



## 1. Application details

### 1.1. Permit application details

**Permit application No.:** 8501/1  
**Permit type:** Area Permit  
**Application date:** 24 May 2019

### 1.2. Proponent details

**Applicant's name:** Palmer Earthmoving (WA) Pty Ltd

### 1.3. Property details

**Property:** Lot 8078 on Diagram 57639, Cranbrook  
**Local Government Authority:** Shire of Cranbrook  
**Localities:** Cranbrook  
**GPS coordinates** Latitude: -34.3071 Longitude: 117.5034

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category
9.6	-	Mechanical Removal	Extractive industry

### 1.5. Decision on application

**Decision:** Granted  
**Decision Date:** 20 June 2019

**Reasons for Decision:** The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is not at variance to any of the clearing principles.

The Delegated Officer has had regard to specialist advice received from the Department of Biodiversity, Conservation and Attractions and a site inspection of the application area undertaken by the Department of Water and Environmental Regulation.

Through the assessment, it was determined that the application area may increase the risk of weeds and dieback. A weed and dieback management condition has been placed on the clearing permit to minimise the risk of weeds and dieback spreading into adjacent vegetation.

The Delegated Officer also took into consideration that, in order to limit the impact of the clearing, the applicant:

- removed the southern portion of the lot from the application area;
- retained a vegetated buffer surrounding the lot; and
- has developed management plans in order to limit clearing and minimise potential environmental impacts.

Based on the predominantly degraded condition of the application area and condition of the understorey, and as linkages will remain through adjoining vegetation, the Delegated Officer considers that the proposed clearing represents a low risk and is unlikely to result in unacceptable impacts to the environment.

## 2. Site Information

**Clearing Description** The application is to clear 9.6 hectares of native vegetation within Lot 8078 on Diagram 57639, Cranbrook, for the purpose of production of hard rock aggregates (Figure 1).

**Vegetation Description** The application area is mapped as Beard vegetation association 697 described as shrublands; scrub-heath on lateritic sandplain in the southern Geraldton Sandplain Region (Shepherd et al., 2001).

A site inspection of the property conducted by Department of Water and Environmental Regulation (DWER) officers (DWER site inspection), described the vegetation within five vegetation types (VT), as shown in Figure 2 (DWER, 2017):

- Stockpile regeneration (VT1) - Low Open *Allocasuarina fraseriana* forest over historical extraction stockpiles in a degraded (Keighery, 1994) condition;
- Stockpile remnant (VT2) - Low Open Eucalyptus woodland over pasture grasses (adjoining and surrounded by historical extraction stockpiles) in a degraded (Keighery, 1994) condition.
- Allocasuarina hilltop (VT3) - Low Open *Allocasuarina fraseriana* with little to no understorey on rocky hill top in a good (Keighery, 1994) condition;
- Eucalyptus Woodland (VT4) - Open *Eucalyptus Wandoo* Woodland over Herbs in an excellent (Keighery, 1994) condition; and

- Eucalyptus Forest (VT5) - Open Eucalyptus sp. Forest over a sparse understorey in a good (Keighery, 1994) condition.

**Vegetation Condition**

The condition of the application area is shown in Figure 3.

As assessed within Section 3, VT4 and VT5 have been omitted from the application area. Given this, the application area is predominantly in a degraded (Keighery, 1994) condition. As the application area occurs on historical stockpiles and a historical extraction site, regeneration to a good condition is not likely (DWER, 2017).

**Soil/Landform Type:**

Two main soil types have been mapped in the application area (Schoknecht et al., 2004):

- Jaffa 1 Subsystem: Lower to upper slopes and hillcrests. Duplex sandy gravel, grey deep sandy duplex and grey shallow sandy duplex are common.
- Jaffa 2 Subsystem: Footslopes, gently undulating rises and undulating plains. Grey deep sandy duplex is widespread with grey shallow sandy duplex and semi-wet soil.

**Comment**

The local area considered in the assessment of this application is a 10 kilometre radius measured from the perimeter of the application area. The local area retains approximately 21.7 per cent native vegetation cover.



