

# Annual Compliance Report 2018

Extension of Mundijong Road (EPBC 2011/5971)

## 1. Introduction

The City of Rockingham was granted approval (2011/5971) under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 30 March 2012 to extend Mundijong Road in Baldivis, Western Australia. A variation was approved on 23 October 2013 to increase the area of native vegetation that could be cleared as part of the works and consequently, 11.9 hectares of native vegetation was approved for clearing within the development zone.

The works included the construction of a new single carriageway two way road (and associated other works) that extended from Baldivis Road to the east through to Mandurah Road to the west. The works commenced within the development zone on 5 April 2013 with the majority of clearing completed by 30 August 2013. The project was completed and the road was officially opened on 11 August 2015.

## 2. Purpose

The purpose of this report is to ensure compliance with Condition 9 of the EPBC Act decision notice which states:

*"Within three months of every 12 months anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any plan(s) as specified in the conditions. The report must stay on the website for at least five (5) years. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published."*

As the initial action commenced on the 5 April 2013 this report is due on the 5 July each year until the approval expires.

## 3. Compliance with approval conditions

The table below summarises the City's compliance with the approval conditions to date. A full copy of the EPBC Act Decision Notice can be found on the City of Rockingham website. Further explanation of the City's compliance with these conditions is provided in the subsequent sections of this report.



No.	Condition	Status
1	Must not clear more than 11.9 ha of native vegetation	Complete
2(a)	Prepare, submit and implement a CEMP	Complete
2(b)	Prepare, submit and implement an EOMP	Ongoing
3	Implement a Black Cockatoo Habitat Revegetation and Rehabilitation Program	Ongoing
4	Offset areas must be placed under Conservation Covenant	Complete*
5	Description, map and shapefiles of offset areas to be sent to the Department	Complete
6	Publish management plans on the City of Rockingham website	Complete
7	Advise the Department of the commencement of works	Complete
8	Maintain accurate records of all activities	Ongoing
9	Publish annual reports	Ongoing
10	Cannot carry out activities that are not approved	N/A
11	Minister may request revised plans if deemed necessary	N/A
12	If works have not commenced after 5 years then further approval must be sought	N/A

\*All actions required by the City have been completed. See page 10 of this report for details.

### 3.1. Condition 1 - Must not clear more than 11.9 ha of native vegetation

No further update since 2017 annual report.

### 3.2. Condition 2(a) - Prepare, submit and implement a CEMP

No further update since 2017 annual report.

### 3.3. Condition 2(b) - Prepare, submit and implement a EOMP

With reference to the Environmental Offsets Management Plan prepared in September 2013 and approved in December 2013, the City confirms an ongoing commitment to the implementation of revegetation and rehabilitation works at the offset sites, Trenant Park and Dixon Road Conservation Precinct (DRCP).

Since the 2017 annual report, work has continued in these reserves in accordance with the Environmental Offsets Management Plan and the site specific Trenant Park and the DRCP Management Plans.

## Weed control

As per previous years regular weed control, including herbicide treatments and manual removal, was undertaken at both sites. This involved maintenance sprays of the revegetation sites, track and path edges to limit “edge effect” from weed intrusion and targeted treatment of exotic species throughout both reserves.

## Revegetation

Plants have been selected from the DEC’s “Plants Used by Carnaby’s Black Cockatoo” ([https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/p4c\\_plantlist\\_20110415.pdf](https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/p4c_plantlist_20110415.pdf)) to ensure 75% of species planted provide Carnaby’s Black Cockatoo, Forest Red-tailed Black Cockatoo and Baudin’s Black Cockatoo feeding and breeding habitat in accordance with the Environmental Offsets Management Plan. The 2017 revegetation zones for DRCP and Trenant Park can be seen in Figures 1 and 2. A total of 2662 tube stock plants were planted at DRCP and 318 at Trenant Park during winter 2017.

