	90	29	7	29	36	7	100	29
8	100	29	8	29	36	8	60	29
9	50	27	9	29	36	9	90	29
10	50	27	10	29	36	10	70	29
Summar	•				Factor	Total T/ha		
Location					7	35.4		
Location					7	36.0		
					7	35.0	Average	35.5
							_	

#### South Lake

Location # 1			Location # 2			Location # 3		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	30	16	1	30	16	1	40	21
2	40	21	2	50	27	2	50	27
3	50	27	3	60	29	3	30	16
4	80	29	4	50	27	4	30	16
5	40	21	5	80	29	5	40	21
6	40	21	6	40	21	6	30	16
7	50	27	7	80	29	7	80	29
8	40	21	8	60	29	8	30	16
9	60	29	9	40	21	9	40	21
10	60	29	10	30	16	10	130	29
Summar					Factor	Total T/ha		
Location					7	31.1		
Location					7	31.4		
					7	28.2	Average	30.2

#### Harry Waring Marsupial Reserve - Main Reserve

L	ocation #	1	L	ocation#	2	L	ocation #3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	60	29	1	120	29			
2	60	29	2	50	27			
3	40	21	3	10	5.3			
4	70	29	4	20	11			
5	50	27	5	20	11			
6	60	29	6	30	16			
7	30	16	7	10	5.3			
8	20	11	8	30	16			
9	20	11	9	50	27			
10	0	0	10	60	29			
Summar	•				Factor	Total T/ha		
Location					7	27.2		
Location					7	24.7		
							Average	25.9

# Harry Waring Marsupial Reserve – (Southwest unfenced corner)

Location # 1		Location # 2			Location # 3			
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21	1	70	29			
2	30	16	2	60	29			
3	20	11	3	80	29			
4	70	29	4	70	29			
5	70	29	5	60	29			
6	80	29	6	70	29			
7	30	16	7	40	21			
8	50	27	8	90	29			
9	10	5.3	9	80	29			
10	30	16	10	100	29			
Summar					Factor	Total T/ha		
Location					7	26.9		
Location					7	35.2		
							Average	31.1

#### **Boldewood Reserve**

L	ocation#	1	L	ocation #	2	L	ocation # 3	3
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	40	21						
2	20	11						
3	50	27						
4	40	21						
5	60	29						
6	40	21						
7	50	27						
8	40	21						
9	40	21						
10	30	16						
Summar					Factor	Total T/ha		
Location					7	28.5		
Location								
							Average	28.5

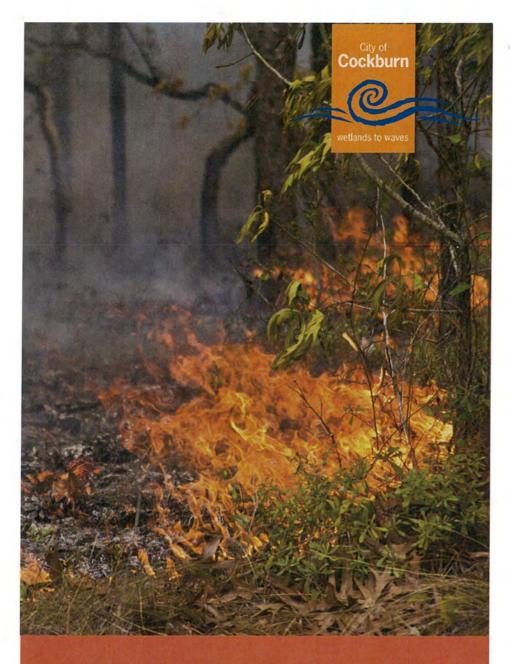
## Torgoyle Reserve

Location # 1			L	ocation #	2	Location # 3		
Reading	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
#1								
1	60	29	1	50	27			
2	40	21	2	60	29			
3	40	21	3	60	29			
4	30	16	4	40	21			
5	0	0	5	40	21			
6	20	11	6	40	21			
7	50	27	7	30	16			
8	70	29	8	70	29			
9	40	21	9	30	16			
10	40	21	10	50	27			
Summar					Factor	Total T/ha		
Location					7	26.6		
Location					7	30.6		
							Average	28.6