Figure 1 Application area in blue



Figure 2: Vegetation types

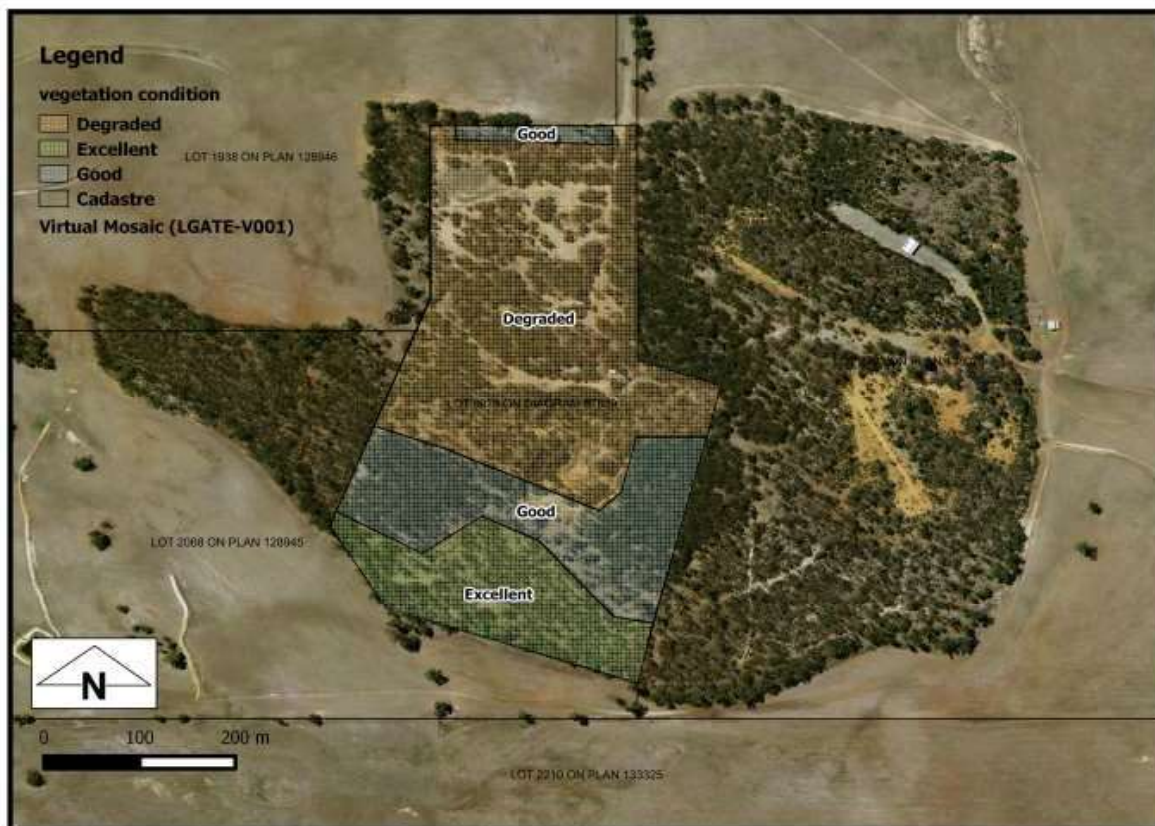


Figure 3: Vegetation condition

### 3. Minimisation and mitigation measures

Following the DWER site inspection (DWER, 2017), in order to minimise the potential impact of the clearing, the applicant revised the initial application area to remove vegetation types VT4 and VT5. This reduced the application area from 16.2 hectares to 9.6 hectares and omitted the vegetation with the highest environmental value from the application.

In order to manage the impacts of the clearing, the applicant outlined the following management actions (Quarry Management Services, 2018):

- Avoid and minimise clearing where possible;
- A 10 metre vegetated buffer will be retained along the west of the lot;
- A 25 metre vegetated buffer will be retained along the north of the lot;
- A mine closure plan has been developed which includes revegetation; and
- Employing fauna spotters/wildlife carers while clearing.

### 4. Assessment of application against clearing principles

#### (a) Native vegetation should not be cleared if it comprises a high level of biodiversity.

##### Proposed clearing is not likely to be at variance to this Principle

The vegetation within the application area is described within Section 2.1 and predominantly consists of Low Open *Allocasuarina fraseriana* forest over historical extraction stockpiles with small pockets of Low Open Eucalyptus woodland over pasture grasses in a degraded (Keighery, 1994) condition (Figure 2a). The application area forms part of a larger 45 hectare remnant of native vegetation.