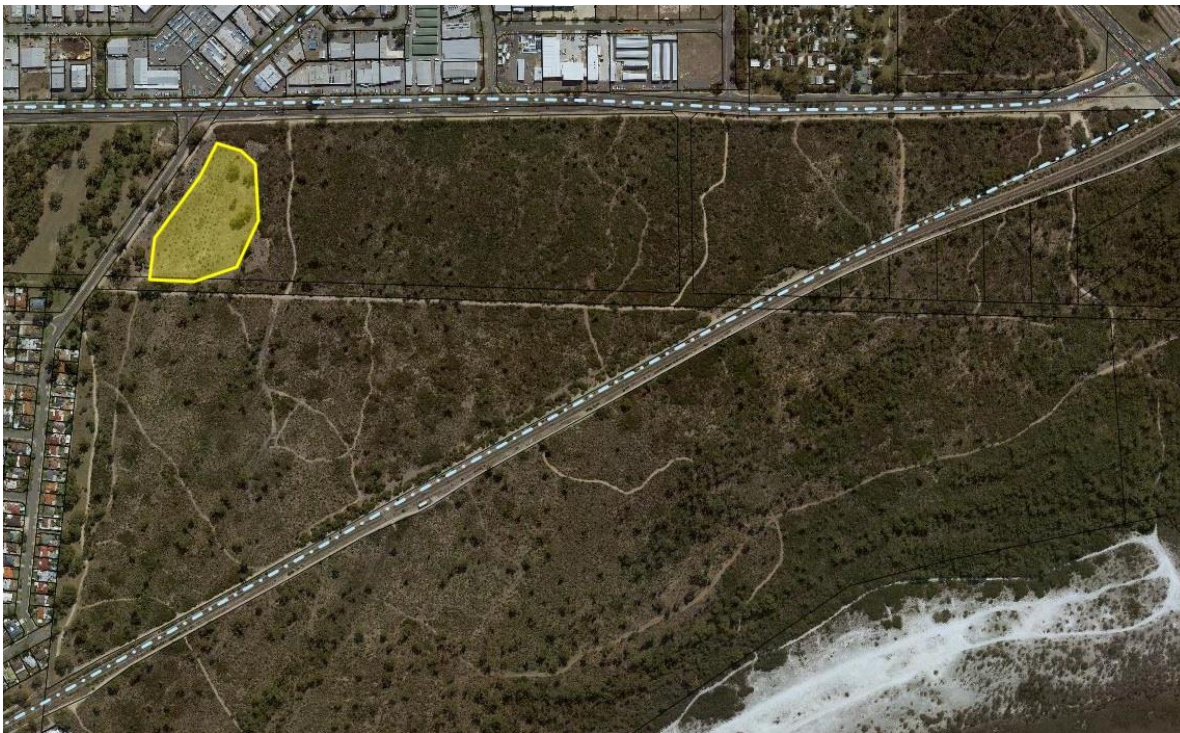
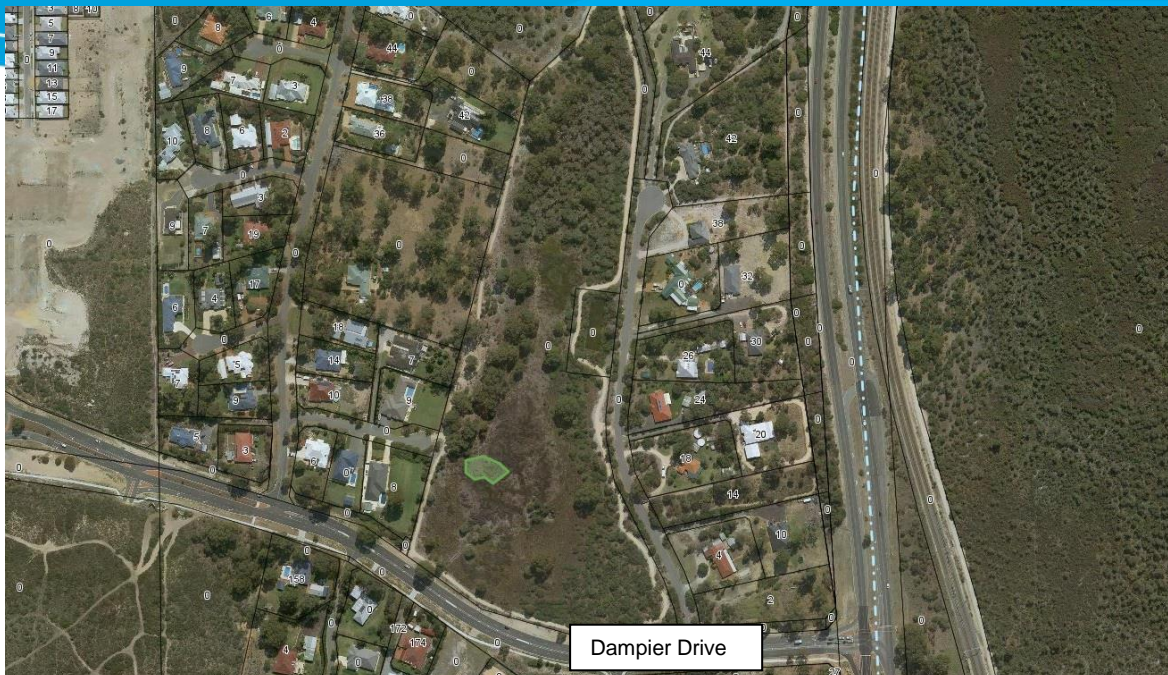