# Farrington Bushland

L	ocation #	1	L	ocation #	2	L	ocation # 3	3
Reading #1	mm	T/ha	Reading #	mm	T/ha	Reading #	mm	T/ha
1	50	27						
2	30	16						
3	20	11						
4	30	16						
5	60	29						
6	30	16						
7	40	21						
8	70	29						
9	50	27						
10	20	11						
Summary					Factor	Total T/ha		
Location					7	27.3		
Location								
							Average	27.3





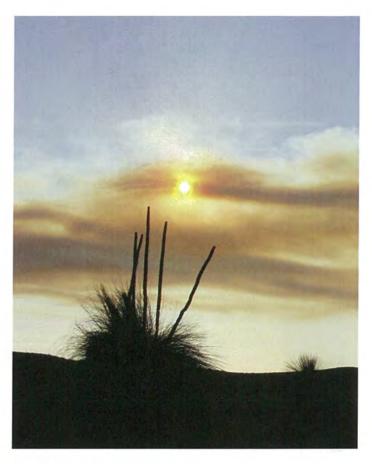
City of Cockburn

# **BUSHFIRE RISK**

A residents guide to the City's Bushfire Risk Management Plan 2014 – 2019

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#### Introduction

As part of the City's Bushfire Risk Management Plan 2014 – 2019 (BRMP), the city has produced a simplified guide for residents and stakeholders to use while attempting to review the risk of bushfire within the City of Cockburn.

Although this guide is heavily summarised from the BRMP, this document highlights key information and provides an overview of the methodology used during the development of the Bushfire Risk Management Plan. In addition to this provides further background information on the development of bushfires within the City of Cockburn.

#### What is a Bushfire Risk?

Bushfire is a real threat to the safety of residents and property within the coastal plains of Perth. A contributing factor to bushfires and their severity is governed by the amount of fuel available to burn. Cockburn Sound is especially susceptible to build up of fuel loads by wet winters creating ground vegetation growth, and hot dry summers which dries growth and subsequently turning it into ground fire fuel commonly referred to as fuel load.

The BRMP provides the basis for treating and reducing the risk of fire, reducing the fuel load and increasing community awareness of the risks associated with bushfire. In accordance with the BRMP objectives, identifying risk by carrying physical fuel load assessments across the City of Cockburn was critical to accurately assessing the level of fuels within areas of bushfire risk. The results of these fuel load assessments were factored into the overall risk assessment process that included data obtained by the Department of Fire and Emergency Services of bushfire historical trends, response times and water availability.



CITY OF COCKBURN | BUSHFIRE RISK 2014-2019

# What else contributes to Bushfires?

#### **Ambient temperature**

The higher the temperature the more likely it is that a fire will start or continue to burn. This is because the volatile organic compounds contained within trees and plants are closer to their ignition point at high temperatures and additionally pre-heated fuel loads burn faster.

Different tree and plants have significantly different volatile organic compounds, for example eucalypts based plants have been known to spontaneously self-combust through the release of chemicals within the plant during relativity moderate temperatures. Most Deciduous trees and fruit trees have a significant increase in being resistant against the threat of bushfire. However, these trees do not stop the spread of fire.

#### **Fuel moisture**

Dry fuel will burn quickly where is, damp or wet fuel may not burn at all. As a consequence, the time since rainfall and the amount of rain received is an important consideration in assessing the risk likelihood of a bushfire. During the development of the BRMP, drought measurements were used as an indicator to assess bushfire weather conditions.

#### Relative humidity

Dry air promotes a greater intensity fire than moist air. Low humidity evaporates moisture from vegetation and flammable materials, making them easier to ignite.



#### Slope angle

Fires pre-heat their fuel source through radiation and convection. Due to this heat transfer effect, a fire will burn faster uphill because the flames can reach more unburnt fuel in front of the fire and slow travelling downhill.

As a general rule, the speed of a fire will double with every 10 degree increase in slope so that on a 20 degree slope, its speed of advance is four times greater than on flat ground.