As assessed under Principle (e), the application area falls within an extensively cleared landscape with approximately 21.7 per cent vegetation remaining within the local area. As assessed under principle (b):

- The remnant is likely to act as an ecological linkage for the movement of fauna and flora through the landscape. As the application area is the most degraded portion of the remnant, is not likely to regenerate to good condition given previous disturbance. As the applicant has retained the southern portion of the lot, thereby retaining linkage values, the proposed clearing is not likely to impact on the viability of the linkage or environmental value of the larger remnant.
- As the understorey within the application area is constrained by the excavation stockpiles present and a linkage through the remnant has been retained, the proposed clearing is not likely to impact on conservation significant terrestrial fauna species recorded within the local area.
- As the application area predominantly consists of *Allocasuarina fraseriana*, which is not a core foraging species for black cockatoos, and potential hollow bearing tree species are not present, the proposed clearing is not likely to contain significant habitat for these species.

Four threatened flora species, three Priority 1, six Priority 2 and 22 Priority 3 or 4 flora species have been recorded within the local area. Given the lack of understorey within the application area, as it is dominated by a monoculture of *Allocasuarina fraseriana* and as recruitment and establishment is constrained by excavation stockpiles, the proposed clearing is not likely to impact on threatened or priority flora. The application area is also not likely to be representative of a priority of threatened ecological community (TEC). Threatened flora and TECs are assessed in more detail under Principles (c) and (d) respectively.

The Department of Biodiversity Conservation and Attractions (DBCA) has advised that there is no additional information known at a regional level (DBCA, 2017).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

#### (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

##### Proposed clearing is not likely to be at variance to this Principle

According to available databases, 10 threatened fauna, one fauna protected under international agreement, two other specially protected fauna and four Priority 4 fauna have been recorded within the local area (DBCA, 2007-).

As assessed under Principle (e), the application area falls within an extensively cleared landscape with approximately 21.7 per cent vegetation remaining within the local area. The application area forms part of a larger remnant of approximately 53 hectares. The application area is likely to form part of the 'Forest to Fitzgerald Corridor', mapped as an ecological linkage by the Albany Regional Vegetation Survey. Given this and the presence of adjoining vegetation, the application area is likely to aid in the movement of fauna through the landscape.

The proposed clearing would reduce the remnant to 43 hectares. As the proposed clearing area is the most degraded portion of the remnant, the remnant vegetation is not likely to regenerate given previous disturbance. As the applicant has retained the southern portion of the lot, thereby retaining linkage values, it is not likely to impact on the viability of the linkage or environmental value of the larger remnant.

As assessed within Section 2, the application area predominantly consists of Low Open *Allocasuarina fraseriana* forest over historical extraction stockpiles with small pockets of Low Open Eucalyptus woodland over pasture grasses in a degraded (Keighery, 1994) condition. As the understorey within the application area is constrained by the excavation stockpiles present and a linkage through the remnant has been retained, the proposed clearing is not likely to impact on conservation significant terrestrial fauna species recorded within the local area.

Black cockatoos nest in large hollows of Eucalyptus trees and forage on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (*Banksia*, *Hakea*, *Grevillea*), *Eucalyptus*, *Corymbia* and a range of introduced species (DBCA, 2013; Valentine and Stock, 2008). As the application area predominantly consists of *Allocasuarina fraseriana*, which is not a core foraging species for black cockatoos and potential hollow bearing tree species are not present, the proposed clearing is not likely to contain significant habitat for conservation significant black cockatoos.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.**

**Proposed clearing is not likely to be at variance to this Principle**

Four threatened flora species have been recorded within the local area. Given the vegetation and soil type within the application area, the degraded condition of the vegetation and consideration of the habitat requirements for each of these species (Western Australian Herbarium, 1997-), they are not likely to be present or impacted by the proposed clearing.

As the understorey within the application area is constrained by the excavation stockpiles present, threatened flora species are not likely to have established.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.**

**Proposed clearing is not likely to be at variance to this Principle**

The application area is mapped within the 'Eucalypt woodlands of the Western Australian Wheatbelt' TEC. The mapping for this TEC is based on indicative locations only and has not been ground-truthed.

The DWER site inspection (DWER, 2017) of the application area noted that VT4 and VT5 that are located outside the application area, may be consistent with this TEC. However, the application area did not contain characteristic species and given its degraded (Keighery, 1994) condition, the TEC is not likely to be present within the application area. The application area is dominated by *Allocasuarina fraseriana* which is not a characteristic dominant species as defined by the conservation advice for this TEC (Threatened Species Scientific Committee, 2015).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**

**Proposed clearing is not likely to be at variance to this Principle**

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750 (i.e. pre-European settlement) (Commonwealth of Australia, 2001). This is considered to be the threshold level below which species loss appears to accelerate exponentially at an ecosystem level.