Figure 1: Dixon Road Conservation Precinct 2017 revegetation area





**Figure 2: Trenant Park 2017 revegetation areas**

## Dieback

In accordance with dieback management protocol, all vehicles entering the offset areas are limited to designated tracks and no soil or mulch has been brought into either offset site. The sandy access track around the perimeter of Trenant Park was consolidated with limestone during the 2015/2016 financial year to minimise the risk of potential weed and dieback infestations within the reserve.

Although no dieback affected areas were identified in either offset area during the 2013 baseline studies, the City continues to monitor the reserves for evidence of new dieback infestations.

## Access

Pedestrian swing gates and locked vehicle access gates have been maintained at all reserve entry points to restrict motorbikes and unauthorised access. The reserves are regularly monitored during routine maintenance activities with any breaches or damage to fencing reported and repaired as soon as possible.

## Feral fauna

The City's annual feral animal control program has continued during the 2017/18 financial year in accordance with the Environmental Offsets Management Plan. This includes pindone baiting for rabbits, soft foot hold trapping for foxes and cage trapping for feral cats.

The City engaged the same feral animal control contractors for the 2017/18 feral animal control program as it did for 2016/17. The most current program removed one fox (a 6.1kg male estimated to be at least three years old) from DRCP which is a reduction from the three removed from the reserve during the preceding financial year. Again the program found no signs of fox activity at Trenant Park and no feral cat activity was noted at either offset site.

## Fire management

All firebreaks and emergency access points continue to be maintained. Firebreaks are sprayed as necessary as part of the weed control schedule for each reserve. Visual Fuel Load Assessments are currently being undertaken throughout City-managed reserves, including DRCP and Trenant Park. The returned fuel ratings (in tonnes per hectare) from these assessments will be aligned with the City's Bushfire Risk Management Plan (currently being reviewed by Office of Bushfire Risk Management) to develop fire mitigation treatment plans as needed.

## Monitoring

Three quadrats have been established in each offset site as part of the City's offset monitoring program. The quadrats are 10 x 10m plots, marked with GPS coordinates and stakes, and evaluated to determine seedling survival rates, persistent or new weed infestations and the overall condition of vegetation. Photographs are also taken during this monitoring, which will allow the City to assess long term changes in site condition (Tables 2-7).

DRCP revegetation is healthy other than a small portion (10%) of the *Corymbia calophylla* and around 80% of the planted *Banksia sessilis*. Leaves of these plants are yellowing possibly due to soil condition being alkaline. At Trenant Park the condition of the revegetation is very good. Comparative species composition of the monitoring quadrats of 2016 and 2018 can be seen in Table 1 below.