#### Wind speed

Wind acts to drive a fire by blowing the flames into fresh fuel, bringing it to ignition point and providing a continuous supply of oxygen. Embers are also carried by the wind which creates ignition of new fires potentially up to several kilometres downwind from the fire the embers originated from.

Winds between 12 to 15km/h make a significant difference in the behavior of bushfires. When wind speeds are below this speed, they often burn slower with a decrease risk of spreading. However, even a slight increase in wind speed above this threshold could result in an increase chance of the fire spreading.

### **Ignition of Bushfire**

Ignition frequency of unplanned fires can vary from seasonal conditions and location. It is believed a majority of uncontrollable fires within the City of Cockburn may have been contributed to human interference relating to arson. Most events of arson within the City are believed to be carried out within or close too residential areas. However, the frequency of arson within semi-rural areas may be higher than what is expected due to the difficultly in identifying fires ignition causes.

Planned fires, utilising the City's Fire Control Order and permit system accounts for the majority of fires within the City's rural land holdings. The fire permit system is heavily utilised by many residents, with 532 permits issued within the 2012/2013 financial year by the City's Rangers Department. With the newly prescribed allowance on non-permit lawful burns of vegetation piles less than 1 cubic metre, it is expected the number of permits may drop over the restricted burning period, however the number of fires (especially less than 1 cubic metre) will increase.



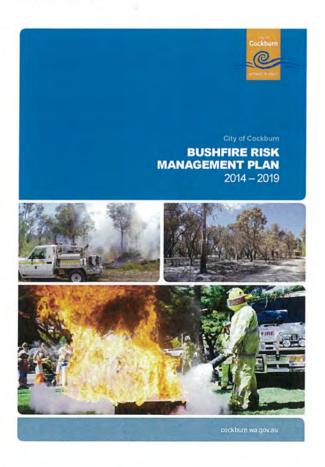
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# **Bushfire Risk Management** Plan 2014 – 2019 explained

#### **Background**

Under the Emergency Management Act 2005, the City of Cockburn has the legislative requirement to ensure it meets all requirements set out in hazard specific state plans. The State Plan for bushfire (Westplan – Fire) specifies each Local Government area to have a completed Bushfire Risk management Plan in place.

The Risk framework used to develop the City of Cockburn Bushfire Risk Management Plan was underpinned by the AS/NZS ISO 3100:2009 risk framework.



#### **Aim and Objectives**

The aim of the BRMP is to document a coordinated and efficient approach towards the identification and treatment of assets exposed to bushfire related risk within the City of Cockburn.

The objective of the BRMP is to effectively reduce bushfire related risk within the City of Cockburn in order to protect people and asset. Specifically, the objectives of this plan are to:

- Guide and coordinate a (tenure blind) bushfire risk management/mitigation program over a five (5) year period;
- Review the Treatment Schedule (appendix 3) annually;
- Document the process used to identify, analyse and evaluate risk, determine priorities and develop a plan to systematically treat risk;
- Facilitate the effective use of the financial and physical resources available for bushfire risk management activities;
- Integrate bushfire risk management into the business processes of the City of Cockburn, land managers and other agencies;
- Facilitate interaction between stakeholders in relation to bushfire mitigation;
- Clearly and concisely communicate risk in a format that is meaningful to stakeholders and the community; and
- Monitor and review the implementation of the BRMP, to ensure enhancements are made on an on-going basis.

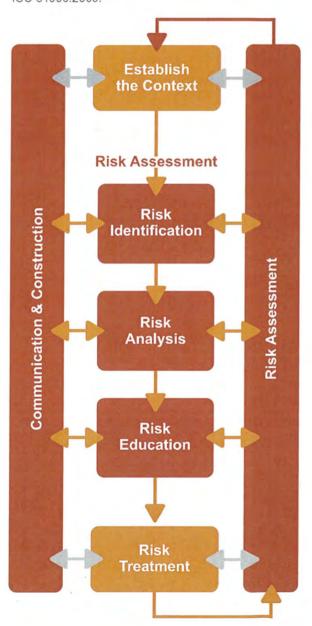
#### Scope of the Bushfire Risk Management Plan

The area covered by this BRMP encompasses all areas within the municipal boundaries of the City of Cockburn, exclusive of Carnac and Rottnest Island on recommendation by the Office of Bushfire Risk Management (Department of Fire and Emergency Services). The map below, show each planning area used to create the BRMP, these areas were used during the planning stages to ensure all risk were identified and an appropriate treatment type was allocated.