As indicated in Table 1, the remaining extents of native vegetation within the mapped Beard vegetation association and Avon Wheatbelt IBRA Bioregion are below the 30 per cent representation threshold (Government of Western Australia, 2019). The local area retains approximately 21.7 per cent native vegetation cover. On this basis, the application area is located within an area that has been extensively cleared.

As assessed within Principles (a), (b), (c) and (d), the application area is not likely to contain significant flora or fauna values. This is due to the application area being restricted to areas previously impacted by extraction activities and dominated by regenerating *Allocasuarina fraseriana*. Given this, and as the presence of adjoining vegetation in a better condition, the application area is not likely to be a significant remnant within the local area.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**Table 1: Vegetation extents**

	Pre-European (ha)	Current Extent (ha)	Extent remaining (%)	Current extent in all DBCA managed lands (ha)	Extent remaining in all DBCA managed lands (proportion of Pre-European extent) (%)
<b>IBRA bioregion</b>					
Avon	9,517,109.95	1,761,178.42	18.51	174,980.68	1.84
Wheatbelt					
<b>Beard vegetation association</b>					
697	7,086.99	1,564.14	22.07	171.87	2.43

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Proposed clearing is not likely to be at variance to this Principle**

No watercourses or wetlands have been mapped within the application area. The closest occurs 700 metres from the application area. The DWER site inspection did not identify a watercourse within the application area (DWER, 2017).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Proposed clearing is not likely to be at variance to this Principle**

The land degradation risk categories for the mapped soil subsystems are presented within Table 2. It is noted that the application area has a low risk of water erosion, wind erosion, eutrophication, waterlogging or flooding (Schoknecht et al., 2004).

The area has a medium risk of salinity (Schoknecht et al., 2004), however, as no watercourses or wetlands are present within the application area, and the application area is predominantly *Allocasuarina* regrowth, the proposed clearing is not likely to cause appreciable land degradation through salinity.

As part of the planning approval process, A Mine Site Management Plan has been developed by the applicant that includes the following actions (Quarry Management Services, 2018):

- Construction of water catchment systems to avoid water run-off from site;
- Actions to ensure that groundwater will not be intercepted by project; and
- Actions to be undertaken during high rainfall events.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Table 2: Mapped land degradation risk categories.

Risk categories	Jaffa 1	Jaffa 2
Wind erosion	<3% of map unit has a high to extreme wind erosion risk	10-30% of map unit has a high to extreme wind erosion risk
Water erosion	<3% of map unit has a high to extreme water erosion risk	<3% of map unit has a high to extreme water erosion risk
Salinity	30-50% of map unit has a moderate to high salinity risk or is presently saline	50-70% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	<3% of map unit has a high subsurface acidification risk or is presently acid	<3% of map unit has a high subsurface acidification risk or is presently acid
Flood risk	<3% of the map unit has a moderate to high flood risk	<3% of the map unit has a moderate to high flood risk
Water logging	<3% of map unit has a moderate to very high waterlogging risk	<3% of map unit has a moderate to very high waterlogging risk
Phosphorus export risk	<3% of map unit has a high to extreme phosphorus export risk	<3% of map unit has a high to extreme phosphorus export risk

**(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

**Proposed clearing is not likely to be at variance to this Principle**

The closest conservation area occurs approximately five kilometres from the application area. As assessed under Principle (b), although the application area forms part of an ecological linkage, the proposed clearing is not likely to impact on the viability of the linkage or form significant fauna habitat. This is due to the condition of the vegetation, its lack of regenerative capacity and the presence of adjoining vegetation in a better condition.

The applicant has retained the linkage value of the remnant by retaining the southern portion of the lot. Given this, the value of the remnant in providing linkages between reserves has been retained.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

**Proposed clearing is not likely to be at variance to this Principle**

As assessed under Principle (f), no watercourses or wetlands occur within or in close proximity to the application area (DWER, 2017).

As assessed under Principle (g):

- the proposed clearing is not likely to cause land degradation through waterlogging, eutrophication or water erosion and is not likely to increase the risk of salinity; and
- Management actions have been developed in order to ensure that surface water is retained on site and groundwater will not be intercepted (Quarry Management Services, 2018).

Given the above, the proposed clearing is not likely to deteriorate the quality of surface water or groundwater and is not likely to be at variance to this Principle.

**(j) Native vegetation should not be cleared if the clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Proposed clearing is not likely to be at variance to this Principle**

Noting the lack of watercourses within the application area (DWER, 2017), the proposed clearing is not likely to be of a scale as to cause an increase in the incidence or intensity of flooding.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

**Planning instruments and other relevant matters.**

This application (CPS 8501/1) was advertised on 5 June 2019 for 14 days closing on 19 June 2019. One public submission was received during this time which stated the area as part of a solitary patch in a cleared area and that a high proportion of woodland habitat available to fauna would be cleared. These factors have been addressed in the discussion of Principle (e) and Principle (b), where clearing is not likely to be at variance to these Principles.