Survival rates were assessed in June 2018 of the 2017 revegetation and the overall success of planting since year one. DRCP's 2017 revegetation had an 87.3% survival with an overall survival rate of 83.1% across the greater site. Trenant Park's 2017 revegetation saw a survival rate of 65.7%, likely attributed to predation from kangaroos. Site-wide the success at Trenant Park is at 76.1%. Further monitoring and maintenance of revegetation at both sites will continue through 2018/2019 with infill revegetation scheduled for winter 2019 and successive years to accommodate for plant attrition and to achieve the desired 80% minimum survival.

**Table 1: Quadrat species composition**

Quadrat No.		Autumn 2016	Autumn 2018
<b>DRCP 01</b>	<i>Agonis flexuosa</i>	-	1 plant
	<i>Corymbia calophylla</i>	-	1 plant
	<i>Dodonaea hacketiana</i>	-	3 plants
	<i>Eremophila glabra</i>	-	3 plants
	<i>Eucalyptus gomphocephala</i>	-	5 plants
	<i>Hakea prostrata</i>	-	2 plants
	<i>Hemiandra pungens</i>	-	1 plant
	<i>Lomandra maritima</i>	-	1 plant
	<i>Olearia axillaris</i>	-	2 plants
	<i>Rhagodia baccata</i>	-	1 plant
	<i>Xanthorrhoea preissii</i>	-	1 plant
	* <i>Cynodon dactylon</i>	<1%	-
	* <i>Euphorbia terracina</i>	-	2%
	* <i>Medicago polymorpha</i>	-	1%
	* <i>Poa annua</i>	-	5%
	* <i>Sonchus oleraceus</i>	-	<1%
<b>DRCP 02</b>	<i>Acacia rostellifera</i>	2 plants	1 plant
	<i>Corymbia calophylla</i>	-	1 plant
	<i>Eucalyptus gomphocephala</i>	-	4 plants
	<i>Hakea prostrata</i>	-	3 plants
	* <i>Cynodon dactylon</i>	5%	-
	* <i>Euphorbia terracina</i>	3 plants	20%
	* <i>Oxalis pes-caprae</i>	-	<1%
	* <i>Poa annua</i>	-	90%





Quadrat No.		Autumn 2016	Autumn 2018
<b>DRCP 03</b>	<b>Banksia sessilis</b>	-	3 plants
	Hakea prostrata	-	3 units
	Hardenbergia comptoniana	-	2 plants
	Hemandra pungens	-	2 plants
	Olearia axillaris	-	2 plants
	Phyllanthus calycinus	-	1 plant
	Rhagodia baccata	-	1 plant
	*Asparagus asparagoides	5%	-
	*Cynodon dactylon	10%	-
	*Eragrostis curvula	2 plants	-
	*Euphorbia terracina	<1%	3 plants
	*Poa annua	-	<1%
	*Trachyandra divaricata	-	6 plants
<b>TP 01</b>	Acacia saligna	1 plant	2 plants
	Eucalyptus gomphocephala	-	3 plants
	Lepidosperma longitudinale	20%	20%
	Spyridium globulosum	-	1 plant
	*Euphorbia terracina	1%	2 plants
	*Fumaria capreolata	20%	25%
	*Poa annua	-	5%
	*Solanum nigrum	-	2 plants
	*Stenotaphrum secundatum	-	2%
<b>TP 02</b>	Acacia pulchella	-	2 plants
	Banksia littoralis	-	3 plants
	Corymbia calophylla	-	25%
	Eucalyptus gomphocephala	-	4 plants
	Ficinia nodosa	-	5%
	Hakea prostrata	-	4 plants
	Hakea varia	-	2 plants
	Lepidosperma longitudinale	<1%	<1%
	Leucopogon parviflorus	-	1 plants
	*Arctotheca calendula	-	<1%
	*Ehrharta longiflora	1%	-
	*Fumaria capreolata	-	<1%
	*Poa annua	5%	1%
	*Scabiosa atropurpurea	<1%	-
	*Trachyandra divaricta	1%	-
<b>TP 03</b>	Acacia pulchella	-	2 plants
	Banksia grandis	-	2 plants
	Banksia littoralis	-	4 plants
	Banksia sessilis	-	6 plants
	Callitris preissii	-	4 plants
	Eucalyptus gomphocephala	-	7 plants
	Ficinia nodosa	-	<1%
	Hakea prostrata	-	8 plants
	Hakea varia	-	2 plants
	Lepidosperma longitudinale	<1%	<1%
	*Euphorbia terracina	1 plant	-
	*Fumaria capreolata	-	1%
	*Poa annua	2%	<1%
	*Solanum nigrum	1 plant	-
	*Trachyandra divaricata	5%	2 plants