#### **The Risk Management Process**

The risk management processes followed in the development of the BRMP are in accordance with the international standard for risk management, AS/NZS ISO 31000:2009.



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#### **Assessing the Likelihood**

The likelihood of bushfire risk for assets is defined as the chance of a bushfire igniting, spreading and reaching the asset. The assessment methodology used to determine the likelihood rating is the same for each asset category; Human Settlement, Economic, Environmental and Cultural. The process for determining the likelihood rating for all asset categories is detailed below.

There are four possible likelihood ratings: Unlikely, Possible, Likely and Almost certain.

Fire Likelihood Ratings	Fires are not expected to spread and reach assets	Fires are expected to spread and reach assets
Fires occur frequently	Possible	Almost certain
Fires occur infrequently	Unlikely	Likely

#### **Assets identified**

During the Bushfire Risk Management Plan process, the City categorised all assets into four (4) different categorises. This was carried out to ensure the threat, level of impact, vulnerability and consequence rating were applicable to each asset.

#### **Human Settlement**

- Residential areas, including rural properties and urban interface areas;
- Places of temporary inhabitants including commercial & industrial areas locations.
- Special risk and critical facilities such as aged care facilities, schools and childcare facilities, tourist accommodation and facilities, designated evacuation centres, fire stations and police stations.

#### **Economic Assets**

- Agricultural including pasture, livestock;
- Commercial and industrial sites including major industries, waste treatment plants, mills and processing/manufacturing facilities;
- Critical infrastructure including power lines and substations, water and gas pipelines, telecommunications infrastructure, railway lines;
- · Tourist and recreational sites;
- Drinking water catchments.



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#### **Environmental Assets**

- Endangered, Rare and threatened flora and fauna, ecological communities and protected wetlands;
- Vulnerable, fire sensitive species and ecological communities; and
- Locally important, nature conservation and research sites, habitats, species and communities considered to be of local importance.

#### **Cultural Assets**

- Aboriginal heritage, places of indigenous significance;
- Non-indigenous heritage, places of nonindigenous significance; and
- Other cultural assets, community cultural assets such as halls, community centres, clubs, places of worship and recreation facilities.

Further information on this and the specific breakdown of the Risk matrix used for each category is available within Chapter 5 Bushfire Risk Planning Area Risk Assessment of the City of Cockburn Bushfire Risk Management Plan 2014 – 2019.



#### **Risk Evaluation**

The treatment priority for an asset is linked to the risk rating the asset receives during its assessment. The consequence and likelihood ratings assigned to each asset have been used to determine the overall risk rating and treatment priority for the treatments linked to the asset. The treatment priority for each asset identified has been recorded in the Asset Risk Register of the Bushfire Risk Management Plan 2014 2019.

Consequence Likelihood	Minor	Moderate	Major	Catastrophic
Almost Certain	3D	2C	1C	1A
Likely	4C	3A	2A	1B
Possible	5A	4A	3B	2B
Unlikely	5C	5B	4B	3C

Within the above matrix, the risk ratings are identified numerically from one (1) to five (5) with priorities from highest (1) to lowest (5). One (1) represents an extreme risk which has the highest priority. Where there is a need to prioritise within the risk rating a letter is used to indicate the higher priority. For example, an asset with a treatment priority of 2A is higher than an asset with a priority of 2C, even though both assets have been assessed to have the same risk rating — very high.

## **BRMP Maps and** Risk Documents

Maps of assets identified have been created during the development of the Bushfire Risk Management Plan 2014 – 2019.