No Aboriginal sites of significance have been registered within the application area.

The applicant has submitted an Application for a Works Approval under Part 5 Division 3 of the *Environmental Protection Act 1986*. This application is currently under assessment.

Planning approval has been obtained from the Shire of Cranbrook for the proposed development (Quarry Management Services, 2018). Conditions include the further development of the Mine Site Management Plan and Mine Closure Plan. The Shire of Cranbrook confirmed in an email of 18 June 2019 that there were no changes to the planning approval since it had been approved and that the Shire had no objections to the proposed clearing under CPS 8501/1 (Shire of Cranbrook, 2019).

The Gillamii Centre (former Land Conservation District representatives) objected to the previous application (CPS 7724/1) on the following grounds (Gillamii Board, 2017):

- The application area is likely to contain high biodiversity;
- The application area forms part of the broad scale Gondwana Link ecological linkage;
- The application area may contain rare flora;
- The application area provides habitat for Carnaby's cockatoo;
- The application area may contain the 'Eucalypt woodlands of the Western Australian Wheatbelt' TEC;
- The proposed clearing may cause land degradation;
- The proposed clearing may cause and flooding; and
- The application area is a significant remnant within a highly cleared landscape.

The concerns raised have been addressed in the assessment against the relevant clearing Principles. It is also noted that the comments from the Gillamii Centre were received prior to the application area being reduced from 16.2 hectares to 9.6 hectares, omitting the vegetation with the highest environmental value from the application. The Gilliamii Centre requested that flora and fauna surveys be undertaken. Given the reduced application area is in degraded condition, there is a lack of understorey within the application area, the vegetation is dominated by a monoculture of *Allocasuarina fraseriana*, as recruitment and establishment is constrained by excavation stockpiles, and given the findings against the Clearing Principles within this report, DWER determined that flora and fauna surveys were not justified in this case.

This application area was originally assessed under CPS 7724/1 as an Undertaking to Grant on the condition that the sale of the land to the applicant was finalised prior to the notification date being surpassed. The land transfer occurred outside the notification period and therefore, a new application was required. The assessment for CPS 8501/1 is based on the assessment undertaken for CPS 7724/1. A review of current environmental information reveals no new additional information. Therefore, the assessment against the clearing principles has not changed from the assessment for clearing permit CPS 7724/1.

## 5. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed November 2017.
- Department of Biodiversity Conservation and Attractions (DBCA)(2013) (2013) Carnaby's cockatoo (*Calyptorhynchus latirostris*) Recovery Plan. Department of Parks and Wildlife, Perth, Western Australia.
- Department of Biodiversity Conservation and Attractions (DBCA) (2017) Advice received in relation to clearing permit application CPS 7724/1, received 1 September 2017 (DWER ref: A1529038).
- Department of Water and Environment Regulation (DWER) (2017) Site inspection report for clearing permit application CPS 7724/1, undertaken 20 September 2017 (DWER ref: A1558159).
- Gillamii Board (2017) Advice received in relation to clearing permit application CPS 7724/1, objecting to proposed clearing. Received 27 October 2017 (DWER ref: A1553926).
- Government of Western Australia (2019). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. Retrieved from <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994). Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Quarry Management Services (2018). Correspondence received from Mr Chris Barker, Quarry Management Services, in relation to clearing permit application CPS 7724/1. Received 11 January 2018 (DWER ref: A1594341)
- Schoknecht, N., Tille, P. and Purdie, B. (2004). Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Shire of Cranbrook (2019). Direct interest correspondence in relation to CPS 8501/1 (DWER ref: A1798254)
- Threatened Species Scientific Committee (2015). Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt. Department of the Environment and Energy, Canberra.
- Town Planning Innovations (2017). Advice received on behalf of the Shire of Cranbrook in relation to clearing permit application CPS 7724/. Received 28 September 2017 (DWER ref: A1533988).
- Valentine, L.E. and Stock, W. (2008). Food Resources of Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) in the Gngara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.
- Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed August 2017).

### GIS Databases:

- Aboriginal Sites of Significance
- DAFWA Heritage
- DBCA Estate
- DEC Covenant
- Groundwater salinity
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed August 2017)
- Soils, Statewide
- Topographic contours
- Wetlands