**Table 2: Revegetation monitoring – Quadrat 1 Dixon Road Conservation Precinct**



 <p><b>Spring 2016</b></p>	 <p><b>June 2017</b></p>
 <p><b>Spring 2017</b></p>	 <p><b>Autumn 2018</b></p>

**Table 3: Revegetation monitoring – Quadrat 2 Dixon Road Conservation Precinct**





 <p><b>Spring 2016</b></p>	 <p><b>June 2017</b></p>
 <p><b>Spring 2017</b></p>	 <p><b>Autumn 2018</b></p>



**Table 4: Revegetation monitoring – Quadrat 3 Dixon Road Conservation Precinct**

 <p><b>Spring 2016</b></p>	 <p><b>June 2017</b></p>
 <p><b>Spring 2017</b></p>	 <p><b>Autumn 2018</b></p>

**Table 5: Revegetation monitoring – Quadrat 1 Trenant Park Wetland**

 <p><b>Spring 2016</b></p>	 <p><b>June 2017</b></p>
 <p><b>Spring 2017</b></p>	 <p><b>Autumn 2018</b></p>



**Table 6: Revegetation monitoring – Quadrat 2 Trenant Park Wetland**

 <p><b>Spring 2016</b></p>	 <p><b>June 2017</b></p>
 <p><b>Spring 2017</b></p>	 <p><b>Autumn 2018</b></p>

**Table 7: Revegetation monitoring – Quadrat 3 Trenant Park Wetland**

 <p><b>Spring 2016</b></p>	 <p><b>June 2017</b></p>
 <p><b>Spring 2017</b></p>	 <p><b>Autumn 2018</b></p>



### **3.4. Condition 3 - Implement a Black Cockatoo Habitat Revegetation and Rehabilitation Program**

This is part of the approved Environmental Offsets Management Plan identified in section 3.3

### **3.5. Condition 4 - Offset areas must be placed under Conservation Covenant**

No further update since 2017 Annual Report. The Conservation Covenants for Trenant Park and DRCP have both been ratified by Landgate.

### **3.6. Condition 5 - Description, map and shapefiles of offset areas to be sent to the Department**

These items were sent as part of the Environmental Offsets Management Plan. The shapefiles were resent to the Department of the Environment on 4 June 2015.

### **3.7. Condition 6 - Publish management plans on the City of Rockingham website**

All Management Plans remain on the City of Rockingham website. Please see the link to these plans below:

<http://www.rockingham.wa.gov.au/Our-city/Major-projects-and-developments/Gateway-to-Rockingham>

### **3.8. Condition 7 - Advise the Department of the commencement of works**

No further update since 2017 annual report.

### **3.9. Condition 8 - Maintain accurate records of all activities**

The City continues to maintain accurate records substantiating all activities associated with or relevant to the conditions of approval. As the road is now complete, these ongoing records primarily relate to the implementation of the Environmental Offsets Management Plan and include, but are not limited to, weed control schedules, revegetation records and Black Cockatoo nesting box installation details, as well as correspondence with state government land agencies to arrange the Conservation Covenants for offset areas.

### **3.10. Condition 9 - Publish annual reports**

This is the fifth annual reporting detailing the City's compliance with the conditions of approval and can be found on the City of Rockingham website.

### **3.11. Condition 10 - Cannot carry out activities that are not approved**

No further update since 2017 annual report.





**3.12. Condition 11 - Minister may request revised plans if deemed necessary**

No further update since 2017 annual report.

**3.13. Condition 12 - If works have not commenced after 5 years then further approval must be sought**

No further update since 2017 annual report.