These maps and associated asset and treatment registers are available at:

#### City of Cockburn's website:

www.cockburn.wa.gov.au/EmergencyManagement

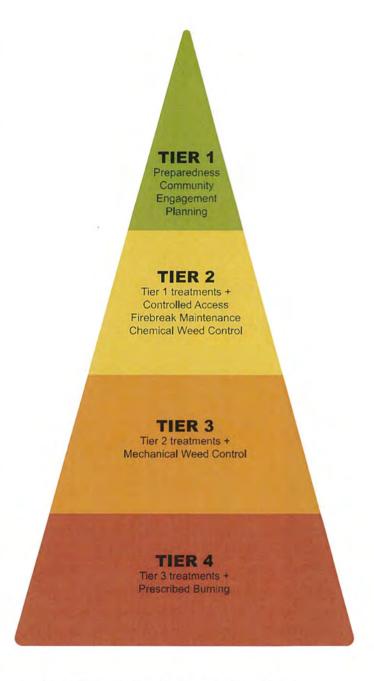
#### Or by writing to:

Emergency Management Coordinator PO Box 1215 Bibra lake DC WA 6965

## **Treatment Strategies**

There are four tiers specific treatment strategies that have been used to manage the bushfire risks identified in the Bushfire Risk Planning Area Risk Assessments. The tier system utilised within the BRMP, allows for an incremental increase in treatment works if the risk has not been reduced to an acceptable level.

Land subjected to compliance via the Fire Control Order will be inspected by the City's Rangers during the prohibited burning season. Crown land within the City will be reviewed by the Chief Bushfire Control Officer or his delegate prior to the annual review of the BRMP. The tiered level system allows for the efficient use of resources and funds to ensure mitigation works carried out are effective and reviewed as part of the overall treatment strategy.



More information on the tiered level treatment system can be obtained from Chapter 7 Bushfire Risk Treatments of the City of Cockburn Bushfire Risk Management Plan 2014 – 2019.

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# Private/Commercial Land Fire treatment Strategy

Private and commercial land will be governed by the Council endorsed Fire Control Order. Prescribe works within the Order are to be completed by 1 November each year in pursuant of Section 33 — Bush Fires Act 1954. Failure to comply with the Order may result in an infringement to the property owner, and a subcontractor appointed to carry out the required works and reimbursement sought by the City on mitigation works used to ensure a property is compliant to the Fire Control Order.

Variations of the Fire Control Order can be sought if the property owner is unable to comply with the Order. These variations must be approved by the City of Cockburn before 1 October. No retrospective approval process is available within the Fire Control Order.

# Crown Land & State Managed Land Treatment Limitations

Current legal limitations of the Bush Fires Act 1954 do not give Local Government Authorities the legal power to enforce mitigation works on state agencies referred to under the act as non-prescribed departments of public service. It is conceived there will be changes to this legal ambiguity in the future. With the current consideration of amalgamating several Acts to form one Emergency Services Act that will bind state agencies to implanting mitigation works.

During the implementation of the BRMP, the City of Cockburn worked with State Agencies to ensure all treatment strategies recommended were achievable without the need for compliance with enforcement.

# Monitoring and Review of the BRMP

The Bushfire Risk Management Plan identifies a monitoring and review process to ensure the BRMP remains current and valid. These processes are detailed below to ensure outcomes are achieved in accordance with objective and goals of the BRMP.

Reviews of the BRMP will be carried out annually with a complete rewrite every five (5) years.

Significant circumstances that may warrant an earlier review of the BRMP would include:

Changes to the BRMP area, organisational responsibilities or legislation;

- · Changes to the bushfire risk in the area;
- · Following a major fire event.

An annual works implementation forum will be held with all key State Agencies. The implementation forums will raise concerns gained through community engagement and highlight amendments to the BRMP. These meetings will be managed by the City's administrative staff. An annual report of the BRMP will be submitted to the Bush Fire Advisory Reference Group and Office of Bushfire Risk Management for independent review.

Where applicable a post bushfire review may be undertaken to assess the effectiveness of the Treatment Schedule outlined within the BRMP. This report will be made available to relevant agencies for review.

City of Cockburn Emergency Management: www.cockburn.wa.gov.au/EmergencyManagement

**Emergency Management Address:** 

PO Box 1215 Bibra lake DC WA 6965

City of Cockburn

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